

# UNITED NATIONS ECONOMIC AND SOCIAL COUNCIL



GENERAL

E/CN.12/217/Add.5

9 April 1951

ENGLISH

ORIGINAL: SPANISH

ECONOMIC COMMISSION FOR LATIN AMERICA DOCUMENTS

INDEX UNIT

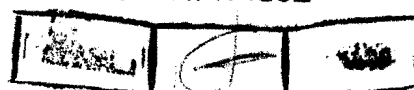
**MASTER**

Fourth Session

Mexico D.F.

28 May 1951

9 APR 1952



## \* ECONOMIC SURVEY OF LATIN AMERICA 1950

### RECENT TRENDS AND EVENTS IN THE ECONOMY OF CUBA

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## RECENT TRENDS AND EVENTS IN THE ECONOMY OF CUBA

### INTRODUCTION

The 1945-49 five-year period as a whole marked the era of greatest activity in the Cuban economy in the last twenty-five years. Two phases are distinguishable: one extending from 1945 to 1948, characterised by the predominance of expansive forces within the economy of the country, (though in the year 1948 there were unmistakable signs of contraction in certain sectors of domestic production) and another covering the year 1949, when depressive forces dominate the picture. This last phase was of short duration, since in the first half of 1950 there was a slight recovery which became considerably more marked in the second half of the year.

The fact that there was intense economic activity in the years 1945-49 does not mean that Cuba's economic development, in the sense of increased productivity per man employed, showed the same rate of growth. Strictly speaking, these were not years of intense economic development, judged by events in other Latin American countries or in Cuba itself in former times. Suffice it to say that imports of capital goods did not, in any post-war year, reach the average volume of the years 1925-29, a period of maximum expansion of the sugar industry.

One essential characteristic relating to the growth of the Cuban economy rather than to its intensity, distinguishes the post-war period from the years before the depression. Up to the 'thirties, the country expanded in an outward sense, that is to say, the greater part of real capital which was added to the country's assets during those years was directed towards its export industries. In the post-war period, the opposite was the case: the country's most important expenditure of real capital was directed towards those sectors of economic activity dependent on the domestic market.

/This does not

This does not mean, however, that capital formation in industry, and consequently its development, has been more intense in recent years than in agriculture; on the contrary, existing information seems to indicate that agriculture absorbed a growing proportion of the real investments of the country while the relative profitability of industry declined, this phenomenon being determined by the events described below. The rise in wages tended to increase production costs both in industry and in agriculture, but while the former was obliged to absorb, without passing on to the consumer, a considerable part of the increased costs (because of the intense competition of foreign products), agriculture, protected by higher customs tariffs, was not obliged to reduce its margins of profit to the same extent as industry.

The slow pace of economic development in Cuba during recent years poses a series of problems which must be clearly defined, even in the cases which may not be completely elucidated in the present survey.

It can confidently be stated that the insufficiency of domestic savings and the low capacity to import are two of the principal obstacles to an increased rate of capital formation in several of the Latin American countries. However, this is not the case in Cuba.

In the first place, a combination of factors which do not need to be discussed in this survey, cause the country's real income, in relation to its population, to be among the highest in Latin America. Since, moreover, the social distribution of this income is similar to that of other countries in the hemisphere, it may be concluded that the volume of savings generated by the Cuban economy - particularly during the cyclical upswing - and therefore the possibility of increasing the rate of capital formation, is greater in Cuba than in the general run of Latin American countries.

However, a substantial proportion of savings created within the Cuban economy do not contribute towards the country's development, because they are invested abroad. In contrast to the rest of Latin America, therefore, Cuba's immediate problem does not lie in the need for increasing the volume of savings, but rather in directing towards local productive investments the savings which are at present invested abroad or which are used non-productively within the national territory.

The second point of divergence between the Cuban situation and that of other Latin American

other Latin American countries lies in their relative capacity to import. The decline in this capacity, or rather, its stagnation undoubtedly affected Cuba just as strongly as it affected other producers of foodstuffs and raw materials. Nevertheless, in contrast to other countries, the level of the capacity to import is sufficiently high, even at the present time, to permit the imports which the level of income may determine, pay for the services and still have a substantial balance in current account.

On the other hand, this fact should not be interpreted as a sign that the country can intensify the rate of capital formation without exerting heavy pressure on the balance of payments. In actual fact, the increased rate of capital formation brings with it an increase in income and a consequent rise in imports which may well convert the present surplus into a deficit if adequate measures are not taken in time.

#### Salient Features of the Cuban Economy in the Post-war Period

##### Agriculture

The greater use of machinery is the distinguishing feature of Cuban agriculture in recent years. Between 1945 and 1950, the number of tractors employed in agriculture rose from 1,888 to approximately 7,150 and there was no indication at the end of 1950 that this increase had lost its momentum. Such an important factor merits a preliminary analysis of its probable impact on certain aspects of the country's economy, and, in particular, on the global income.

The mechanisation of Cuban agriculture was determined by the raising of agricultural wages during recent years; its objective being to reduce the costs of production. Whether these lower costs have resulted in lower prices for the domestic or foreign consumer, however, is not known. Since the force of the impact of mechanisation on the national income depends largely on the price trends of mechanised products, an analysis should be made of its probable effects, first on the assumption that prices have not changed, and secondly that they have been reduced.

In the second case, agricultural mechanisation produces different effects according to whether it relates to export products - sugar cane - or to articles produced for the domestic market.

The sugar market in the United States is subject to a rigid quota system, and demand does not respond to a reduction in the price of Cuban /sugar. This means

sugar. This means that mechanisation of sugar cane would only produce a transfer of income from Cuba to the United States or, in other words, its only achievement would be to reduce Cuban global income and increase unemployment.

In the rest of the world market, the total demand for sugar does not vary. If, therefore, Cuban producers lower the price of sugar and other producers follow their example, Cuba's global income would contract and unemployment would increase, although to a lesser extent than in the case of a drop in the price of national sugar designed for the United States. The national income would only rise provided other producers did not reduce their prices.

The mechanisation of crops produced for the domestic market offers considerable possibilities for increasing the national income if, in reducing the price of foodstuffs produced within the country, the import prices of these same foodstuffs remain unchanged. The simple displacement of imported foodstuffs by nationally produced foods would automatically imply a substantial increase in domestic production. However, even in this event it is likely that mechanisation would cause certain amount of unemployment of labour. If mechanisation did not produce a drop in the prices of the products involved, the effects of mechanisation would be the same if it were applied to products for export or those designed for domestic consumption. In the first place, global income would not vary, but would be redistributed within the country as producers' profits rose, and in addition there would be an increase in unemployment of labour. There is no doubt that mechanisation of an export crop would also in this case bring with it an improvement in the terms of trade. However, the favourable impact of this factor on the balance of payments might be compensated by an increase in imports derived from the transfer of wage-earners' income to a social group with a higher import co-efficient, that is, producers.

Among the secondary effects of mechanisation under the conditions previously considered, is the diversion of productive factors towards crops with an increased relative profitability, or in other words, towards those which have been mechanised.

#### Industry

The most significant event in the field of industrial activity was the  
/extension of the

extension of the Government policy of customs protection to those industries in the country which depend on the domestic market. The tariffs for certain articles were so much increased that they put an end to foreign competition for certain articles on the domestic market.

Since the tariff reform, at the end of the twenties, the Government had shown no inclination to increase customs duties for industrial products, partly because of existing trade agreements which granted the manufactures of other countries certain tariff advantages, and partly in view of the risk of losing part of the foreign market for certain domestic products. Since the war, the need to diversify domestic production caused the Government to take measures for its protection, declaring at one point - although only for a short time - a virtual embargo on imports of textiles.

This policy of promoting local industry was also linked to the provision of incentives of another kind to industrialists and tax exemptions on imports of machinery and raw materials, etc. were established by the Government.

#### Mining

Among the most important events in this branch of production was the discovery, in 1946, of new deposits of copper ore, after the exhaustion of the deposits then being worked. The discovery of these new deposits made it possible to increase production within a short space of time, and it is estimated that this increase will continue, until by 1951 it will reach a level exceeding that of the pre-war period by 60.0 per cent.

The development of petroleum exploration work is another important event in the field of national mining activities. After the end of hostilities, several companies commenced or intensified research designed to determine the existence of petroleum in the country, over ten million pesos being invested in these undertakings in 1947-48. This exploration produced negative results and all the companies, with one exception, ceased operations. The one company which continued drilled a trial well under the sea in 1950. The results of this drilling were not altogether satisfactory, but the company announced that it would continue its search and would drill a second well at the beginning of 1951.

/The discovery of

The discovery of petroleum in sufficient quantities to meet growing domestic requirements, would help to solve one of the country's fundamental problems. The resources of Cuba in this respect are so limited that, at the present stage of development, petroleum is the only one which offers any prospects of large scale utilization in the future.

There are at present three basic sources of energy in Cuba: wood, the residue of sugar cane (bagasse) and petroleum. Hydro-electric energy occupies a very secondary place, representing approximately 2.0 per cent of the total energy consumed in the country.

It is clear that the economic development of a country cannot be based on the first two sources of energy mentioned; and even as secondary sources, both have very limited possibilities of expansion in Cuba. The indiscriminate forest clearance during the first thirty years of this century and its continuation, although at a more moderate rate, during the following decades, caused a heavy reduction in forest reserves, these being limited to the most inaccessible regions of the republic. The maintenance of charcoal production at its present levels has only been achieved at a rising cost, since this type of fuel tends to become relatively more expensive than others. Bagasse offers no more favourable prospects; the available quantity of this product bears direct relation to the quantity of sugar produced in the country, and therefore the energy which can be produced by this fuel is comparatively limited. Moreover, the energy requirements of the sugar industry itself leave only a small portion of bagasse available to provide energy for other branches of national activity.

The country's hydro-electric potential is in the opinion of experts very small, since the maximum production which could be attained by the country is only 300.0 million kilowatt hours. Cuba's potential is, in absolute terms, lower than that of any other Latin American country, with the exception of the Dominican Republic. In per capita terms it is the lowest in Latin America.

#### State Activity

The absence of organisations for the fostering of economic development has up to the present time been a serious obstacle to government intervention in /problems of national

problems of national concern. The limitation of the means available to the authorities is evidenced by the fact that until the post-war years, Cuba had no official institution in charge of determining the monetary policy. The state of affairs undoubtedly contributed to increase the vulnerability of the country's economy to the action of depressive or inflationary forces originating abroad.

During the last decade, the first symptoms may be observed of a change in policy with the object of encouraging certain aspects of the national economic life previously lacking incentives or suitable directives. During these years, the Government took measures which would in the future permit more effective government action on domestic economic matters. Among the institutions created in the last few years are: a) La Junta Nacional de Economía (National Economic Council) an adaptation of the institution created in 1943 as a war emergency measure. This is a consultative institution, one of its aims being "... to direct national economy in the paths of development and diversification" and to determine "the possibilities of creating new sources of production, trade or employment." b) The Comisión de Fomento Nacional (National Development Commission) another official institution designed to influence the country's economic development, which handles the planning and assignment of public works. c) The Banco Central (Central Bank), whose functions are similar to those of other organisations of this type which exist in various Latin American countries, and whose main objectives, as defined by the law, are to give greater elasticity to the credit structure of the country and greater security to depositors; to lessen domestic monetary disturbances caused by large surpluses in the balance of payments, and to maintain the stability of the exchange rate. The creation of the Bank brought about a partial reform of the monetary system, which lay in eliminating the dual system of circulation in force until then and in the transfer to the newly created institution of exclusive power to issue currency. d) The Banco de Fomento Agrícola e Industrial (Bank of Agricultural and Industrial Development), which is described in detail elsewhere in this report.

Two important events regarding fiscal policy occurred towards the end of the period under review. One of these was the effective operation of

/a tax on

a tax on personal income, and the other was the organization of the first voluntary internal loan, which was designed to finance public works and the founding of the Banco de Fomento Agrícola e Industrial.

At the beginning of the war, the Government introduced the second important direct tax in the country - the tax on personal revenue. However, since the methods of applying the law were not adjusted from the beginning, State receipts from this tax were negligible, only reaching in the maximum year (1947) 3.4 million pesos, that is, less than 1.0 per cent of total fiscal receipts. In 1950, an improvement in the administration of this tax produced a substantial increase in the amounts collected. These were over 20.0 million pesos, in spite of the total income for that year being less than in 1947.

During the first half century of the republic's existence, the Government financed its expenses by means of taxes, mainly indirect, and foreign credits. <sup>1/</sup> These were never financed by means of domestic loans. At the end of 1949, the Government for the first time resorted to this latter procedure, introducing a law which authorised a bond issue for 120.0 million pesos at 4.0 per cent interest per annum, with an amortization period of thirty years. To begin with, in 1950, 45.0 million pesos worth of bonds were placed, the remaining 75.0 million pesos being left for placing at a later date. Of the funds obtained, 10.0 million were used to pay the outstanding debt to the Export-Import Bank, and the remainder to create the Banco de Fomento Agrícola e Industrial and to carry out public works.

This loan has, to some extent, a greater significance in Cuba than a similar step would have in other Latin American countries, because in this case the issue of bonds offers an example of the type of incentive which may be necessary in order to induce the public to invest its savings within the country and not abroad.

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<sup>1/</sup> When there were budget deficits, these were met by the accumulation of unpaid accounts or by issues of money. These two methods of finance particularly the second, were not very important.

## CHAPTER I FOREIGN TRADE

The value of exports at current prices increased sharply after 1945, and two years later reached a maximum for the 1946-50 period. A slight drop occurred in 1948, followed by a sharper one in 1949. In the first half of 1950, there was an almost imperceptible improvement (8.2 million pesos) in relation to the value of exports in the first half of the preceding year; a greater increase occurred in the second half of 1950, bringing the total value of exports to 642.0 million pesos. From the incomplete data published, it may be inferred that the increase of exports to the United States in the second half of 1950 was considerably lower than that of exports to Europe.

The value calculated at constant prices varied in a manner similar to that described above, but with a year's delay, since in the latter instance the rise began in 1946, and did not reach its maximum until 1948. After 1949 the movement of the value at constant prices coincided with that of the value at current prices (see Table 1).

Table 1. Cuba: Value of Exports at Current Prices and at Constant 1937 Prices: 1945-1950 Period

<u>Years</u>	<u>Current prices</u>	<u>Annual Variation</u>	<u>Constant Prices</u>	<u>Annual Variation</u>
1945	409.9		272.6	
1946	475.9	+ 16.1	265.4	- 2.6
1947	746.6	+ 56.9	322.8	+21.6
1948	709.9	- 4.9	341.6	+ 5.8
1949	578.3	- 18.6	286.6	-16.1
1950	642.0	+ 11.1	311.4 a/	+ 8.6

Sources: Anuario del Comercio Exterior de Cuba and Monthly Bulletin of Statistics, Statistical Office of the United Nations.

a/ Provisional figure.

In spite of the fluctuations shown above, the average annual value of exports at constant prices during the 1946-1950 period, exceeded that for the 1935-39 period by 168.6 per cent, the divergence being even greater (315.2 per cent) if the comparison is made on the basis of the value at current prices.

/Table 2.

Table 2.      Cuba:      Per Capita Value of Exports at Current and Constant 1937 Prices at the Dates Indicated

	<u>1935 - 39</u> <u>Annual Average</u>	<u>1945</u>	<u>1946 - 50</u> <u>Annual Average</u>
Current value	35.12	83.27	122.81
Constant value	40.59	55.36	99.51

Sources: Anuarios del Comercio Exterior de Cuba; Monthly Bulletin of Statistics of the United Nations; Características Fundamentales de la Economía Cubana, by Julián Allenes, Havana 1950, Table 16 and Page 66, for population.

If changes in exports are calculated on a per capita basis, the average annual value, at current prices, during the 1946-50 period exceeded that for 1945 and the 1935-39 period by 47.5 and 249.7 per cent respectively, while the value at constant prices did so by 7.5 and 46.6 per cent (see Table 2).

The increase in the total quantum of exports was derived from the increased volume of exports of only two of its components: syrups and sugar. Table 3 shows that the quantum corresponding to total exports rose by 73.4 per cent between 1945 and 1948 and that for syrups and sugar by 58.4 per cent during the same period, although both dropped in 1946 to a lower level than that of the base year. The 1949 contraction was followed in 1950 by a new increase in exports both of syrups and sugar. Table 3 shows the degree of this recovery.

Table 3.      Cuba:      Quantum of Exports of the Products Indicated

	<u>Base 1945 = 100</u>				
	<u>1946</u>	<u>1947</u>	<u>1948</u>	<u>1949</u>	<u>1950 a/</u>
Sugar	99.2	143.0	158.4	133.2	141.6
Tobacco	106.8	63.6	72.8	54.5	53.4
Alcohol	81.9	83.9	39.2	11.0	5.0
Syrups	87.0	168.5	173.4	182.2	321.9
Minerals	71.4	56.9	55.7	49.6	107.0
Sundries	98.3	53.8	44.8	44.4	..
Total	97.9	127.2	137.7	115.7	125.7

Source: Basic data from the Anuarios de Comercio Exterior.

a/ Provisional figures.

Note: The indices appearing in the table, as well as all others in the section on foreign trade, were calculated on the basis of 1937 prices. Later the base year was changed to 1945.

/The factors

The factors determining the increase in sugar exports during the 1946-50 period differ from those prevailing in former times. Throughout the period extending from the beginning of the century until the twenties, the rise in sugar exports was caused by the increase in world demand - at times only that of the United States - by production costs in Cuba being reduced relatively more than those of other countries or by Cuba obtaining tariff advantages which placed it in a better competitive position vis-a-vis other producers.

During the last five years none of the factors mentioned above bore any appreciable influence on the volume of sugar exports. 1/ The expansion during the 1946-50 period was motivated by the change in direction of United States demand and that of certain European countries. This change in direction was conditioned by the production level of countries which, before the war, met all or part of their domestic market requirements from their own production, or which had substantial exportable surpluses, as in the case of the Philippines or Indonesia.

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1/ The per capita demand for sugar in the United States dropped between the periods 1935-39 and 1946-50, as will be shown below. According to various surveys, the price elasticity of the demand for this product is low, the income elasticity being considerably higher (see Características Fundamentales de la Economía Cubana, Chapter XV, by Julian Alienes, Havana 1950). Between the first period mentioned and the second, the retail price of sugar in the United States rose at approximately the same rate as prices of other food products, while the real income per capita in 1946-50 was greater than during the 1935-39 period. It was only to be expected, in accordance with the changes experienced by both variables (prices of sugar and income), that per capita consumption of sugar in the post-war period would exceed that of the pre-war period; nevertheless, according to existing data, this was not the case, since on the contrary per capita consumption was lower than that of the years before the war. This is unmistakable evidence of the downward trend taken by the curve of demand. Even though the increase in population offset to a certain extent the drop in per capita consumption, the rise in total demand was not sufficiently large, of itself, to justify such a sharp rise in Cuban exports of sugar to the United States. As regards Europe (the other important market for sugar), the drop in real income in relation to the pre-war period, brought about a lower demand for sugar.

/This point is

This point is illustrated by the course of Cuban sugar exports to the United States. When the Philippines withdrew from the sugar market at the beginning of the war, the United States was obliged to find another source of supply in order to keep the consumption of sugar at an absolute level comparable with that of the pre-war period. Consequently United States demand was displaced towards Cuba, and the latter's volume of exports varied in proportion to the deficit existing between United States demand and the total amount of sugar offered by the traditional suppliers of the United States (continental producers, Puerto Rico, Hawaii and the Philippines). Part of the United States demand for Cuban sugar came to be a residual demand eventually determined by the volume of supply from other regions. 1/ The United States Quota Law, re-introduced in 1948, legalised this de facto situation by fixing a basic quota for Cuba, which could be increased to the extent that the other producers failed to cover theirs. As regards Europe, Cuban sugar and its increased volume of exports represented a temporary substitute for national or foreign sources of supply for that region.

The drop in the exports of syrups and sugar in the year 1946 took place independently of the variations in the world market for these products. Abnormal weather conditions were responsible for a drop in production, and consequently of exports, of both products in that year.

In contrast to events affecting syrups and sugar, the quantum of other items - tobacco, alcohol, minerals and sundries - dropped after 1945. The indices corresponding to tobacco and minerals were the only ones to exceed in a post-war year, the figure for the base year.

The group composed of alcohol and its by-products showed a greater decline than others, the drop in the volume of exports of alcohol itself being particularly sharp. This product was not only affected by the contraction in demand - which had risen to abnormal levels - but also by the competition in other countries of synthetic alcohols, whose production increased rapidly in the 1940-45 period. According to private information, the Cuban product is encountering growing difficulties in

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1/ United States demand had no influence for the reasons previously given. Domestic conditions of production were not a limiting factor for exports since even at the level of activity of the period 1946-50, there was partial unemployment of labour. Recent experience indicates that only at a much higher level of production would the Cuban supply of sugar become inelastic.

competing in price with alcohol extracted from substances other than syrups. For these reasons, the quantum of alcohol dropped from 83.9 per cent in 1947, to 39.2 per cent in 1948 and even further in the next two years.

Exports of tobacco and its manufactured products ceased temporarily to decline during the war years, but by 1947 there was again a drop in the volume of exports of the different products in this group, and particularly processed tobacco. Several countries adopted measures against the import of Cuban tobacco and determined to eliminate imports which they considered to be luxuries, or to reduce purchases payable in scarce currencies, which helped to make the contraction more acute.

In 1949, however, the first effects may be noted on tobacco exports of the relaxing of exchange and other controls introduced by several European countries, though the increase in shipments of tobacco of all kinds to several European countries, and of leaf tobacco to the United States, was not sufficient to offset the effect of the drop in exports to Spain, (the most important European market for this Cuban product). The drawing up of a trade and payments agreement between the two countries in 1950 <sup>1/</sup> improved the position of tobacco in that market.

The quantum of mineral exports dropped after 1945, and in the four years following did not reach the average level of the war years. In this case, as in that of alcohol, the drop in foreign demand for Cuban minerals brought about a reduction of exports, although another contributing factor was the total or partial exhaustion in Cuba of certain manganese and chrome deposits. In 1950, the military situation in Korea caused an increase in foreign demand for minerals, particularly copper, and the quantum of exports rose above the 1945 levels. The drop in the quantum corresponding to the group of "sundries" took place in spite of the increase in the physical volume of exports of lesser agricultural products - tomatoes, pineapples, etc. etc. However, exports of several articles - caramels, pharmaceutical products, hennequen rope, etc. - for which there was a market abroad up to 1945, began to

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<sup>1/</sup> According to this treaty, Spain undertook to assign half of the foreign exchange obtained from Cuba, through exports, to the payment of tobacco imports.

decline rapidly as soon as the war ended. The majority of these products were not exported before the war and can only be sold outside the country in abnormal circumstances.

Though exports of agricultural products rose in post-war years they never equalled in any year of that period, the average for the pre-war period. Several factors prevented these products from attaining an export volume comparable to that of the 1935-39 period, among them being: 1) intensification of tomato growing in Mexico, and increased exports by that country to the United States, with the consequent displacement of Cuban tomatoes from that market; 2) the reduction of exportable surpluses of bananas, due to the rise in domestic consumption and the drop in national production; and 3) the contraction in the margin of profit of Cuban truck-gardeners when production costs in Cuba rose higher than prices on the United States market.

#### Composition of Exports at Constant Prices

The structure of Cuban exports since the war differed considerably from that which existed in the year 1943 (when the distortion of foreign trade as a result of the war was most acute). On the other hand there was a greater similarity, particularly in the last two years of the five-year period under review, with the typical structure of the years before the war. This does not mean that the relative share of the different items in the total value of exports at constant prices remained unchanged.

Table 4.      Cuba:      Relative Share of the Groups Indicated in the Total Value of Exports at Constant 1937 Prices

	1935 - 1939	1946 - 1949
	<u>Annual Average</u>	
Sugar	69.3	78.6
Syrups	8.0	3.2
Tobacco	8.5	6.0
Alcohol	0.8	3.3
Minerals	3.0	1.7
Sundries	10.4	7.2

Source: Basic data from the Anuarios de Comercio Exterior.

Table 4 shows that the average individual contribution of two groups (that of sugar and that of alcohol, aguardiente and rum - in spite of the continuous reduction in the quantum of exports for the latter group since the war) was higher in the last period under review than during the

/1935-39 period.

1935-39 period. The average figure in the table conceals certain annual changes of some consequence. Thus, the contribution of sugar, which in 1946 was lower than the pre-war average, rose continuously until it reached 83.8 per cent of the total in 1949. This percentage compares favourably with the percentage for this product in the years before the depression of the thirties.

The relative share of the other four groups of exports in the total declined. This reduction was particularly heavy in the case of tobacco, this being the only item which continued to lose ground at the end of the period under review.

Analysing the figures in the preceding table as a whole, it may be concluded that the concentration of Cuban export trade on a few articles increased in the last decade and that the predominance of sugar during the years 1946-50 was just as great as during the twenties.

#### Prices of Exports

Of the six indices in Table 5, four rose up to 1947 and two (syrops and minerals) reached their maximum a year later. With the exception of tobacco and sugar, the year 1949 showed a subsequent drop in the price index of the remaining groups.

Table 5. Cuba: Indices of Export Prices of the Groups Indicated

	Base 1945 = 100			
	<u>1946</u>	<u>1947</u>	<u>1948</u>	<u>1949</u>
Sugar	122.4	164.5	142.6	143.2
Tobacco	103.7	108.1	89.2	107.8
Alcohol	135.1	144.4	125.3	74.3
Syrups	99.8	99.8	137.5	45.6
Minerals	102.0	111.9	115.8	100.4
Sundries	119.2	153.8	138.1	134.1

Source: Basic data from the Anuarios de Comercio Exterior.

The price index of sugar showed the greatest increase, the 1947 figure exceeding that for 1945 by 64.5 per cent. The slight recovery of 1949 took place when the price of raw sugar increased, even though that of refined sugar fell slightly.

The rise in prices of alcohol and its by-products followed that of sugar in intensity, though during the first three post-war years there was a drop in foreign demand for the products included within this group. According to certain private sources, the price increase was due to the

/high domestic

high domestic price of syrups.

The lifting of price controls in the United States allowed Cuban minerals to reach higher prices in the first few post-war years than in 1945. Table 5 shows that the index rose by 15.8 per cent within three years, dropping to a post-war minimum in 1949. Although the downward trend continued during the first half of 1950 - the index reached 81.8 per cent in the first five months - it ceased during the second half of the year.

The tobacco group was characterised by the slow rise in its price index; the 1947 level exceeded that for 1945 by only 8.1 per cent. This moderate rise in the index was partly due to the greater relative importance within the group acquired by poorer quality products, the prices of which were naturally lower.

Composition of Exports at Current Prices

Table 6 shows that these same two groups - sugar and alcohol - which in relation to the 1935-39 period increased their share in the value of exports at constant prices, also did so in the value at current prices. The alcohol group showed the greatest increase, its relative weight rising from 0.9 per cent in 1935-39 to 6.5 per cent in the post-war period. The variation in physical volume had little influence on this change in comparison with that of the prices of the products included in this group.

The predominant influence of sugar on Cuban exports as a whole was accentuated during 1946-50, its participation in the total rising from 70.7 to 79 per cent, due to the simultaneous trend of prices and quantum, although the latter had less influence on results.

Table 6. Cuba: Relative Share of the Groups Indicated in the Total Value at Current Export Prices

	Percentages	
	1935 - 1939	1946 - 1949
	Annual Average	
Sugar	70.7	79.0
Syrups	8.2	3.9
Tobacco	9.7	2.0
Alcohol	0.9	6.5
Minerals	2.7	1.3
Sundries	7.8	7.3

Source: Basic data from the Anuarios de Comercio Exterior.

/The share of

The share of tobacco in total Cuban exports declined from 9.7 per cent to 2.0 per cent, falling from second to fourth place in order of importance. The percentage attributable to syrups, minerals and sundries, also dropped.

#### Evolution of Imports

The quantum of imports reached the highest post-war figure in 1947, declining slightly in 1948 and 1949, increasing once more in 1950, (according to incomplete data available) reaching almost the same level as in the maximum post-war year. In the lowest year after the war the quantum of imports exceeded that for 1945 by 10.4 per cent, and in the highest by 67 per cent. The annual average of imports for the years 1945-49 exceeded that for 1935-39 by 71.4 per cent.

Two factors played a decisive part in determining the increase in the quantum of imports in the years indicated: the demand which had accumulated during the war, the effects of which were probably exhausted by 1948, and the high level of income in the country, which was maintained throughout the period.

The quantum of imports and the capacity to import, moved along parallel lines during all these years, but the rise in quantum was sharper and the drop in capacity less acute. (See Table 7). This table also shows considerable disparity between the level of the capacity to import and that of the quantum of imports, the latter being considerably lower than the capacity to import. This anomaly is partly due to the base selected for making the calculation, and partly to the fact that the accumulation of foreign exchange during the war allowed substantially higher imports to be made after the war than is indicated by the capacity to import for these years. It should be indicated that in 1945 the capacity to import exceeded the physical volume of imports by 18.8 per cent, both variables being calculated on the basis of 1937.

Table 7. Cuba: Quantum of Imports and Capacity to Import

Base: 1945 = 100

<u>Years</u>	<u>Quantum</u>	<u>Capacity to import</u>
1946	110.4	101.2
1947	167.0	139.8
1948	153.2	121.9
1949	141.2	105.2

Source: Basic data of the Anuarios de Comercio Exterior.

/During the

During the 1946-50 period the terms of trade had little influence in determining the increase in the capacity to import, since throughout the five-year period they varied between a maximum of 118.1 per cent in 1947 <sup>1/</sup> and a minimum of 97.3 per cent in 1948, as can be seen from Table 8. The decisive factor was, therefore, the increase in the quantum of exports.

Table 8.      Cuba:      Price Indices of Imports and Exports, and Terms of Trade

Base: 1945 = 100

<u>Years</u>	<u>Imports</u>	<u>Exports</u>	<u>Terms of trade</u>
1946	113.9	112.3	104.7
1947	130.2	153.8	118.1
1948	142.1	138.2	97.3
1949	133.9	134.1	100.1
1950			

Source: Basic data from the Anuarios de Comercio Exterior.

The different items included under the heading of imports, with a few exceptions, exceeded during the whole of the post-war period the figure corresponding to 1945 and by an even wider margin, the average figure for the 1935-39 period.

Table 9.      Cuba:      Value at Constant Prices of Imports of the Groups of Products Indicated

	<u>1935-39</u> <u>Annual Average</u>	<u>1945</u>	<u>1946</u>	<u>1947</u>	<u>1948</u>	<u>1949</u>
Foodstuffs	28.0	38.8	31.6	54.5	44.2	50.4
Textiles	20.6	19.1	26.5	31.9	31.3	27.2
Capital goods	14.0	14.8	22.0	44.1	43.7	34.5
Chemical products	7.9	17.0	13.8	19.9	18.6	17.3
Fuels	7.7	10.6	12.8	13.8	14.6	15.7
Paper	4.2	5.8	6.6	5.4	7.0	6.0
Metals	3.1	3.8	5.5	7.0	8.2	5.0
Timber	2.4	1.7	1.8	3.2	3.7	3.2
Glass	2.3	3.3	3.4	5.7	5.6	4.1
Leather	2.2	2.3	1.9	2.5	2.7	2.1

Source: Basic data from the Anuarios de Comercio Exterior.

Note: The different headings have been placed in order of relative importance within the total for the 1935-39 period.

The preceding table shows that the items which increased most were those the supply of which was most restricted during the war, when domestic

<sup>1/</sup> Only in this year were the terms of trade more favourable to Cuba than in 1937.

production could not cover the gap produced by the reduction in imports. Capital goods (particularly non-reproductive ones) are included in this category, as well as metals such as tinplate and its manufactures. The demand for these articles tends to increase more rapidly than that for other consumer goods when the level of income rises, as occurred in Cuba during the post-war period, or when the rate of capital formation is intensified. It will later be seen that, judging by the import figures, the increase in capital formation had a lesser influence on the increase in imports of durable goods than the other factors indicated.

Besides the two headings mentioned above (capital goods, metals and their manufactures), the value at constant prices of imports of timber and its manufactured products, glass, crystal and the corresponding manufactured articles, rose to much higher levels than those for the base year. A comparison of the quantum imports of these groups in the 1946-49 period with those for 1935-39 shows that, with the exception of timber, the post-war value considerably exceeded that of the pre-war years.

Textiles occupied an intermediate position, as regards the amount of the increase in the value of imports. According to the table, this increase reached a post-war maximum in 1947, falling slightly in 1948 and 1949. The rise in the last few years does not appear very impressive, however, if the level of imports during the pre-war period is taken into account.

The items which showed the least increase within the total volume were foodstuffs, chemical products, fuels, paper and leather, and their manufactures. It should be noted, however, that imports of chemical products in the base year were only 114 per cent greater than in the 1935-39 period.

As has been shown, foodstuffs, textiles, paper, timber and leather - including the corresponding manufactured goods - were the items which exceeded the average value for the 1935-39 period by the lowest margin. The rise in domestic production of the articles included in these five headings contributed towards the relatively slight rise in the volume of imports. Although no data exists to justify a categorical statement that the share of domestic industry and agriculture in the total consumption of the articles included in the above groups has been greater since the war than in the years 1935-39, the changes in the

/value of imports

value of imports of these items - together with other less reliable indications - help to substantiate such a criterion, with only a small margin for error.

It is very probable, however, that the share of domestic production in the total consumption of the articles indicated in the preceding paragraph, was lower in the years 1946-49 than during the war, when the supply of foreign foodstuffs and manufactured goods was considerably reduced.

Because capital goods occupied an important place in total imports it is interesting to study the changes which took place in the various products under this heading.

Table 10. Cuba: Value at Constant Prices of Imports of the Sub-groups Indicated

	1935-39 Annual Average	1945	1946	1947	1948	1949
Non-reproductive capital goods	5.2	1.7	6.9	17.7	18.6	13.8
Reproductive capital goods	8.7	13.0	15.2	26.4	25.1	20.6
1. Building materials	1.0	2.8	2.2	3.4	2.8	2.8
2. Other materials a/	3.9	6.5	6.1	9.7	10.2	8.7
3. Industrial machinery and equipment	1.1	1.5	1.9	3.6	4.2	2.9
4. Agricultural machinery and equipment	1.6	1.6	2.1	4.1	3.1	4.0
5. Transport materials	1.1	0.6	2.9	5.6	4.8	2.2

Source: Basic data from the Anuarios de Comercio Exterior.

a/ Including pipes, wires, etc.

The preceding table shows that imports of non-reproductive capital goods rose with greater intensity than those of reproductive capital goods in general or of its components in particular. In fact, the value of the unreproductive goods increased fourfold between 1945 and 1946 and continued to rise, reaching in 1948 a value exceeding the average for the 1935-39 period by 257.7 per cent. In 1949, the value at constant prices of imports of non-reproductive capital goods, fell sharply although remaining above the corresponding value for 1945 and even for the 1935-39 period.

Up to 1948, the increase in imports of these goods reflects to a certain extent the effects of the accumulated demand of the previous years. In view of this, imports in 1949 may be said to reflect the volume of current demand for non-reproductive capital goods in relation to

/Cuba's level of

Cuba's level of income.

The rise in imports of building materials was the greatest within the group of reproductive capital goods, since 1945. Variations in the index reflect along general lines fluctuations in the demand for trucks, since this type of vehicle is the most important item in this sub-group.

Agricultural machinery followed transport materials as regards rate of increase in imports. The value of imported machinery and equipment rose from 1.6 million pesos in 1945 to 4.1 million pesos in 1947, falling in 1948 and recovering again the following year, when it reached 4.0 million pesos - that is 250 per cent over the year 1945. On comparing imports for the last few years with those of the pre-war period, it is seen that this sub-group, with tractors as the principal item, shows one of the least important increases. The index of agricultural machinery probably under-estimates the increase in imports due to the inaccuracy of Cuban foreign trade statistics for the products included in this group. In support of this statement, the figures for exports of tractors from the United States to Cuba are given elsewhere in this survey, and these appear to indicate a sharper increase than that shown by the index.

The value of imports of industrial machinery and equipment - with machinery for sugar factories predominating - rose without interruption until 1948 and fell in 1949. The rise of this sub-group was fundamentally due to greater purchases of machinery for the sugar industry, and these in turn were determined by the replacement requirements of this industry.

In no post-war year did the value of imports of building materials exceed that for 1945 by more than 19.0 per cent. The value of imports in that year was, however, more than twice as great as during the 1935-39 period, so that the average value for the 1946-49 period exceeded that for the pre-war period by a wide margin. This took place in spite of the increase in domestic production.

The strong demand for these materials arose, in the years after the war, from the private construction industry, since in Cuba, just as in other Latin American countries, several factors combined to channel an appreciable part of the savings effected during and after the war towards investment in the construction of dwellings. The conditions which encouraged building in Cuba did not vary greatly between 1946-49

/and the volume

and the volume of savings in the building industry remained much higher than in the pre-war years. Thus imports of construction materials were maintained at the same level.

Imports of other materials in the post-war period showed the smallest increase, both in relation to 1945 and to the pre-war period.

#### Composition of Imports

Three changes of some importance may be observed in the composition of imports at constant prices: 1) the decline in the relative importance of the group composed of foodstuffs, beverages and tobacco; 2) increased share of capital goods in the total value; and 3) the decline in the percentage of total value represented by textiles, paper, timber and leather, and their corresponding manufactured products. (See Table 11).

Table 11.      Cuba:      Relative Share of the Groups of Imports Indicated  
in the Total Value at Constant 1937 Prices.  
Percentages.

	Annual Average	
	1935 - 39	1946 - 49
Foodstuffs	24.6	21.8
Textiles	18.2	14.1
Capital goods	13.1	17.5
Chemical products	7.0	8.3
Fuels	6.8	6.8
Paper	3.7	3.0
Metals	2.7	3.1
Timber	2.1	1.4
Glass	2.0	2.3
Leather	1.9	1.1
Others	17.9	20.6

Source: Basic data from the Anuarios de Comercio Exterior.

Notwithstanding the relative drop in imports of foodstuffs, these have since the war retained their dominant position amongst imports as a whole. They were followed in order of importance by imports of capital goods, which succeeded in displacing textiles from the position they had occupied almost without interruption since the beginning of the century.

This fact was significant, as well as the change in the textile item itself, in which there was an increase in the section corresponding to raw materials and a decline in clothing and other manufactures.

Table 11 shows lesser variations in the structure of Cuban imports, such as the reduction in the percentage corresponding to leather and its manufactures, fuels and glass.

/The changes in

The changes in the structure of imports at current prices were somewhat different from those described above. In this case the share of foodstuffs rose from 23.6 to 27.9 per cent of the total; this increase took place as a result of the rise in the prices of foodstuffs. This group together with that of textiles constituted 42.9 per cent of the value of imports compared with 43.3 per cent before the war.

The group comprising capital goods increased its contribution to the total from 13.0 per cent to 15.7 per cent, while the share of the remaining groups mentioned in the preceding table was reduced.

The figures for Cuban imports in the 1946-50 period clearly indicate that between the pre-war and post-war periods the economic structure of the country did not undergo any basic change. Moreover, the increase in global income was due, to the changes which took place in the structure of the Cuban import trade more than to any other factor.

The present composition of imports also indicates that a large portion of these imports are not strictly essential to the development of the country and that moreover they could be substituted by domestic production within a relatively short period of time. It would be interesting to analyse this problem in relation to the country's plans for industrial and agricultural development.

#### Prices of Imports

The price indices of four items (paper, metal, glass and leather) reached their highest level in 1947, while the items of foodstuffs, textiles, capital goods, chemical products and fuels reached a maximum in the following year; only the prices of timber and its manufactures reached the highest post-war figure in 1946. The indices in the table, without exception, remained throughout the 1946-49 period at a higher level than in the pre-war period, the rise which they experienced varying in relation to the 1935-39 average between a peak of 263 per cent for foodstuffs in 1948, and a low point of 48 per cent for leather and its manufactures in that same year.

/Table 12.

Table 12. Cuba: Indices of Import Prices for the Groups Indicated

	Base: 1945 = 100				
	<u>1935-39</u>	<u>1946</u>	<u>1947</u>	<u>1948</u>	<u>1949</u>
Foodstuffs	49	127	162	178	137
Textiles	52	106	130	117	105
Capital goods	65	110	128	144	143
Chemical products	88	132	128	129	139
Fuels	84	116	153	200	156
Paper	54	104	161	140	130
Metals	77	101	158	142	158
Timber	44	106	97	95	93
Glass	65	106	121	118	125
Leather	81	127	128	90	120

Source: Basic data from the Anuarios de Comercio Exterior.

The most important rise since 1945 corresponded to the price index of fuels, followed by that of foodstuffs and again by that of paper. Fuels in 1948 showed an increase of 100 per cent over 1945. The opposite extreme shows the indices for timber, glass and leather, the maximum level of which, in relation to the base year, was 106, 125 and 128 per cent respectively. The increase in the price indices of the remaining groups varied between 158.0 per cent for metals and 144.0 per cent for capital goods.

The high prices of foodstuffs acted as a check to growing demand. Thus when the prices of these articles rose in 1948 above the high level of the year 1947, there was a strong contraction in quantum, as already indicated in another section of this report. The prices of timber and its manufactures showed the opposite trends. Each price contraction was accompanied by a substantial rise in the quantum of imports.

#### Geographic Distribution of Foreign Trade

##### Exports

The traditional geographic concentration of the Cuban export trade diminished considerably during the years following the war. Table 14 shows that the share in the total value of exports corresponding to the United States dropped from an average of 78.1 per cent for the years 1935-39, to 62.1 per cent after the war; Latin America's share rose from 1.5 to 3.3 per cent, that of Europe from 17.5 to 28.5 per cent and that of the remaining countries or regions from 1.9 to 6.0 per cent. The

/increase in the

increase in the relative importance of exports to Europe occurred in spite of the fact that exports to the United Kingdom rose only moderately, this country having in the past been Cuba's most important market in Europe. It is interesting to note in this connection, that after 1947 the value of exports to the United Kingdom represented a declining proportion of the total; from 17.9 per cent in that year, it dropped to 11.8 per cent in 1950. Exports to Germany also dropped, the percentage which these represented in the total value declining from 8.7 per cent in 1948 to 2 per cent two years later. The substantial increase in Europe's share of Cuban exports took place, as can be seen from Table 14, when Cuba sharply increased its sales to other European countries including France and Belgium, to which it had exported little before the war.

Table 13.      Cuba:      Geographic Distribution of Exports in the Years Indicated

(In percentages of the total value)

	1935 - 39	1946 - 50
	Annual Average	
United States	78.1	62.1
Latin America	1.5	3.3
Germany	1.6	3.3
United Kingdom	12.0	13.7
Rest of Europe	4.9	11.5
Others	1.9	6.0

Source: Anuarios de Comercio Exterior.

Note: The figures for 1950 correspond to the first six months of the year.

The lessening (during the 1946-50 period) of geographic concentration of exports, was due to variations affecting world production of sugar and, consequently, the international sugar trade.

#### Imports

The geographic distribution of imports changed in a manner diametrically opposed to that described in the preceding section. While exports tended to be dispersed during the 1945-50 period, as shown above, the geographic concentration of imports became more acute than during the war years, when it had already reached extraordinary proportions. The United States became the supplier of more than 80 per cent of Cuban imports.

The increase in the United States' share, and to a lesser degree, in  
/that of Latin

that of Latin America, took place at the expense of Europe and Siam. Table 14 shows that the proportion of European imports dropped from 18.7 per cent in 1935-39 to 6.4 per cent after the war, and that of Siam from 3.4 per cent to less than 0.1 per cent.

The quantity of imports derived from Latin America in the last two years of the 1946-50 period, exceeded the average figure for 1935-39, in spite of the fact that the percentage corresponding to these two years was not as high as that for the first three post-war years. During this period there was no improvement in the relative position of Europe. Imports from Germany represented 0.6 per cent of the total in 1950, those from the United Kingdom 1.7 per cent and those of the remaining European countries 4.6 per cent.

Purchases from the United States rose in 1948 and 1949 to 83.2 and 78.9 per cent of the total, these figures considerably exceeding the pre-war average.

Table 14. Cuba: Geographic Distribution of Imports in the Years Indicated

	(Percentages)	
	1935 - 39	1946 - 50
	Annual Average	
United States	87.5	80.4
Latin America	2.6	6.0
Germany	4.3	-
United Kingdom	4.3	1.5
Rest of Europe	10.1	4.9
India	3.0	2.8
Siam	3.4	-
Others	4.8	4.2

Source: Anuarios de Comercio Exterior.

At the time of the crisis, the world sugar market contracted drastically, the United States continuing in the role of principal export market for the country. Since the mid-thirties, trade relations between that country and Cuba were subject to the terms of successive reciprocal treaties. In exchange for concessions granted by the United States in connection with sugar, tobacco and several other products, the Cuban government granted preferential customs treatment in some instances to certain United States articles (e.g. rice) which previously could not compete in the international market with those of other countries. On other occasions, it ~~extended the~~ customs privileges enjoyed by other

/articles from the

articles from the United States. In these circumstances, United States products which were not previously imported into Cuba, had, before the war, begun to displace those from other sources, so that these new imports were added to those which Cuba normally purchased from that country.

Balance of Payments

Changes in Structure

In 1946 exports provided 94.2 per cent and in 1949, 90.8 per cent of Cuba's total foreign exchange receipts, the average annual contribution of this item in the post-war period being approximately equal to that of the 1935-39 period. Nevertheless, a continuous reduction may be observed in the relative contribution of this item since the beginning of the period under review. (See Table 15).

Table 15. Cuba: Composition of the Balance of Payments in Current Account

	Receipts				
	(In millions of pesos)				
	1935-39 Annual Average	1946	1947	1948	1949
Exports	151.9	534.6	772.7	724.1	593.2
Tourist trade	9.6	16.3	21.9	23.1	19.6
Private remittances	0.7	2.2	1.7	1.1	0.9
Income from investments	1.2	1.6	1.0	1.3	0.8
Others	0.8	13.0	24.7	36.2	30.7

Sources: Data for the 1935-39 period were taken from an unpublished survey by Henry C. Wallich. For the other years, Balance of Payments Yearbook 1947 and 1948, International Monetary Fund, Washington, D.C., and official data.

During the four years 1946-49, the items covering the tourist trade, private remittances and income from investments lost some of their importance as sources of foreign exchange receipts. The first dropped from 5.8 to 3.2 per cent of total receipts, and the last two from 1.1 to 0.4 per cent. There was an improvement in the receipts from tourist trade after 1947, which became more marked in 1949, although their contribution did not reach the pre-war level. The falling off of the tourist trade from the United States to Cuba explains the declining relative contribution of this item to the global amount of the country's exchange receipts. The rise in prices of tourist services in Cuba - which exceeded that of other countries near the United States - also proved to be an important /factor in

factor in bringing about this situation, 1/

The importance of the item termed "Others" increased considerably as shown by Table 15. This item rose from 0.6 per cent in 1935-39 to 3.6 per cent in the years 1946-49. The greater part of the receipts under this heading was derived from the payment of services and trade commissions to the agents of foreign businesses in Cuba. The nature of the fundamental element of this item indicates that during the cyclical upswing the increase is in accordance with the rise in the value of imports. This explains its small contribution in 1935-39 and its greater share since the war.

On examining the structure of expenditure in current account, of the balance of payments, the following changes may be noted: 1) a decline in the relative outlay for the purchase of merchandise, of private remittances and of income on investments, and 2) the increase in the relative share of travel and freight expenses. (See following table).

Table 16.      Cuba:      Composition of the Balance of Payments in Current Account

	Expenditures				
	(In millions of pesos)				
	(Percentages)				
	1935-39	1946	1947	1948	1949
	<u>Annual Average</u>				
Imports	108.0	299.8	519.7	527.4	451.0
Tourist trade	5.2	34.3	53.2	56.3	31.6
Private remittances	4.5	10.4	11.0	9.2	6.6
Freights	4.4	24.6	34.6	46.1	42.9
Income from investments	17.7	41.0	75.0	52.8	31.2
Others	8.2	14.6	11.0	8.7	4.5

Sources: See Table 15.

The reduction in the share corresponding to imports is a cyclical phenomenon. During the downswing, expense items, such as the tourist trade, income on investments, etc., contract more sharply than the expenditure for the purchase of merchandise. This is particularly so in the case of countries like Cuba, whose imports are, for the most part,

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1/ Cuba's position tended to deteriorate as a result of the monetary devaluation of some countries towards which the United States tourist trade normally flows and the consequent price drop in dollars of certain services which constitute an important part of tourist expenses.

essential consumer goods. During the upswing, there is normally a reversal of the trend indicated above, the total amount of the other items increasing relatively more than imports. In apparent contradiction to the foregoing, it may be observed that the relative amount of income from investments declined in recent years. Three factors justify - at least partially - the behaviour of this item: 1) since the war, transfer of the property of certain foreign companies to Cuban hands, with the result that profits were retained within the country; 2) the transfer of a lower proportion of the profits obtained, due to the greater volume of re-investment carried out in the country by foreign companies since the war 1/, and 3) the bigger increase in the amount of liabilities of other items (tourist trade and freights) than in profits.

In regard to the first point, it should be pointed out that some of the companies transferred were sugar factories, and as regards the second, that during the 1935-39 period, the amount of re-investment was less than after the war, reaching approximately 40 million pesos in 1947, according to private sources.

Expenditure under the heading of freights and tourist trade increased considerably after the war. Expenditure on freights rose from 4.4 million pesos in 1935-39, to 37 millions since the war, that is, an increase of 763.6 per cent. Its share in the total exchange expenditure (in current account) rose from 3.2 to 6.2 per cent. Part of the increase in transport expenses, which cannot be determined exactly but which is of undoubted importance, was due to the rise in maritime freights. 2/ There could be no other interpretation of the fact that

- 1/ Even though reinvestments should be included in the debit and credit of the balance of payments, Cuba has no data available which would permit doing this.
- 2/ An idea of the probable course of freights between the pre-war period and the post-war years is given in the following table:

<u>Years</u>	<u>Indices of Total Tonnage Imported into Cuba and Expenditure under the Heading of Freights</u>	
	Base 1938-39 = 100	
	<u>Tonnage</u>	<u>Freights</u>
1946	162	456
1947	197	641
1948	175	854
1949	176	794

Source: Anuarios de Comercio Exterior.

The probable increase in freights in relation to the base period, according to these data, was 181.5 per cent in 1946; 225.4 per cent in 1947; 388.0 per cent in 1948 and 351.1 per cent in 1949.

the total import tonnage increased ~~at a~~ much slower rate than the total amount of freights and that the average distance which each ton of imported merchandise had to be transported was reduced. <sup>1/</sup>

The increase in tourist expenses was even greater than the increase under the heading of freights. Never before had tourist expenses been as high as during recent years. As may be observed from the following table, the expenses of Cuban tourists abroad rose from 5.2 million pesos in the 1935-39 period, to 56.3 million pesos in 1948. This table also shows an unprecedented increase of expenditure over receipt under this heading.

Table 17.      Cuba:      Receipts and Expenditure of the Tourist Trade in the Years Indicated

(In millions of pesos)

	<u>Receipts</u>	<u>Expenditure</u>	<u>Balance</u>
Average 1935-39	9.6	5.2	4.4
1946	16.3	34.3	-18.0
1947	21.9	53.2	-31.3
1948	23.1	56.3	-33.2
1949	28.5	45.5	-17.0

Sources: For the post-war years: Balance of Payments Yearbook 1948 and Preliminary 1949, International Monetary Fund, Washington, D.C. 1950.

For the pre-war years: the data were taken from an unpublished survey by Henry C. Wallich.

Factors which influenced the increase in the volume of Cuban tourist trade to other countries, and in particular to the United States, were the rise in Cuban global income, cheaper transport which had returned to normal conditions, and the lower price level of durable consumer goods in the United States, which induced many people to make their purchases in that country.

An analysis of Cuba's balance of payments, not from the viewpoint of its structure, but from that of the financial result of its current account transactions, shows that the annual balance for the period 1946-49 was highly favourable to the country, though the absolute

<sup>1/</sup> This is inferred from the increase in relative terms of Cuban imports from the United States. Another factor which could also have influenced the increase in transport expenses - a change in the composition of imports in favour of those products paying higher freights - does not seem to have occurred.

amount declined continuously after 1946 (see Table 18). The amount of the annual average balance since the war (105.6 million pesos) contrasts with that for the years 1935-39 which only reached 22.2 million pesos.

Table 18. Cuba: Total Receipts and Expenditure in Current Account  
(In millions of pesos)

	<u>Receipts</u>	<u>Expenditure</u>	<u>Balance</u>
1946	567.7	425.6	142.1
1947	822.0	704.5	117.5
1948	785.8	700.6	85.2
1949	645.2	567.7	77.8

Source: Balance of Payments Yearbook 1948 and Preliminary 1949, International Monetary Fund, Washington 1950; Banco Nacional de Cuba.

Although there is no regional balance of payments which might permit a detailed survey of the geographic structure of Cuba's expenditure and receipts, it is possible to judge, from data published at the present time, that certain important changes have taken place in recent years.

The balance of payments in current account of Cuba and the United States has always shown balances favourable to Cuba, which for many years was a source of foreign exchange for the rest of the world, particularly Europe and Asia. 1/ The deficit with Europe existed in spite of the fact that mercantile trade showed balances favourable to Cuba, while transactions of other kinds - payments of freights to the

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1/ From 1902 to 1939, except for 1921, the balance of mercantile trade between Cuba and the United States favoured Cuba. On the other hand, since 1919 - from which date information is available - during all the years except 1921 and 1930, this favourable balance exceeded Cuba's net expenses for all items except the tourist trade and private donations.

The tourist item was excluded from the estimate because 1) this heading always showed a balance in Cuba's favour; 2) the tourist trade was mainly confined to journeys by Cubans to and from the United States. The second item was excluded because the great majority of donations were made to Spain, and to a much lesser degree to China and Haiti.

The above facts and the additional consideration that only part of the net expenditure in Cuba's current account was absorbed by the United States, corroborate the truth of the statement made in the text.

United Kingdom, donations to Spain, etc. determined the adverse balance in current account. The negative balance with Asia arose from the mercantile trade, since there were no important transactions of any other kind.

Since 1948, the geographic structure of Cuba's balance of payments in current account changed. The mercantile trade between that country and the United States itself produced negative balances of 53.9 million pesos in 1948, 4.6 million pesos in 1949 and 54.8 million pesos in 1950. <sup>1/</sup> If the deficit in the tourist trade and the payments under other headings made by Cuba to the United States are added to this negative balance, it may be inferred that the adverse balance for these years was high. Nevertheless, as indicated previously, the total balance favoured Cuba. This implies that Cuba's balance of payments in current account with Europe showed very large favourable balances for that country, particularly since the balance of transactions with Latin America and Asia was unfavourable.

The origin of the changes described above lay partly in the stabilisation of Cuban exports - particularly sugar - towards the United States, together with the heavy increase in imports from that country, and partly in the increased Cuban sales to Europe made possible by United States financial assistance to that continent.

The present geographic structure of the balance of payments, together with the payment difficulties which may arise in Europe when United States assistance terminates, poses certain problems of some importance which warrant careful analysis. Some of the possibilities and problems which might be studied are suggested below.

The maintenance by Cuba of the present volume of exports to Europe seems to depend on future changes in demand and in domestic or colonial production of sugar, and to a lesser degree on other factors. Should United States aid to Europe be discontinued, one of these factors might well be Cuba's inclination to accept payments in currencies other than the dollar or Cuba being forced, like other Latin American countries, to adopt a policy of bilateral agreements.

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<sup>1/</sup> The information corresponding to that year was taken from official United States Statistics.

## CHAPTER II. THE SUGAR INDUSTRY AND CANE BY-PRODUCTS

The extraordinary increase in the activity of the Cuban sugar industry since the war was not, in contrast to previous experience, accompanied by an increase in its fixed industrial capital. This was due, for two reasons, to the lack of earlier incentives:

The first lay in the excessive production capacity installed since the 'twenties. This was abnormally high even in relation to the demand for sugar in 1948, which was the highest in the history of the industry. According to information published by the Ministry of Agriculture, the installed capacity of the industry is at present approximately 58.0 thousand metric tons a day. This means that in 115 working days<sup>1/</sup> the country could produce 6.8 million tons; that is, 700,000 tons more than those processed during the year of maximum activity since the war.

The second reason lay in the prospect that the demand for Cuban sugar would not in future exceed the level reached in the postwar years, even though the world demand for this product should increase. This apparent contradiction is due to the peculiar nature of the international sugar market, where restrictions such as quotas, protectionist tariffs etcetera are common, and these hinder or prevent the transmission along normal channels of the effects of the increase in world demand.

Table 19 shows the data covering imports of machinery for the manufacture of sugar. It may be observed from this that the volume of imports, after a fall in 1946, followed an upward trend until 1948, declining in 1949 but still remaining at a higher level than in the year 1945. There was a rise of 82.2 per cent between 1945 and 1948, this being a

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<sup>1/</sup> According to the opinion of experts, the industry could work more than 115 days a year if there were sufficient cane.

moderate figure when compared with the percentage of increase in imports of other types of capital goods. It is necessary, however, to indicate that in 1945, the volume of imports of sugar machinery had already risen considerably in relation to the war years, and this was not the case even with other machinery.

Table 19. Cuba : Imports of Spares for Machinery and Apparatus of the Sugar Industry

(In metric tons)

1945	1641
1946	1383
1947	2271
1948	2989
1949	2044

Source: Anuarios de Comercio Exterior

Note: The figures in the table represent approximately 85.0 per cent of the machinery imported for the sugar factory.

As was to be expected, the annual average of imports of sugar machinery for the 1945-49 five year period exceeded the average for the years 1935-39, but it continued to be unimportant in relation to the average figure for the period 1925-29, when imports of this type of machinery had already fallen sharply (see table 20).

Table 20. Cuba: Annual Average of Imports of Machinery and Apparatus for the Sugar Industry

(in metric tons)

1925-29	42,650
1935-39	945
1945-49	2,065

Source: Anuarios del Comercio Exterior

Note: The figure for the 1945-49 period cannot strictly speaking be compared with that for the other five year periods since it only represents about 85.0 per cent of the total of imports of sugar machinery.

Another fact which should be mentioned is that the rate of capital formation (since the war) of the agricultural sector of this activity considerably exceeded that of the industrial sector, for the first time in the course of this century. This may continue to be the case in the future if there is no radical change in the methods of producing sugar.

The intense rate of capital formation in the industrial branch raised

/the amount of

the amount of fixed capital per worker employed - and thus of his productivity - very far above that of the agricultural labourer. Under these circumstances, it is obvious that the prospects of relative profit on the new investments are greater in the agricultural than in the industrial sector.<sup>1/</sup>

Almost all the other industries of cane by-products, in contrast to sugar itself, experienced a substantial expansion in their productive capacity during the war or in the early postwar years. The incentive in the majority of cases came from increased foreign demand; in other cases - for example, alcohol - domestic demand played an important part.

The expansion in capacity was accompanied by an increase in production which was usually of short duration. This was the case, among others, in the alcohol and caramel industries.

The capacity of the alcohol industry increased in the period from 1943-45 from approximately 6,150 hectolitres daily to 16,880. In the three years mentioned, production rose sharply, but in 1946 it commenced to decline until in 1948 it dropped to 48.0 per cent of the volume corresponding to 1945. During the two years 1949-50 it rose again, but did not reach the level of the years prior to 1948 (see Table 21).

Table 21. Cuba: Volume of Production and Exports of Alcohol:  
1945-50

(In thousands of hectolitres)

<u>Years</u>	<u>Production</u>	<u>Exports</u>
1945	2,026.5	831.9
1946	1,915.6	938.0
1947	1,530.3	1,075.4
1948	900.6	437.2
1949	1,252.4	33.3
1950	1,465.1	..

Sources: Cuba Económica y Financiera, Habana, January 1951, page 30 and Anuario Azucarero de Cuba, Habana 1949, page 208.

During the years 1946-47, alcohol ceased to be used as a substitute for gasoline; this explains why local demand for this product dropped fairly sharply. Foreign demand, judging by exports, rose during these years, so that it may be inferred that the drop in production was mainly due to the change in the domestic market. In the subsequent years, there

<sup>1/</sup> This fact is important in the present case because the industrialists are also engaged in agriculture.

was a violent contraction in foreign demand while domestic demand recovered some of the territory lost. This gave rise to a fairly marked transformation in the nature of the product manufactured by the industry. In 1948 absolute alcohol was not produced in the country, but in 1950, the growing demand of the liquor industry and of pharmaceutical and chemical products caused this type of alcohol to reach 58.4 per cent of the total.

As indicated above, the caramel industry followed a course similar to that of alcohol, although in this case the influence of domestic demand did not substantially change the level of the industry's activity.

Until the beginning of the war the production of caramels covered the requirements of the local market without leaving any important exportable surpluses. With the war and the shortage of sugar, foreign demand for this product rose sharply. To meet the new situation, the Cuban industry entered a phase of increasing expansion, which was arrested in 1946.

There are no production figures to prove the peak and decline of this industry, but the export figures provide incontrovertible evidence of its return, in the last years of the 1945-49 period, to the prewar level of activity. Table 22 shows that the volume of exports rose from 17.8 thousand metric tons in 1945 to 30.1 thousand the following year, declining to 12.5 thousand in 1947 and terminating by a reduction to an unimportant figure in 1948-49. It is interesting to note that the total value of caramels exported amounted to 8.6 million pesos in 1946.

Table 22. Cuba: Quantum of Exports of Caramels

(In metric tons)

1945	17,846
1946	30,105
1947	12,512
1948	48
1949	..

Source: Anuarios del Comercio Exterior

During the 1945-49 period several advances were made in industries based on the more complete utilisation of the residue from the process of sugar manufacture. A dry ice plant was built in one of the sugar factories, to take advantage of the residues from alcoholic distillation of final syrups, and two other factories were built which manufacture yeast for cattle feed, using as a raw material the creams from the distillation of /absolute alcohol

absolute alcohol.<sup>1/</sup> In another mill a pilot plant was installed for the purpose of extracting the ashes from the final syrups, using their potassium, and simultaneously to treat the syrups and make them edible.

#### Wages of the Sugar Industry

Since the beginning of the war, the Government policy of wages has been directed, at least normally, towards maintaining them at the highest levels compatible with the competitive position of the industry. For this purpose the amount of the wages for workers in the industry was fixed by the authorities every year from 1940 to 1945. In the last year mentioned, a variable scale of wages was introduced, depending on the price of sugar. This regulation only remained in force for a short period, since in 1948, in spite of the fall in the price of the product, the Government kept wages at the level corresponding to a higher price than that actually in force, and this policy was continued in 1949.

Table 23. Cuba: The Share of Wages in the Value at Current Prices of the Production of Sugar and Syrups in the Years Indicated

(In percentages)

<u>Years</u>	<u>Percentages</u>
1940	22.9
1945	23.3
1946	24.9
1947	20.8
1948	24.0
1949	

Source: Anuario Azucarero de Cuba 1948, Habana 1950

Note: The estimate of the value of production was made by using the average official price in public warehouses.

Available information makes it possible to determine, indirectly, the impact of the rises in wages on the production costs of sugar. Table 23 shows that the share of industrial wages in the total value of the production of sugar and syrups exceeded the percentage corresponding to 1940 in all the postwar years except 1947. It is interesting to note that the share was lower precisely during the year in which the value of production reached the maximum for the last three decades. Unfortunately there is not sufficient information to ascertain whether the relative

<sup>1/</sup> See the Anuario Azucarero de Cuba, Habana 1949, page 160.

improvement of industrial wages took place at the expense of the profits of the producers or of other elements such as the transport workers and civil servants.

### The Tobacco Industry

This industry is divided into two sectors, which have evolved as the result of very different factors. While the only incentive to the cigarette industry comes from domestic demand, the tobacco industry properly speaking is linked to the international market, although it cannot be denied that the influence of the latter has declined considerably since the crisis of the twenties.

The postwar years showed marked activity in the cigarette industry. Domestic demand, which, spurred by the increasing global income, had begun to rise at the beginning of the war, continued its upward trend after 1945, probably encouraged by the stabilisation of the retail price of cigarettes after the end of the war. The following table shows how production rose by 18.0 per cent between 1945 and 1949.

Table 24. Cuba: Quantum of Cigarette Production

<u>1945-49</u>		
(In millions of units)		
<u>Years</u>	<u>Production</u>	<u>Imports</u>
1945	6,689.8	126.0
1946	7,129.6	208.3
1947	7,299.4	264.4
1948	7,660.5	301.1
1949	7,943.8	312.9

Sources: Resumen Analítico del Consumo de Productos Tabacaleros en la República en el Decenio 1940-49, Comisión Nacional de Propaganda y Defensa del Tabaco Habano, Habana, June 1950.

However, the competition of imported cigarettes on the domestic market also increased during these years. In fact, the rise in global income, linked with a change in the preferences of the consumers, brought about an unusual increase in the demand for cigarettes of types differing from the national product, and at a higher price. This change was shown in an increase of 248.0 per cent in the consumption of imported cigarettes over a period of four years.

Between 1945 and 1949 the share of imported cigarettes in apparent total consumption, rose from 1.9 per cent to 3.9 per cent. This percentage, /considered by

considered by itself, is small, but if its evolution over the last fifteen years is studied, this will prove the heightened competition of the imported product. In this connection it is sufficient to mention that between 1935 and 1949 imports of foreign cigarettes increased 8.3 times and that at the rate of average annual increase in total consumption and of imported cigarettes since the war, the share of the latter will increase in the next five years from 3.9 to about 8.2 per cent.

The postwar period has been one of very limited expansion for the tobacco industry. Table 25 shows that production declined in 1946, rising in the two following years, only to fall to 99.0 per cent of the base year in 1949.<sup>1/</sup>

Table 25. Cuba: Volume of Cigar Production 1945-49  
(In millions of units)

<u>Years</u>	<u>Production</u>	<u>Exports</u>
1945	370.5	110.0
1946	362.4	59.7
1947	380.3	39.5
1948	399.9	53.8
1949	366.9	21.3

Source: See Table 24.

The depression in the tobacco industry began with the reduction in foreign demand, since domestic demand not only rose in the first two postwar years, but remained at a very high level in the 1948-49 period, thus partly offsetting the contraction in the former. Table 25 shows that exports of manufactured tobacco dropped until, in 1949, they represented only 19.0 per cent of the figure corresponding to the base year. This caused the share of national production absorbed by the foreign market to be reduced in the course of four years from 29.7 to 5.8 per cent.

The drop in exports once more stressed the precarious position of the industry on the international market, due, according to the tobacco manufacturers, to the high costs of production. According to this viewpoint, as long as the process of hand manufacture is not changed to a highly mechanised one, cigars will not be able to compete with those produced in other countries where the industry has reached a very advanced technical level.

<sup>1/</sup> According to data from the Census of the Tobacco Industry, 20.5 per cent of the workers in this industry were unemployed in 1945.

The workers in the industry, who had resisted mechanisation since the 'twenties, arguing that the resultant skilled unemployment would be very high indeed, changed their attitude when exports fell in 1949, agreeing to the introduction of technical improvements in the process of manufacturing tobacco.

The Government which had on previous occasions supported the workers in preventing mechanisation, now, after having obtained an agreement between the parties, issued a decree authorising mechanisation for the product directed towards the export market and of no more than 20 per cent of the volume manufactured for domestic consumption.

This same decree created a subsidy of 40 pesos a month for the workers who were displaced by technical innovations.

#### Considerations Concerning the Mechanisation of the Industry

The position of wages in the cost structure of the tobacco industry cannot be exactly determined, but on the other hand there are figures which show that 55.3 per cent of the total production cost corresponds to the process of industrial manufacture and 33.8 per cent to raw material.<sup>1/</sup> Assuming, conservatively, that the profits of the manufacturers amount to 5.0 per cent of the total cost and that other items, e.g. sundry materials, propaganda, electricity, etcetera represent another 10 per cent, it would be possible to state that in Cuba industrial wages form about 40 per cent of the total cost of the finished product.

The foregoing percentages suggest that a broader field exists in the industrial than in the agricultural sector for reducing the cost of production by increasing its productivity. However when it is considered that sowing and cultivation are still carried out by very primitive methods and that among the different regions of the country there are notable variations in the unit yield of tobacco, a possible substantial improvement in the productivity of the agricultural sector may be anticipated. It cannot be denied, however, that certain phases of

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<sup>1/</sup> The percentages have been taken from La Economía Tabacalera de Cuba, Quinquenio 1941-45, Ministerio de Agricultura, Habana 1946, page 84. These figures correspond to the annual average for the 1941-45 period.

cultivation, in the present stage of technical skill, cannot be mechanised. This, to give one example, is the case in the work of collecting the leaf.

Table 26 gives data which permit a comparison of the productivity of the worker in the manual and mechanised processes of manufacture.

For a better understanding of the problem, certain prior clarifications are made concerning the nature of the figures quoted. These refer to conditions in force in the United States, where the quality and type of tobacco produced differ from the Cuban. This fact has a certain importance, since it has been proved that the quality of the raw material and of the final product at times have considerable influence on the productivity of the manual worker, particularly in certain stages of the process, such as stripping and the manufacture itself. Therefore it is very probable that the productivity of the Cuban worker is in fact lower than that which appears in the table, at least insofar as the manufacture is concerned, given the better quality and the higher price of the domestic product. In fact, it appears that<sup>1/</sup> a Cuban cigar worker requires an average of 40 hours to produce a thousand cigars.

Finally, in two stages of the process of manual manufacture - stripping and binding - the table includes original figures of productivity which are identical with those of the mechanised process. However, the data corresponding respectively to the two processes are expressed in one of the stages, that of stripping.<sup>2/</sup>

Table 26. Cuba: Time Employed in the Manual and Mechanical Manufacture of 1,000 Long Stem Cigars of a Common Type

<u>Type of operation</u>	<u>Man-hours per 1,000 cigars</u>	
	<u>By hand</u>	<u>With 4 operator machines</u>
Preparation of the branch	1.41	1.41
Stripping	5.11	1.64
Making	25.19	9.55
Selection	1.96	1.96
Binding	0.36	0.36
Sealing	0.66	0.16
Sundry tasks	2.16	0.38
<u>Total</u>	<u>36.85</u>	<u>15.96</u>

Source: Mechanisation and Productivity of Labour in the Tobacco Manufacturing Industry. Bulletin No. 660 of the Statistical Bureau of the United States Department of Labour, September 1938, quoted in Mecanización de la Industria Tabaquera, José E. Perdomo, Jorge J. Posse, Habana 1945.

<sup>1/</sup> First Census of Workers in the Tobacco Industry, First Part, Comisión Nacional de Propaganda y Defensa del Tabaco Habano, Ministry of Agriculture, Page 14.

<sup>2/</sup> For a broader discussion, see José E. Perdomo and Jorge J. Posse, op. cit.

The statistics in the preceding table show that the man-hours of work required to produce a thousand cigars are reduced by means of mechanisation to 43.1 per cent of the amount required for the manual process, or, which amounts to the same thing, that the productivity per man-hour of work increases 2.3 times. If it is accepted that in Cuba the phase of manual manufacture requires 40 hours instead of the 25.19 required in the United States, and supposing that the other stages of the process vary in the way indicated in Table 26, then the productivity per man-hour of work will be increased 3.2 times. The maximum decline in the total cost of production which could be obtained would in one case be slightly less than 22 per cent and in the other, somewhat less than 27 per cent.

However, the average price ex factory of tobacco manufactured in the United States varies between 35 and 45 per cent of the f.o.b. price of Cuban tobacco. This fact indicates that the greatest reduction in the cost of production of the latter by means of mechanisation would still not allow it to compete with the average or low-priced product of the United States. This would only be possible by stepping up the mechanisation of cultivation or reducing the profits of the manufacturers.

The mechanisation of this industry poses certain problems relating to the incorporation of advances in technical skill, which also affect other export industries in the remaining Latin American countries. There is no doubt that in the case of tobacco, as well as others, the pressure on industry to reduce its costs comes from abroad. Therefore the fact that technical improvements must be introduced to prevent the subsequent contraction of exports, implies that the advantages of technical progress should necessarily be passed on to the foreign consumer in the form of lower prices, since if this were not so, mechanisation would not fulfil its immediate purpose. This situation contrasts with that in the great industrial centres, where the gains in productivity do not often result in lower prices for foreign trade.

There is a possibility that Cuban exports of cigars will not increase substantially after mechanisation, if, as appears likely, the United States terminates the system of preferential customs treatment which it has granted to tobacco since the beginning of the century. The raising of the tariff would largely cancel out the effects of the reduction in costs.

### CHAPTER III AGRICULTURE AND CATTLE BREEDING

#### Development of Production

An index of Cuba's agricultural production has been compiled from available data, despite the difficulties arising from the inadequacy of agricultural statistics, particularly as regards products supplied to the domestic market. This index proves that the volume of production has grown at an extraordinary rate in the post-war years, though a sharp fall was recorded in 1949.

The growth of production shown in this index is probably somewhat exaggerated due to the base year, 1945, having been one in which adverse climatic conditions caused damage to the crops. This fact, however, does not refute the general conclusions arrived at in the present chapter.

Table 27 Cuba: Partial and Total Indices of Agricultural Production  
1945 = 100

	1946	1947	1948	1949
Sugar	129	165	171	145
Tobacco	131	121	87	82
Products for domestic consumption	112	112	116	111
Total	118	139	139	124

Source: The Economic Commission for Latin America of United Nations.

Note: The weighting was effected by considering the relative proportion of each of the components of the total index in the year 1945, as supplied by the National Agricultural Census data.

It will thus be seen that the rise in the quantum of sugar cane production was considerably greater than that of products for domestic consumption. Comparing the two indices with that of the population, it will be observed that the production of sugar cane and goods for domestic consumption rose more rapidly than the population. Calculation of the per capita production figures reveals that sugar cane production increased 37.2 per cent between 1945 and 1949, whereas an increase of 5 per cent was recorded for products for the domestic market. The development of tobacco production is marked by its own characteristic features: the rise observed during the first year after the war was followed by a period of constant contraction, so that the index for the

/years 1948

years 1948 and 1949 was below the corresponding figure for 1945.

The remarkable increase of agricultural production was partly due to improved yields in export crops though not in products intended for domestic consumption. In the latter case, with the exception of a few commodities, such as rice and potatoes, the yields obtained in the post-war years were not appreciably greater than previously.

The total area sown increased in five years from 1,970,400 hectares to an estimated 2,330,000 hectares, while the area sown with products for domestic consumption increased from 959,500 to approximately 1,050,000 hectares. That is, the proportion of the total area sown which was devoted to products for the home market decreased from 48.7 to 45 per cent.

In its main outlines, the structure of agricultural production shows no change, though in 1945 sugar cane production represented 48.4 per cent of the total value of agricultural production at 1945 prices, while three years later, at the same prices, it represented 59.4 per cent of the total. During the same period products for domestic consumption fell from 40.3 per cent to 33.6 per cent of the total value of production, while the proportion of tobacco fell from 11.3 per cent to 7 per cent of this total. The insufficient data available, however, would seem to indicate that the changes which have taken place in the relative importance of the components of the total indices of agricultural production, calculated at current prices, were greater than those shown above. In this case, the predominant position of the sugar cane crop is still further emphasized.

#### Factors which cause the Changes in the Quantum of Production

The main crops, sugar and tobacco, are forcibly controlled by the factor of foreign demand. Domestic demand, in view of its limited scope, does not affect the level of production.

The only internal factors to be taken into consideration are those which have a direct bearing on the level of Cuban supplies of these products, and not on demand for them. These factors only become important when they tend to limit the quantum of production. This statement is particularly applicable to the production of sugar cane.

Chapter I, dealing with foreign trade, contains a detailed analysis of the process of foreign demand for sugar in the post-war years. Therefore, in the present instance, it is sufficient to add that the increase in the production of sugar cane was carried out without the need for large-scale investment in the industrial sector. Even though it is impossible to determine the amount of unused equipment installed

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in the sugar industry, the increase in the volume of production from 1945-1949 indicates that the reserve must have been considerable at the beginning of the post-war period. It is doubtful whether the production of sugar and sugar cane could have developed at the rate it did during the period 1945-1949 unless there had been a reserve of idle installed machinery in the industry. The shortage of machinery in the first two years after the war, and the time required for its installation, would have been a considerable obstacle to the increase of production in a short period of time.

As opposed to the course of events affecting foreign demand for sugar, demand for cigars and tobacco leaf decreased in the second year after the war. The depressive effect of this contraction was partly counteracted by the increase in domestic demand, though this was insufficient to prevent the fall in the price paid to the tobacco planters. The natural characteristics of the product allow for a relatively rapid adjustment of production level.

Various factors encouraged agricultural production for domestic consumption, one of the most outstanding being the unprecedented rise, in a period of two years, of real demand for foodstuffs and its subsequent stabilization at a much higher level than that which obtained during or before the war.

The extent of this phenomenon is indicated by the changes in total income during the last two years which, according to figures obtained from private sources, rose approximately 57 per cent between 1945 and 1947, fluctuating subsequently at a level about 45 per cent higher than the level for 1945.

The rise in agricultural prices also influenced this trend. Despite the intensification of the growth of total income, the rate of increase of the price level tended to be lower than during the war years. The effect of increased demand on prices was counteracted by the increase in the supply of foodstuffs, both of domestic and foreign origin.

In addition to these factors, which served to stimulate production, there were others which facilitated the development of agriculture for the domestic market. As has already been stated, the rise of production for this market occurred simultaneously with a remarkable increase in production for export purposes. This was in direct contrast with previous experience, since, in the past, any sharp increases in agricultural production for the foreign market had been accompanied by a reduction or, at least, by the stagnation of agricultural production for the domestic /consumer.

consumer. As will be shown, in later years the reversal of this process was caused partly by the changes in some of the factors which influenced agricultural production within the country over the long period and partly by natural forces.

Prior to the 1930 depression, the labour requirements of the sugar industry were sufficient to maintain full employment during the greater part of the year. When the industry attained a high level of activity and within the limits established by the mobility of labour, the workers were attracted from agricultural production for the domestic market by the better wages offered in the cultivation of sugar cane. In view of these higher rates of pay, the farmers whose produce was intended for domestic consumption were compelled to choose between raising wages to the level of those paid on the sugar plantations, or else stopping production. The first alternative caused marginal producers to be ousted from the market, and a corresponding decrease in the volume of production.

This position changed radically after the beginning of the 'thirties. From then on, the sugar industry absorbed less labour than in the past. Furthermore, the increase recorded in other productive activities was insufficient to offer employment to labour not engaged in the sugar industry. This means that at present the economy of Cuba is faced with a state of structural unemployment, which is intensified by seasonal unemployment. In those circumstances, farmers supplying the domestic market are compelled to compete for labour with the sugar industry, just as occurred before the depression of the 'thirties.

On the other hand, the difference between the wages paid to the sugar plantation worker and those of other agricultural labourers does not disappear with unemployment, and even tends to become sharper during the cyclical upswing, in contrast to the period of growth of the sugar industry. This can be explained by the intensive activity of the syndicates in the agricultural sector of the sugar industry and by the fact that they have little or no influence in other branches of agriculture.

From the above, it will be seen that two important changes have taken place in the combination of factors which, over the long period affect agricultural production for the domestic market: 1) the disappearance of a labour shortage which, during the cyclical upswing,

/affected this

affected this sector of agriculture; 2) the increase, relative of less intense, of the costs of agricultural production for the home market, as compared with those of production for export, in a measure corresponding to the effect of wages on costs.

### The Evolution of Certain Crops

#### Sugar Cane

In another section of the present chapter, it has been stated that the increase in the unit yield contributed substantially to increasing sugar cane production. The following table bears out this statement. From these figures it will be seen that there was an increase of 18.4 per cent in the cultivated area between 1945 and 1948, which coincided with a 47 per cent rise in the yield per hectare. Since then, the rate of increase has been lower than that of 1948, though higher than that of 1945.

Table 28 Cuba: Area harvested, Production and Yield per Hectare of Sugar Cane, 1945-1949

Year	Area harvested (In thousands of hectares)	Production (In thousands of metric tons)	Yield (Tons per hectare)
1945	948	29,535	28.9
1946	1,019	35,153	32.8
1947	1,123	48,935	42.5
1948	1,183	50,639	41.5
1949	1,183	42,922	35.2

Sources: Memoria Azucarera (Ministerio de Agricultura, 1940-46, Habana, 1948); Yearbook of Food and Agriculture Statistics 1948 (Food & Agriculture Organization, Washington, D.C., 1950); Yearbook of Agricultural Statistics (United States Department of Agriculture, Washington, D.C.)

Note: The original figures have been converted into the units indicated above.

The increase in the yield per unit during the post-war years was principally due to the fact that climatic conditions were more favourable and also, in a lesser degree, to the introduction of improved methods of cultivation.

Despite this improvement, the annual yield per hectare in the five-year period 1945-1949, was lower than that recorded during the war and pre-war years. (See Table 29.)

/Table 29

Table 29 Cuba: Annual Average Yield of Sugar Cane per Hectare in Selected Five-Year Periods

<u>Year</u>	<u>Yield</u> (in metric tons)
1935-39	40.1
1940-44	38.8
1945-49	36.2

Sources: Memoria Azucarera (Ministerio de Agricultura, Habana, Cuba, 1948); Agricultural Statistics 1948 (United States Department of Agriculture, Washington, D.C.) and official publications of the Cuban Government.

The constant reduction in yield has all the characteristics of a long-term process, and it has been fully dealt with in the chapter on economic development. For present purposes it is merely pointed out that the adverse effect on the costs of production is, to a certain extent, compensated by the long-term increase in the sugar content of the cane, as a result of the introduction of new varieties of the plant.

Another feature worth noting during periods of high production is the ratio between the total area planted with sugar cane and the land owned directly or indirectly by the sugar mills. In 1948 the sugar mills owned 1.8 million hectares and rented a further 800,000 hectares, thus making a total of 2.6 million hectares.<sup>1/</sup> In 1948, out of a total of 1.2 million hectares planted with sugar cane, the sugar mills owned approximately 900,000 hectares.

Owing to the agricultural methods employed by the sugar cane planters, a considerable part of the land which is not used for cane cultivation lies completely fallow for long periods. A detailed analysis of the problem - which would be of the utmost importance to the country's agricultural development, - cannot be carried out at the present time in view of the inadequate data available. Such an analysis would determine, among other things, the effects of the non-utilization of land on: 1) the expansion of cultivation for domestic consumption; and 2) production costs of crops for the domestic market. It would also show to what degree extensive agriculture - especially that of sugar cane - is dependent on the accumulation of vast reserves of land.

<sup>1/</sup> In 1946, 75.2 per cent of the cane-cutting area was in the hands of the sugar mills. (See Memoria Azucarera 1940-46, Ministerio de Agricultura, Habana 1948.) The estimate for 1948 was based on the assumption that there had been no change in the proportion between the planted area and that held by the mills.

Tobacco

Due to the 31.2 per cent increase in tobacco production between 1945 and 1946 and the prospects of decreasing foreign demand, the government feared a surplus of unsaleable tobacco and a substantial drop in price. Faced with this danger, the government, in 1946, proposed the setting up of a Stabilization Fund, for the purpose of maintaining prices at a minimum fixed by law.

To this end, the government purchased on the free market the unsold surplus of each harvest and held the stocks until they could be placed on the market without causing a fall in price. Between the date of its inception and the beginning of 1948, the Stabilization Fund had bought up 5.3 million kilogrammes of tobacco leaf. The funds required for these transactions were provided by a tax of one centavo on each packet of cigarettes produced in the country.

Furthermore, the Fund sought to limit crops in order to avoid surpluses which it would be unable to buy up with its own funds. However, production in 1947 surpassed the total fixed by the Fund, since the high yield per unit of the previous year was again recorded and only a very small reduction took place in the total area cultivated. A substantial cut was made in the 1948-49 crops. However, during the post-war years there has not been a single instance in which the level of production has not been at least 10.8 per cent higher than the average annual pre-war level (1934-38):

Table 30      Cuba: Total Tobacco Production and Yield per Hectare  
1945-49

<u>Year</u>	<u>Production</u> (tons)	<u>Yields</u> (quintals)
1945	28,873	4.6
1946	37,871	6.2
1947	34,976	6.2
1948	25,220	5.9
1949	23,340	5.3

Source: Publications issued by the Comisión Nacional de Defensa y Propaganda del Tabaco Habano (National Commission for the Defence and Publicity of Havana Tobacco).

Since 1946, the yield per unit has been higher than the pre-war level, which averaged about 4.8 quintals per hectare. The increase in the tobacco yield, unlike that of sugar cane, can be largely ascribed to

ascribed to the more intensive use of fertilizers in the cultivation of the crop.

#### Products for the Home Market

Between 1945 and 1949 the production of foodstuffs for domestic consumption has increased at a greater rate than that of the growth of the population, as will be seen from the fact that, while the latter showed an increase of only 5.7 per cent the population increased by 11 per cent during this period.

Generally speaking, no very outstanding changes occurred in the relative importance of the various crops comprising the total. At the end of the five-year period, maize was still the main crop grown, followed by coffee and rice, though in 1945 the position of the two latter had been reversed. The principal change occurred in the replacing of plantains by potatoes as the fourth largest crop.

The following table shows the changes which took place in the production indices of the above foodstuffs and of other crops grown mostly for home consumption.

Table 31 Cuba: Volume of Production Indices for Selected Products 1946-1950

	<u>1946</u>	<u>1947</u>	<u>1948</u>	<u>1949</u>	<u>1950</u>
Rice	106	111	111	96	..
Potatoes	127	105	126	160	178
Coffee	114	106	83	122	97
Beans	120	88	133	134	..
Maize	100	103	117	105	
Plantains	113	141	130	114	
Tubers	117	120	126	116	
Peanuts	216	186	91	63	31
Cocoa	128	143	152	162	152
Hennequen	107	100	96	76	
Bananas	112	112	101	78	
Pineapples	113	132	141	105	
Oranges	86	88	120	102	
Lemons	97	97	98	91	
Grapefruit	120	121	126	145	
Total	112	112	116	111	

Sources: Censo Agrícola Nacional de Cuba, 1946; Yearbooks of Food and Agricultural Statistics and Monthly Food and Agricultural Statistics Bulletins of the Food and Agriculture Organization; Economic Review of Cuba 1945-49; International Reference Service, United States Department of Commerce; Publications of the United States Department of Agriculture and other private and official reports dealing with Cuba.

Note: For weighting purposes, the prices of the selected products on the farms was utilized, with the exception of the data published in the Censo Agrícola Nacional. The following

The production indices for five important items in the Cuban diet that is, rice, beans, potatoes, coffee and maize, show a different trend from that for the total index. The production indices rose 9 per cent between 1945 and 1946, but fell in 1947 to a level only 4 per cent higher than that of 1945. During the course of the next two years, production swung upward, so that by 1949 the quantum of production had reached a point 14 per cent higher than the 1945 level.

Table 32. Cuba: Production Indices for Five Basic Articles of Cuban Diet a/ Base: 1945 = 100

1946	109
1947	104
1948	111
1949	114

Source: See Table 27.

a/ These include rice, beans, potatoes, coffee and maize.

Broadly speaking, it may be stated that the rate of development of the above foodstuffs was lower than that of total agricultural production.

#### Potatoes

Within this group, potatoes revealed the greatest rate of growth noted in the past few years. The contents of Table 31 indicate that the volume of production of this tuber increased by 78 per cent between 1945 and 1950.

The exceptional rise is typical of the results obtainable in a short period if steps are taken - sometimes involving a moderate expenditure - in order to overcome the indirect obstacles to the development of the cultivation of a given product for the domestic market. Since the 'thirties, productive technique and the yield per unit of cultivated area have enabled the home-grown potato to compete successfully on the local market with the foreign product. Nevertheless, domestic production has always been unable to meet the country's apparent total consumption and, what is more, the rate of growth of this

(Continuation of note to Table 31)

formula was used for the calculation of the indices:

$$\frac{\sum P_0 Q_n}{\sum P_n Q_n}$$

production, from the end of the depression until the beginning of the post-war period, was lower than that of consumption.

In Cuba, as in other hot climates, the principal obstacle to the expansion of potato cultivation was the impossibility of keeping the product in good condition for a period of more than 3 or 4 months, in view of the lack of adequate storage facilities. When at the end of the war the government built six refrigerated warehouses, it was possible to store large quantities of potatoes within easy reach of the area where they were grown. The effects of the improvement of warehousing facilities on the volume of production were felt within a short space of time. It is hardly likely, however, that production will continue to expand at the rate recorded during the period 1948-50, unless the present capacity of the warehouses is increased and others are built in the areas developed since the end of the war.

No such pronounced change occurred in the production of any of the other four basic crops though they attained at some time in the 1946-1950 period, the maximum production level recorded for the past two decades, and possibly even for the century.

#### Coffee

The largest coffee harvest was obtained the year following one of the smallest for the past few years. Average annual production for the period 1946-50 was only slightly higher than that of the two preceding five-year periods, as may be seen from the data contained in the following table:

Table 33      Cuba: Average Annual Coffee Production for Three Five-Year Periods

<u>Five-Year Periods</u>	<u>Production</u> (In thousands of metric tons)
1936-40	31.2
1941-45	31.9
1946-50	32.4

Sources: Yearbook of Food and Agriculture Statistics 1949 (Food and Agriculture Organization, Washington, D.C. 1950); Censo Agrícola Nacional for 1946 and the Cuban Institute for the Stabilization of Coffee.

/The volume

The volume of the coffee crop was practically stabilized, despite the measures adopted by the authorities with a view to increasing its production. It is worth mentioning some of the problems which arise in connection with coffee cultivation in Cuba in order to determine just what factors have contributed to counteract official and private enterprise in this field.

Since the eighteenth century, coffee has been planted in relatively small areas of the country, the only ones having the ecological conditions necessary for the production of the berry. The expansion of the sugar cane plantations during the present century served to reduce still further the small area allotted to coffee.

The continued use of the soil in these regions over a long period, and the employment of inadequate methods of cultivation have diminished its fertility to such a point that the present yield of coffee per unit of cultivated land is one of the smallest, if not the least, in all Latin America. The following table shows the yield per hectare in Cuba to be lower than that of Guatemala and Brazil, which countries, in their turn, do not show a very high level of production per unit of cultivated land.

Table 34 Cuba: Coffee Yield per Hectare in Guatemala, Brazil & Cuba  
(In metric quintals)

<u>Country</u>	<u>Period</u>	<u>Yield per Hectare</u>
Guatemala	1943	5.48
Brazil	1947-49	4.06
Cuba	1945	3.50

Sources: The World Coffee Industry, a preliminary Study prepared by the Special Commission for the Inter-American Coffee Board; Serviço de Estatística da Produção, Ministério da Agricultura, Brazil, and Censo Agrícola Nacional de Cuba 1946.

The position of Cuba is even worse if we compare the yield per bush. According to the data published by the Inter-American Coffee Board, the Cuban plants yielded 140 grammes each, whereas in Guatemala and Brazil (in the State of São Paulo), they yielded 460 and 204 grammes respectively.<sup>1/</sup> These differences in yield alone would tend

<sup>1/</sup> See the Report on the World Coffee Conditions, by the Inter-American Coffee Board, Washington, D.C. published by the Asociación Cafetalera de El Salvador, in 1949.

to raise the cost of production in Cuba above that of other countries. The discrepancy between the local and foreign cost is accentuated by the difference between wages paid to coffee workers in Cuba and those paid to them abroad. The average wage in Cuba is 2.5 times higher than in Guatemala, from 1.5 to 1.9 times higher than in Brazil, and higher still than in other coffee-producing countries in Latin America. (See Table 35).

Table 35. Cuba: Day wages paid to Unskilled Labourers on the Coffee Plantations in Cuba, Brazil and Guatemala  
In Dollars - 1945-46

<u>Country</u>	<u>Day-wages</u>
Guatemala	0.46
Brazil	0.55 - 0.65
Cuba	1.60

Source: Mimeographed Report on Coffee issued by the Inter-American Coffee Board, page 280.

The report from which the above data was obtained also contains details covering the number of man-days required to produce a 60 kilogramme bag of coffee in various Central and South American countries.

If it is agreed to accept the results shown for Cuba, which would seem to suggest a very small application of human labour, then it must be concluded that the productivity of the Cuban coffee worker was 3.3 per cent to 24 per cent higher than that in Brazil and 211.6 per cent to 220 per cent higher than that in Guatemala <sup>1/</sup>.

The foregoing facts bear out the statement that the costs of coffee production in Cuba were, and continue to be, exceedingly high. Their absolute level is so high that, under normal conditions, the Cuban coffee planter would not be in a position to face foreign competition.

In order to avoid the discontinuation of coffee planting the Government resolved during the 'thirties, to establish a high protective tariff on this product. With the encouragement offered by the raising of domestic prices, it was possible to increase production within a short time, though domestic per capita consumption was reduced. It became evident that in achieving the rapid stabilization of coffee production at a level approximate to that of consumption, there remained no means of stimulating production other than the increasing of demand. But the only method of attaining

<sup>1/</sup> Though the figures for labour productivity in Cuba appear to be exaggerated, the difference between the wage paid in Cuba and in the other countries is greater than the difference in the levels of productivity would suggest.

- this objective was the reduction of the price of coffee on the home market, which, in turn, implied increasing the yield or increasing the productivity of the coffee worker.<sup>1/</sup> The measures adopted after the establishment of this protective tariff legislation did nothing to remove the obstacles to the expansion of coffee growing.

During the past fifteen years, the only dynamic impetus given to the planting of coffee was that arising from the increased demand for the product, which can be ascribed to the increases of income and population. Prices, however, had the reverse effect, showing an almost constant tendency to rise ever since 1936.

Since before the war, production has largely conformed to the pattern of domestic demand, which expanded little during this period. Hence the fact that production shows only a very moderate increase, as may be seen in Table 33.

#### Rice

The cost of production of this cereal is much higher in Cuba than in many other Latin American countries, for the following reasons:

- 1) The limited yield per unit area due to the lack of varieties suited to the ecological conditions in Cuba and the fact that the greater part of the rice crop is grown on unirrigated land.
- 2) Cuban agricultural wages are higher than those of other rice-growing countries.
- 3) Lack of mechanization in the methods of cultivation and therefore a low productivity rate per rice grower.

These factors evidently restrict the volume of rice production in Cuba. Until they have been removed, the only possible stimulus to production is a sharper increase in price than in agricultural wages. Only in this way would it be feasible to plant rice in areas which, at a different price level, would be considered marginal.

Rice production increased during the first few years after the war due to the rise in price. When the price fell, at the end of the 1945-1949 period, production began to decrease. However, the minimum level which might be reached by domestic production if prices continue to fall, is at present higher than the pre-war minimum. This can be inferred from the increase in the proportion of rice grown by modern

<sup>1/</sup> There was, in fact, one other alternative, that of exporting the coffee surpluses. However, the difference between world coffee prices and those on the Cuban market - the latter in 1939 were actually 4.8 times higher than the former, - would make it necessary to grant an enormous subsidy to the exporter in order to obtain an

methods of cultivation and, therefore, at low cost.

Among the five basic articles of diet already mentioned, rice was the only one of which the supply for domestic consumption increased between the pre-war period and 1946-1949. Table 36 shows the reduction as a percentage of the other four foodstuffs as a percentage of total domestic production.

The decrease in the relative importance of domestic production undoubtedly points to the slowness of its growth as compared with the development of domestic demand. It also indicates what could occur if, following a plan of industrial development, investments were increased. In this case, the growing need for imported foodstuffs would restrict foreign exchange availabilities required for more essential imports.

Table 36 Cuba: Percentage Proportion of Foods of Domestic Origin in the Total Apparent Available Foodstuffs in the Periods Indicated

<u>Products</u>	<u>Average annual percentage</u>	
	<u>1937-39</u>	<u>1946-49</u>
Rice	7.0	18.3
Beans	64.0	61.0
Potatoes	70.0	66.5
Maize	105.0	100.2
Coffee	136.0	90.8

Sources: P.G. Minneman: The Agriculture of Cuba (United States Department of Agriculture, Washington, D.C. 1942) and the Economic Commission for Latin America of United Nations.

#### Other Crops

The production of peanuts, which had reached a high peak during the war, began to drop in 1947. Hennequen production also declined, but the drop was less severe than in the case of peanuts.

These falls were caused by entirely different factors. Whereas the decline in the production of peanuts was brought about by a corresponding decrease in domestic production of edible vegetable oils, resulting from foreign competition, and a simultaneous contraction of demand for raw material for the industry, in the case of hennequen the principal factor was the decrease in world demand for the product.

#### Hennequen

The difficulties which hennequen at present encounters on the international market can be attributed to the same source as those  
/faced by

faced by other Cuban crops, and not to any particular circumstance affecting this product alone. This category comprises crops which require a substantial amount of labour in the productive process<sup>1/</sup> and those which do not benefit from the natural conditions which give Cuba a considerable advantage, as in the case of sugar cane, over her competitors.

The reasons which are not relevant to the present analysis, the level of daily wages paid to Cuban agricultural hands is higher than that of many other countries with the same economic structure and in a similar stage of development. This being so, these crops, owing to their high production cost, cannot compete on the international market with those of other countries where agricultural wages are lower. This tendency has become sharper in the past few years, in view of the relatively greater raising of day-wages in Cuba than in other under-developed countries.

Hennequen offers a good example of this trend. During the war, Cuba was in a position to export this product, despite its high agricultural wages, because world shortage of the fibre had caused prices to rise even more than the cost of production in Cuba. However, at the end of hostilities, world hennequen supplies expanded and the upshot of this was a fall in the quotation on the United States market. Cuban farmers, faced with the inelasticity of wages, were unable to adapt their costs of production to the falling price level. It is not to be wondered at, therefore, that foreign demand sought other sources of supply and that domestic production decreased to such an extent that it did no more than meet home demand.

#### Bananas

The fall in the production of bananas which, a priori, might have been ascribed to the same factors as affected hennequen, had, in fact, a different origin. Cuba can compete with the other Latin American producers of this fruit, despite the onus of wages in the cost of production, since the wage level in the banana belt is considerably

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1/ Reference is made to crops in the cultivation of which little or no mechanization is possible.

lower in the rest of the country. This anomaly can be explained by the total isolation of this region (the Northeastern part of the Oriente Province) from the rest of the island, together with the lack of any other industrial or agricultural activity which might absorb potential labour sources located in the area.

The substantial reduction in the volume of banana production arises from the spread, during recent years, of the parasitic disease known as "sigatoka". The cultivation methods used by Cuban banana planters make it difficult to combat this pest. Unlike the system used in other countries, the crop is cultivated on small plots of land by independent planters who, as a rule, have a very low income level.

It is generally recognized that the effective control of such pests requires the investment of large sums for spraying equipment for disinfectants, irrigation, and for the services of experts in this type of work. The vast scale of the preliminary disbursements practically bars any action by the Cuban planters under present production conditions. The only possible means of overcoming the difficulties would appear to lie in some form of co-ordinated action by the planters, with government assistance.

#### Evolution of the Technical Factors of Production

##### Mechanization of Agriculture

Relatively little progress was made in the mechanization of Cuban agriculture until 1945, as compared with developments in other aspects of the country's economic activity. However, from that year the use of machinery has increased notably, especially as regards the introduction of tractors for agricultural work.

Table 37 summarizes some of the changes which took place during the five-year period 1946-1950. The data contained in this table shows that the number of tractors used for agricultural purposes increased from a total of 1,888 units in 1945 to approximately 7,150 in 1950.<sup>1/</sup>

<sup>1/</sup> It is interesting to note that approximately 53 per cent of the tractors in use at the beginning of the period had been operating for less than 10 years, whereas in 1950 nearly all of these (98 per cent) were in such condition.

The total available horsepower increased, though to a lesser degree than the actual number of tractors, due to a decrease during this period of the average horsepower of the equipment used throughout the country.

Table 37 Cuba: Number of Tractors Used in Agricultural Work

	<u>Types of tractors</u>		<u>Total number</u>	<u>H.P. available</u>
	<u>Track-laying</u>	<u>Wheel</u> ( u n i t s )		
1946	1416	472	1888	57.075
1950	2020	5130	7150	185.900

Source: Censo Agrícola Nacional de Cuba, 1946, and United States Foreign Trade data.

Note: The 1950 estimate of available tractors was based on the following data: 1) United States exports of tractors to Cuba and 2) the average life of a tractor in Cuba. The estimate does not include track-laying tractors with draw bars of over 50 H.P., nor does it include those imported by the Ministry of Public Works, and wheel tractors for gardening, since it was considered that the former are not employed in agricultural work and the latter only to a limited extent.

In order to obtain some idea of the changes made in Cuban agriculture during the post-war years, it is sufficient to compare the ratio of tractors to the total cultivated surface in the first and last year of the period 1946-1950. According to the Agricultural Census in 1946, there was one tractor per 1,044 cultivated hectares, whereas by 1950, it was estimated that there was one tractor per 320 hectares.

An even more significant indication of the degree to which Cuban agriculture has been mechanized can be obtained by comparing the number of tractors with the cultivated hectare, excluding the area on which semi-permanent crops are grown, in coffee plantation, banana and other fruits, hennequen etcetera, the cultivation of which admits only of a small degree of mechanization. Unfortunately, no accurate data are available on which to base an estimate for 1950. However, if, as a rough estimate, it is assumed that the proportion of area on which these crops are cultivated remained constant between 1945 and 1950, it can be deduced that there is now one tractor per 285 cultivated hectares.

The changes in the type and horsepower of the machinery used by  
/the farmers

the farmers in Cuba are as striking as the increase in the number of tractors. /Until the end of 1946, the track-laying tractor was the type most commonly used, representing nearly 75 per cent of the total number of tractors in the country. By the end of the 1946-1950 period, small types of wheel tractors for general purposes represented almost as high a percentage of the total number as was represented by the track-laying type at the beginning of this period. It should be noted that in 1950 imports of track-laying tractors surpassed total imports for the four previous years. Whereas in the 1946-47 period imports included four-wheel tractors for every track-laying tractor, in 1950 imports of both types were almost equal. In this year, 1,064 wheel tractors were imported, as against 896 of the track-laying type. The reason for this change in 1950 is not certain, but according to some authorities it was partly due to the large scale replacement of worn out track-laying tractors in service and in part to the increased mechanization of agricultural work.

Table 38 Cuba: Per cent Distribution of the Various Types of Tractors in Use in 1950

<u>Type of Tractor</u>	<u>Percentage of the Total</u>
Track-laying	28
Wheel:-	
1 disc	6
2 "	44
3 "	14
4 "	8
	<u>72</u>

Source: Basic data from United States Foreign Trade Statistics.

In the preceding table additional details for 1950 are shown concerning the distribution of the various types of tractors. The 1946 Census data thus far published are insufficient for the drawing of a satisfactory comparison between distribution in the first and last years of the five-year period under review. However, isolated statistics referring to 1946, and those contained in Table 38 lead to the conclusion that, as a rule, the smaller type tractors at present predominate in Cuban agriculture. Fifty per cent of the total number of tractors in use were of the one and two disc-wheel type, and if

/these are

these are added to the total number of track-laying tractors of the same horsepower, this category would constitute about 62 per cent of the total.

Further evidence of the changes indicated in the last paragraph can be found in the average horsepower reduction from 30.2 to 26 in the tractors in use. The change in the type and horsepower of the tractors used would appear to indicate that the employment of tractors has spread to the medium sized farms.

There are other facts which bear out this statement. For instance, according to data obtained from private sources, the time required by two disc tractors to carry out the following specified tasks on one hectare of soft earth in Cuba, is as follows:

Breaking	4 hours
Harrowing	4 hours
Cross ploughing	1 1/2 hours

From the same sources, it has been learned that a tractor works on the average 700 hours annually, which means that these three basic agricultural tasks, in addition to others, can be carried out by two disc tractors, on plots of land varying between 55 and 60 hectares. It is quite likely that this type of tractor is also used in sugar-cane plantations of less than 55 cultivated hectares. Even when the size of the holding is insufficient for a tractor to be used economically for sowing and cultivating purposes, its use can be justified when it is taken into account that the transporting of the sugar cane represents an appreciable part of the real number of hours during which the tractor is used.

#### Factors which Determine the Intensification of the Process of Agricultural Mechanization

This problem which has been considered briefly in another section of the Commission's Report is dealt with at greater length in this chapter.

The following data and conclusions refer only to the cultivation of sugar cane. As a rule, the factors bearing on the mechanization of this crop are common to others, though in the course of this analysis, certain statements will be made which are exclusively concerned with the export crop. In 1940, according to private estimates, the wages paid

/in this

in this activity represented about 52 per cent of the gross income derived from one cultivated hectare of sugar cane. Five years later, this proportion had been increased to about 61 per cent, as a result of government legislation controlling the level of agricultural wages. Until 1947, the position remained unchanged, but since then the share of wages in gross income has increased, as a result of the wage level falling proportionately to a lesser extent than the price of sugar cane and sugar. Even when the rise in wages bore heavily on the planters' margin of profits, it would not appear that the cost of production showed a tendency to increase to such an extent as to signify a short-term threat to Cuba's competitive capacity. For Cuba to lose the advantage which it has over other sugar growing countries by reason of the cost of its agricultural production, the increase in average wages paid to agricultural labour would have had to be considerably greater.<sup>1/</sup> Furthermore, under post-war conditions, the price of sugar - even for the marginal producers, - remained well above the cost of production.

It can therefore be inferred that there was no need to lower the costs of production in Cuba to enable that country to compete on the world market and that, in consequence, these costs had no bearing on mechanization, which is, on the other hand, influenced by the pressure of wages on the margin of profits.

A second factor which stimulated the rate of mechanization was undoubtedly the rise in the incomes of the cane growers, which enabled a larger proportion of these planters to acquire machinery and implements.<sup>2/</sup>

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1/ It is interesting to note that, until 1945, the average cost in dollars of the cane or beet required to produce one ton of saccharose was 49 per cent higher in Porto Rico than in Cuba, 111 per cent higher in the State of Louisiana (United States), 32 per cent higher in Trinidad and 171 per cent higher in the beet sugar producing states of the United States. Further details will be found in Características Fundamentales de la Economía Cubana by Julian Alienes, Havana, 1950, pages 115 et sequitur, where reference is made to the work published in the Annual Report (1944-45) of the South African Cane Growers Association, South African Sugar Journal, Vol.29, (1945) N.Y. which deals with the costs of sugar production.

2/ It should be kept in mind that the price of agricultural machinery has increased to a lesser degree than the agricultural wages paid in Cuba and less, also, than the growers' net income.

From the following table, it will be seen that the gross income per cultivated hectare of cane increased from 71.73 pesos in 1940 to a maximum of 288.39 pesos by 1947, falling to 223.15 pesos in 1949.

Table 39 Cuba: Gross Income per Cultivated Hectare of Cane on Land Held Individually by the Planters: 1940 and 1945-49.  
(In pesos)

<u>Year</u>	<u>Gross Income</u>
1940	71.73
1945	126.22
1946	162.78
1947	288.39
1948	251.94
1949	223.15

Source: Cuban Ministry of Agriculture and Anuario Azucarero de Cuba, 1950. Cuba Económica y Financiera, Havana, 1951

Note: The estimate has been made on the amounts payable to the grower by law for his cane crop, according to the industrial yield of the sugar mill to which the cane is sold. The average domestic yield per hectare for each of the years in question was also taken into account, as was the official average price of sugar.

Comparing the data contained in the above table with the ratio of labour to gross income, as shown above, it will be seen that the total net income per cultivated hectare of cane has increased substantially between the pre-war period and recent years.

A third factor tending to increase mechanization was the increase in price of draught animals, and especially of oxen. These still play an important part in the transport of cane from the plantations to the railways.

There are still other factors, though of considerably less importance which affected the growth of mechanization. Among these are the expansion of credit facilities to the grower by distributors of agricultural machinery.

#### Effects of Mechanization

The use of machinery in agriculture raises a problem of fundamental importance to the country, and one which will undoubtedly become greater when mechanization is extended to include that phase of cultivation in which productivity is lowest, that is to say, in the cutting of the cane.

There is no doubt that mechanization involves technological  
/unemployment and

unemployment and that the export industries are unable to absorb the labour surplus. It is up to the industries supplying the home market and to services to absorb the unemployed, but these have developed sufficiently to do so adequately.

When the problem is stated in these terms it becomes evident that the further development of agriculture depends on the consideration and solution of certain difficulties that are closely linked to a policy of organic development of the country.

#### Agricultural Credit

The first step toward the establishment of an adequate system of agricultural credit was taken about the end of 1950, when the Government set up a public institution, known as the Banco de Fomento Agrícola e Industrial de Cuba (Agricultural and Industrial Development Bank of Cuba), with a capital of 15 million pesos and a so-called "Fondo de Fomento" (Development Fund) of 10 million pesos. The Agricultural Development Section of the Bank was financed with 50 per cent of each of these amounts. The capital of both the Bank and the Fund may only be increased from profits earned by the Bank, and by further grants from the Government.

The Agricultural Development Section will supply normal credit facilities for Agriculture and will, in addition, develop the country's agricultural activities.

It will fulfil the former undertaking by granting loans, either directly or through the Rural Credit Association (Asociaciones de Crédito Rural). Loans maturing within less than 25 years will be granted for: "the setting up of permanent plantations; the construction or repair of buildings, irrigation or drainage projects, or other improvements required for agricultural development; the purchase of pedigree cattle for breeding or draught purposes, and of equipment and machinery for use in agricultural development; the purchase of land for purposes of cultivation or for other activities of a similar nature and finally, for the refinancing of loans incurred for any of the aforementioned reasons". Advances will be made for periods not exceeding 18 months for the following purposes: "ordinary expenses incurred in sowing, cultivating and harvesting; purchase of cattle for breeding, fattening or draught, forage, tools, seeds, insecticides, fungicides and fertilizers, and for processing, producing, storing and  
/transporting

transporting agricultural produce".

Loans for periods of less than 18 months can be guaranteed "by financial or rural taxes on crops, produce, cattle and other movable goods; liens on securities issued by the Bank itself or by any others deemed adequate for the purpose in the opinion of the competent authorities. Loans maturing in periods between 18 months and 25 years are guaranteed by mortgages. The law also establishes that loans for periods of between 18 months and five years may be guaranteed by securities or financing, instead of a mortgage, if the Board of Directors of the Bank is in agreement.

In order to stimulate agricultural development, the Bank will grant:

- 1) "Loans to Rural Credit Associations for the purchase of property required for the fulfilment of its duties;"
- 2) "Rehabilitation loans of not more than 300 pesos to agricultural producers, even though they lack an adequate credit rating".
- 3) It will participate "as a shareholder, in Rural Credit Associations";
- 4) In order to assist the Rural Credit Associations and the Employers Associations, it will purchase, for re-sale to the Rural Credit Associations and the Employers Associations such movable and immovable property as is required for the development of their activities;"
- 5) It will establish and direct or give its patronage to "organizations set up for purposes of research, study and experimental work, or dissemination of information regarding agriculture and its organization on a co-operative basis".

The law seeks to extend credit facilities by means of the establishment of Rural Credit Associations, which are defined as being local co-operatives on a shareholding basis, which are subject to its legislation (that is, the Law of the Bank of Agricultural and Industrial Development), and which are set up for the express object of:

- 1) "Extending credit facilities to their members;"
- 2) "Facilitating the production, processing, storing, transport, distribution, sale and consumption of produce and such other economic transactions as will benefit agricultural production".

Among their various powers these Associations are authorized to:

/1) "Grant

- 1) "Grant loans to their members in accordance with the terms established by the Bank";
- 2) "Store produce, preferably belonging to their members";
- 3) "Co-operate with their members in the buying and selling of every kind of goods";
- 4) "Discount and rediscount obligations undertaken on their behalf and obtain advances from the Bank".

#### Cattle Breeding

The outstanding feature of Cuban cattle breeding during the past few years has been the constant decrease in stocks of bovine cattle. Table 40 shows that within the past 10 years, the total number of heads fell from 5 million to 4 million, that is to say, a reduction of 20 per cent.

The principal factors which have given rise to and hastened this trend, are of a cyclical nature, though there are also others which are more deeply rooted in the past. The first group consists of nearly all those factors which in recent years tended to raise the level of domestic demand for meat; in the second group we find those factors that bear upon supply and which, owing to their peculiar nature, hampered a short-term increase in supply.

Table 40      Cuba: Bovine Cattle Stocks

<u>Annual Average</u>	<u>Thousands of Head</u>
1936-40	5,024
1941-45	4,823
<u>Years</u>	
1945	4,236
1946	4,136
1947	4,100
1948	4,000
1949	4,000

Source: Foreign Crops and Markets (United States Department of Agriculture), Vol.60, No.15, April 1950, page 318.

At the beginning of the war the shortage of certain basic foodstuffs stimulated the demand for meat. It was also expanded, though to a lesser extent than the other causes mentioned, by the rise in income of the population and the relatively low price of this product as compared with other foodstuffs. Since 1945, the increase of total income has become probably the only dynamic factor bearing on demand. Although this latter may lack some of the stimuli which existed in previous years,

/it rose

it rose to even higher levels up to 1947.

During normal periods, the impact on home production of the increase of domestic demand for meat was to a certain extent lessened by imports of this product or its substitutes. However, during the war no such increase in the volume of imports was possible and therefore increased demand turned to local sources of production. The war years were characterized by a contraction of imports and an expansion of demand. Nevertheless, Cuba began to export meat, despite sporadic restrictions imposed by official authorities. As will be seen from Table 41, in 1939 the volume of Cuban meat exports was insignificant, though by 1941 their volume was equivalent to practically 20 per cent of the average annual pre-war meat production. In terms of heads of cattle, and basing the comparison on sales of cattle on the hoof, total exports for the period 1940-44 rose to approximately 180,000 head.

Table 41 Cuba: Exports of Fresh and Preserved Beef, 1939-1944  
(In metric tons)

1939	20.5
1940	5,515.7
1941	19,386.3
1942	6,042.3
1943	249.2
1944	1,701.0

Source: Cuban Foreign Trade Annual Reports.

These facts are of outstanding importance when it is considered that Cuba is a country in which, in view of the bovine birthrate <sup>1/</sup> - about 55 births per 100 cows - and the relatively high mortality rate of calves, there is little possibility of increasing meat production without reducing stocks. At the end of the war the Government decreed the absolute stoppage of meat exports so that foreign demand no longer

<sup>1/</sup> The low birthrate can be attributed to the prevalence of Brucellosis (undulating fever) and the deficit of proteins and minerals in the local pasture lands. More ample data on this subject will be found in "Estudio de diversos aspectos de la producción y comercio de ganado vacuno en Cuba con vista al normal abastecimiento de carne de la población" (Thesis on the various aspects of production and trade of bovine cattle in Cuba with regard to normal meat supply of the population), by Caste Ferragut L. (Ministry of Agriculture, Havana.)

/had any

had any influence on Cuban cattle breeding. However, at this time (1944-45) a new disturbing factor arose: a drought, which lasted approximately a year and a half.

The distribution and intensity of Cuban annual rainfall plays a vital part in the total of that country's meat production, since it is a determining factor of the amount of food available for cattle. It should be noted in this connection that the natural grassland pastures are the country's only source of food for bovine cattle.

Government policy, stipulating that meat supply should be maintained at a level at least as high as that achieved during the two-year period 1944-45, made it necessary to slaughter a considerably larger number of heads than would have been required in a year of normal rainfall. In this two-year period there was a sharp decrease in the number of heads of cattle, the number slaughtered in 1945 being as high as 840,000.

During the first two years of the post-war period, demand for meat continued to increase and production also rose, though fewer cattle were slaughtered in 1946 and 1947 than in 1945. This seeming paradox can be explained by the fact that the average weight of each head slaughtered was higher in 1946 and 1947 than in 1945. However, the decrease in the number of heads slaughtered did not hinder the subsequent decline in total bovine stocks. In 1948 meat production was not particularly high, though demand retained its former volume. This was due to a certain amount of opposition on the part of cattle breeders to selling their cattle at the ceiling price established by the Government.

In 1949 domestic demand fell as a result of a substantial fall in the total income of the population. By the end of that year it was possible to maintain bovine stocks at the same level as in the preceding year. This was achieved after 10 years of constant reduction in the number of heads of bovine cattle in Cuba.

#### CHAPTER IV INDUSTRIAL DEVELOPMENT

##### The Expansion of Industrial Production for the Domestic Market

The data on industrial activity in Cuba is extremely incomplete, its deficiency being particularly evident in the fields of employment, productivity and wages. However, the statistics referring to the volume of production, within certain limits, facilitate the drawing of several conclusions, relative to the development of manufacturing in the past few years. These have also been used in computing a total index and partial indices for the quantum of production, both of which, however, inaccurate, do summarize industrial expansion in the post-war period.<sup>1/</sup>

- 1/ If the production indices are compared with the indices for the sale of electric power to industrial consumers, other than those connected with the sugar industry (shown below), various differences will be noted.

##### Indices of the Sales of Electric Power to Industrial Consumers Other than those Connected with the Sugar Industry 1945-1949

(1945 = 100)

1946	107
1947	101
1948	92
1949	91

Source: Reports of private concerns.

Various occurrences suggest, however, that the index computed by the Economic Commission for Latin America of the United Nations indicates more accurately than sales of electric power, the true course of production during the past few years. In the first place, the sale of electric power includes export industries such as pineapples, sweets (candy), etcetera, which contracted sharply at the end of the war, though it will be noted that the sugar industry is not included. In the second place, many factories did not use their own electric power generators while there was a fuel shortage but relied on electricity supplied by public services. When petroleum supplies were restored after 1947, however, these factories began using their own generators again.

Table 42. Cuba: Partial and Total Indices of the Volume of Production of Eighteen Industries Supplying the Domestic Market, 1945-1949  
(1945 = 100)

	<u>1946</u>	<u>1947</u>	<u>1948</u>	<u>1949</u>
Foodstuffs and beverages	113	126	129	123
Textiles	110	124	87	66
Footwear	100	105	84	61
Paper and cardboard	144	157	157	199
Rubber goods	168	247	187	200
Cement and paints	124	143	150	156
Others	<u>90</u>	<u>112</u>	<u>120</u>	<u>119</u>
Total	<u>110</u>	<u>126</u>	<u>116</u>	<u>106</u>

Source: Economic Conditions in Cuba 1945-1949, International Reference Service, United States Department of Commerce, Washington, Reports from official and private sources.

Note: The calculation of the index was made by employing the formula  $\frac{P_{0n}}{P_{00}}$ . Where possible, factory prices of the products included in the indices were used; elsewhere export or import prices were employed. The total index comprises eighteen of the principal products manufactured for the domestic market, but does not include goods such as alcohol, cigarettes and tobacco, which are also exported and which have been studied elsewhere in this report.

As will be seen from Table 42, the increase of production was relatively greater, and the decrease less abrupt in the three industries (paper, rubber and cement) in which capital investment per gainfully employed person is greater. In two of these (cement and rubber) the increase in fixed capital during the post-war period enabled them to expand production, whereas in the paper industry expansion was accomplished mostly by making greater use of the machinery already installed. In the manufacture of foodstuffs, despite the increase of investments, production did not expand more rapidly owing to the shortage of raw materials.

Taking production as a whole, it may be said that the maximum activity of industries producing for the domestic market was recorded during the five-year period 1945-1949, though production decreased noticeable in 1948 and 1949. From Table 42 it can be seen that the total index rises substantially during the first three years and then falls to 116 per cent in 1948 and 106 per cent in 1949. According to preliminary /data, production

data, production maintained its downward trend during the first half of 1950 and rose again sharply during the second half of the year.

During the period 1945-47, a combination of three factors greatly stimulated production: 1) the increase in domestic demand for manufactured goods following the rise in income resulting from the higher value of exports; 2) the expansion of foreign supplies of raw materials for domestic industry; and 3) the extremely limited competition still offered by foreign supplies in the domestic market. In 1948 effective demand began to diminish due to the fall in total income and the satisfaction of an appreciable portion of pent-up demand during the first two post-war years. On the other hand, foreign industrial competition in the Cuban market was intensified, exercising the greatest depressive influence on domestic production. The competition of foreign products was further strengthened by the rise in the price of goods manufactured in Cuba.

In fact, the rise in industrial wages, which was proportionally greater than the increase in productivity per person gainfully employed in industry, tended to raise the price of domestic manufactures beyond the level of those of foreign origin.

The data published in Cuba do not provide sufficient support for the contention that the rate of increase of industrial wages in that country, at least during the three-year period 1945-47, exceeded that in the great industrial centres, such as Great Britain and the United States. However, the fact that the rise in Cuba's cost of living was greater than in either of these countries and that the Government authorised increases of wages in industry in relation to the increase in the cost of living, would appear to confirm the foregoing conclusion.

There is even less data available on the trend of productivity during the past few years for industries supplying the domestic market. However, the following rough estimates may be made.

During the war, the expansion of production was achieved by lowering productivity per labourer and increasing the amount of labour in relation to capital investment, which either remained constant or increased very slightly. During the post-war period, though the ratio of capital investment to labour tended to revert to its pre-war level, productivity probably remained lower than in the earlier period, but higher than

/between 1940 and 1945.

between 1940 and 1945.

Foreign trade statistics show that from 1945 there was a sharp increase in capital imports, which would lead to the prima-facie belief that there was a considerable rise in total capital investment per gainfully employed person and, therefore, an increase of productivity in the industries supplying the domestic market and competing with foreign industries. In reality, this was not the case, since a large proportion of the capital goods imported was absorbed by the export industries, while the remainder was used mainly for purposes of replacement.<sup>1/</sup> Thus only the remainder can be considered as a net increment to capital investment in the industries supplying the domestic market.

The events analysed above suggest that the net increase of capital investment was moderate and that, consequently, the increase of productivity was not very great. This does not mean that in some branches of industry taken together this improvement in productivity has not been appreciable. This was the case in the textile industry after the installation of an efficient rayon factory, in spite of the fact that net additions to the fixed capital of the industry were small.

These changes did not affect the whole of industry with uniform intensity. The protection given by customs tariffs was so great, in certain cases, that despite the rise in prices foreign manufactures were unable to compete on the Cuban market. In other cases, the margin of profit accruing to domestic producers was so great that they were able to absorb increased costs without increasing their wholesale prices.

Within industrial activity as a whole, foreign competition was felt most sharply in the cotton textile industry and in the manufacture of footwear. Its pressure was felt to a lesser extent in the manufacture of rubber goods, especially tyres. Between 1947 and 1949 tyre production fell from 65,900 to 53,000 and that of inner tubes from 41,500 to 34,000. Nevertheless, during this period, apparent total consumption of these goods continued to expand.

The manufacture of footwear decreased from 10 million pairs to 5.8 million pairs, during these same two years, while activity in the cotton

<sup>1/</sup> It is very likely that replacements increased productivity per gainfully employed person, but this increase was probably small.

/textile industry

textile industry began contracting in 1947 and continued this trend until March 1949, when there was a complete shut-down. (See Table 43).

Table 43. Cuba: Indices of the Volume of Employment, Salaries and Production in the Cotton Textile Industry: Monthly Averages 1947-1949

	<u>Labourers employed</u>	<u>Wages paid</u>	<u>Production</u>
1947	100	100	100
1948	90	83	67
1949 <u>a/</u>	66	50	..

Source: Caja de Retiro y Asistencia Social de los Trabajadores Textiles y Henequeneros (Social Security and Pension Fund of the Textile and Henequen Workers)

a/ Includes only January and February.

Some time after the shutting-down of the factories, consumer resistance to the high prices diminished, thus stimulating domestic demand. Moreover, entrepreneurs were granted a government subsidy, the funds for which were derived from a domestic tax levied on imported cotton goods; this measure was designed both to maintain industrial wages at a minimum level and to provide a dole to unemployed textile workers.

#### New Industries

Although no exceptional increase or fundamental change in the direction of industrial investment was observed during the post-war years, a certain amount of progress in the form of net additions to fixed capital was achieved in the industries already established in the country. As has already been shown, any attempt to assess the total net investments in Cuban industry would meet with failure. In order to convey an impression of the amount of these investments, the industrial plants established since the end of the war will be described briefly.

Judging from the number of factories built, the largest investments have been made in the food and beverage industries. One example was the construction of a flour mill near Havana with a capacity which should be sufficient to cover about one third of the country's total flour consumption. Moreover, two condensed milk plants have been built, and a brewery with an annual capacity of 30 million litres, while the capacity of other breweries has been expanded.

In the textile industry, the factories which have recently been  
/built are now

built are now producing rayon yarn or textiles, but none have been equipped for the processing of cotton. The capacity of the rayon yarn factory was increased by 50 per cent in two years. As this plant is described fully in another report presented by the Commission,<sup>1/</sup> no further reference will be made to it here.

The other two rayon factories established since the war, have a joint annual capacity of 4.2 million square metres, 90 per cent of this total corresponding to one of the two factories, which has 200 automatic looms. In another factory established before 1945, 120 additional looms have been installed, though these are not automatic.

In the rubber industry, the five-year period 1945-49 was marked by the rapid expansion of productive capacity. In fact, not only was the tyre factory built in 1941 enlarged, but a new one was built, followed by another for the manufacture of rubber-soled shoes and other rubber goods.

The building of a match factory was undertaken at the end of 1950, its capacity being designed to cover total domestic consumption. About the same time, work on the expansion of the cement factory was concluded. During the past few years, the number of furnaces in this factory has been increased from 4 to 6 and its productive capacity raised to approximately 325,000 tons.

#### Government Policy

Growing foreign competition has stimulated local entrepreneurs in certain industries to request greater government tariff protection by either increasing the tariff or eliminating preferential treatment for countries which had previously enjoyed this privilege.

The Government took up the suggestion of the country's industrial leaders, and in 1948 for a short time went so far as to prohibit imports of certain types of manufactured goods and cotton materials. Later, however, it was decided to negotiate with the United States, the principal country affected, with the purpose of annulling the preferential treatment granted for five products, namely, ribbons, trimmings, nylon stockings;

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<sup>1/</sup> Document E/CN.12/164 Annex J.

tyres and inner tubes,<sup>1/</sup> which were normally imported from the United States. This implied a significant change in government policy, especially in view of the fact that the Cuban Government was in turn willing to accept the annulment by the United States of the preferential treatment of certain Cuban exports.

Previously, government policy would not have protected domestic industry if this resulted in the loss of the advantages of tariff concessions to Cuban products.

In addition to its high wages policy, the Government continued its practice, begun before 1945, of taking over temporarily the administration of private enterprises under certain circumstances. Although there is no standard practice, official intervention usually occurs when the owners of an enterprise refuse to put into effect Government-authorized salary increases which they consider exorbitant.

In cases in which the claims of industrial leaders were proved to be well founded, the Government sought other means of settling the dispute, while avoiding wage reductions. Once a solution had been reached, control of the industry was restored to its legal owners. Among the methods employed by the Government are tax exemptions granted to industrialists and subsidies for the payment of wages. The Government has intervened in the cotton textile industry, in the manufacture of henequen rope, and in other activities during this period.

Another important event connected with the country's industrial development during 1950, was the establishment of an Industrial Development Bank with a government loan. Its establishment is of great importance, since until that date there had been no adequate organization through which private savings might be diverted into industrial investments, nor had the private banking system shown any interest in financing undertakings of this nature. Thus, this institution partially fills the need which

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<sup>1/</sup> These industries were either created during the war or at least greatly stimulated during this period.

/private enterprise

private enterprise had failed to meet.

The capital and the so-called Development Fund of the Industrial Bank are equivalent to those of the Agricultural Bank, that is to say, 7.5 and 5 million Cuban pesos respectively. The banking operations which this institution is entitled to undertake are as follows:

1. The granting of loans for periods of not more than 25 years for the purpose of purchasing, building, or repairing machinery, buildings and other assets required for industrial production; and the granting of loans for periods of not more than eighteen months to cover operating expenses of industrial activities;
2. Purchase or exchange of bonds and other debentures issued by these types of enterprises.

The development operations which the Bank is entitled to undertake are:

- a) To share in industrial undertakings which may be established, investing not more than 55 per cent of the paid in capital of such undertakings;
- b) To grant loans for industrial development in accordance with the plans formulated by the Board of Directors;
- c) To establish, direct and foster services intended to carry out research, study and experimentation, including the building of pilot plants and the publishing of information connected with industry.