THE ECONOMIC DEVELOPMENT OF PUERTO RICO 1950-1974

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Over the past twenty-four years, the Commonwealth of Puerto Rico has experienced a very high, continuous rate of economic growth. The development effort has been so successful that many people might question the classification of Puerto Rico as a less developed country. In comparison to many of the other less developed countries, Puerto Rico's economy seems indeed to be highly developed. However, despite its impressive growth, the economy is still plagued with many problems common to less developed countries, in particular, a high level of unemployment, low per capita income, and a decaying, neglected agricultural sector.

This paper will study the economic development of Puerto Rico from 1950 to the present. Some reference will be made to events during the late 1940's as they have a direct bearing on the later development efforts.

Impressive improvements have been made in the economic characteristics of Puerto Rico. Real GNP in terms of 1954 dollars has grown at an average of 6.5% per year since 1950.1 Real per capita income has increased from \$399 in 1950 to \$1146 in 1972, an average growth of 5.48% per year. Gross fixed domestic investment has maintained a growth rate of 11.6% throughout the 1960-1970 period.

Puerto Rico continues to be troubled with a balance of payments problem as imports exceed exports by approximately 50%. Recently some improvement has taken place. Over the past five years exports have been growing at a 13.6% rate per year while imports have only grown at a 10.97% annual rate. The balance of payments problem for Puerto Rico is not as significant as it is for other less developed countries due to its special status with the United States. The island uses the American dollar as its own currency and need not particularly fear devaluation. Ninety per cent of all Puerto Rican exports go to and 80% of its imports come from the United States.2 Trade with the United States has a regional rather than international character. The deficit is financed chiefly through unilateral transfers and enormous foreign investment in the island's economy.

Puerto Rico's inflation problems are closely tied to the American economy. When the United States experiences a period of inflation, so too does Puerto Rico, only more severely. Because of the poorly utilized agricultural sector, food prices are rising faster than the prices of all items. Between 1963 and 1972 prices of all items rose 3.2% annually while they increased 4.2%

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*Puerto Rico Planning Board, Socioeconomic Statistics of Puerto Rico, Fiscal Years 1940, 1948, 1950, 1959 to 1972, 1973. Note: All statistical information contained in this paper are from the above mentioned source unless otherwise cited.

*Robert D. Crassweller, The Caribbean Community: Changing Societies & US Policy, (New York: Praeger Publishers, 1972), p. 230.

ECONOMIC AND SOCIAL CHARACTERISTICS OF PUERTO RICO

	1950	1960	1965	1967	1968	1969	1970	1971	1972	
GNP (1954 \$) \$ million	879	1,475	2,070	2,325	2,462	2,628	2,806	2,992	3,148	
Real GNP Growth Rate	7.3	8.1	7.6	4.1	5.9	6.7	6.8	6.6	5.2	
Per Capita (1954 \$)	399	634	806	884	928	978	1,033	1,090	1,146	
Real Per Capita Growth	7.0	7.5	5.8	3.0	5.0	5.4	5.6	5.5	5.1	
Gross Fixed Domestic Investment (\$ million)	111	355	720	919	975	1,099	1,403	1,624	1,808	
Inflation Rate*	6.8	2.9	2.4	4.4	5.0	3.7	4.7	5.6	7.6	
Unemployment Rate	13	13	11	13	12	11	11	12	12	
Fomento Plants estab. (cumulative)	82	688	1,118	1,445	1,479	1,629	1,729	1,829		
Foreign Plants as % of total*	84	82	75	69						
Exports (\$ million)	235	622	974		1,449	1,606	1,729	1,797	1,974	61
Imports (\$ million)	345	915	1,659		2,263	2,556	2,879	3,108	3,505	
Tourist Expenditures (\$1,000's)	6,816	58,100		167,794	201,680	233,994	235,422	234,715	258,942	
Population (1,000's)	2,218	2,360	2,583		2,665	2,706	2,716	2,741	2,825	
Life Expectancy	61	. 69	70	70	71	70	72			
Birth Rate per 1,000	38.5	33.5	32.1	-	26.5	26.0	25.8	27.0	25.9	
Death Rate per 1,000	9.9	6.7	6.9	-	6.6	6.5	6.7	6.6	6.5	
Infant Mortality per 1,000 (under age 1)	68.3	42.0	41.3	31.5	28.1	28.5	27.6			
Enrollment in public day schools	431,000	567,000				_		0	697,410	
Enrollment in universities	12,600	24,500		45,100	47,600	52,000	56,000	64,481	69,457	

*SOURCE: RITA MALDONADO, THE ROLE OF THE FINANCIAL SECTORIN THE ECONOMIC DEVELOPMENT OF PUERTO RICO, 1970 SOURCE: SOCIOECONOMIC STATISTICS OF PUERTO RICO, Commonwealth of Puerto Rico, Planning Board, 1973

on food.3 The inflation rate declined in the early sixties but has been increasing steadily since 1967, averaging about 5% a year. The inflation is particularly acute for the Puerto Ricans as they are forced to pay Mainland prices with sub-Mainland wages.4

Similarly, the Puerto Rican economy tends to mirror the American economy's recessions. Puerto Rico immediately feels the effect of a slow-down in the American economy. Investment rapidly slows as does revenue from the American tourist.

One of Puerto Rico's most significant problems is its inability to reduce its high unemployment rate. Over the past twenty-four years, the unemployment rate has fluctuated around 12% in spite of all the new jobs introduced by the government's economic development branch. New jobs barely keep pace with increased population and decreased employment in agriculture.

The wage differential in manufacturing between the United States and Puerto Rico has narrowed considerably. In 1950 the average American wage was three times greater than the prevailing rate in Puerto Rico, But, by 1972 the American rate was only 1.9 times greater. Many critics have expressed concern that a narrower wage differential might discourage foreign industry from locating on the island. Their fears have not been borne out since Puerto Rico offers many other incentives to attract foreign industry. The productivity of Puerto Rican workers is also improving rapidly. Between 1965-1970 Puerto Rican productivity increased 4.3% compared with only 2.1% in the United States.6

During the decade of the 1960's the following growth rates illustrate the growth sectors in the Puerto Rican economy.

Agriculture 3.3%
Industrial Activity+10.0%
Manufacturing + 9.5%
Construction+10.4%
Wholesale and Retail Trade + 8.8%
Transportation $\dots + 7.7\%$

The composition of the Puerto Rican economy has shifted considerably since 1950. During the early 1950's Puerto Rico was predominantly an agricultural economy. By 1955, the industrial sector surpassed agriculture as the largest generator of income in the economy. The serious decline in agriculture is striking.

³Statistical Office of the United Nations, Statistical Yearbook—1973, (New York: Statistical Office of the United Nations, 1974), p. 546.
⁴Gordon K, Lewis, Puerto Rico: Freedom and Power in the Caribbean, (New York: MR Press, 1963), p. 220.
⁵Statistical Office of the United Nations, p. 500. (1963) and p. 533, (1973).
⁶Commonwealth of Puerto Rico, "Basic Industrial Facts on Puerto Rico," (New York: Continental Operations Branch, April 20, 1974).
⁵Statistical Office of the United Nations, 1973.

Percentage Distribution of Net Income by Economic Sector⁸

	1950	1960	1970
Agriculture	24	13	6
Manufacturing	15	21	24
Construction	4	6	9
Commerce	17	18	18
Government	11	13	14
Services	7	10	13
Other	22	19	16

Within the manufacturing sector itself, there have been sizeable changes in the distribution of the products produced, once again indicating the decline in agriculture.

Percentage Distribution of Manufacturing Net Income by Product9

	1950	1960	1970
Food and related products	47	23	19
Tobacco products	3	3	5
Textiles, apparel, etc.	20	23	22
Chemicals and allied products	7	3	8
Stone, clay, and glass products	6	7	6
Metal products and machinery	3	19	18
Paper and printed products	6	6	3
Leather goods	0.5	2	6
Other manufacturing	8	14	13

The decision in the late 1940's to stress industry at the expense of agriculture has caused a serious deterioration in the agricultural sector. The three principal agricultural products are sugar, coffee, and tobacco, all of which have suffered a continuous decline. Sugar production is presently only 26.5% of what it was in 1948. Coffee production reached a peak in 1962 but has declined ever since. The coffee industry is currently producing at its 1950 level. Tobacco production today is four times less than it was in 1950. Outdated technology, low wages, and a serious labor shortages account for the deterioration of Puerto Rican agriculture.

Growth areas in agriculture include milk (+6.8%/year), beef and veal (+6.6%), pork (+6.6%), beer (+9.0%), and rum (+18%). Of prime importance is the rum industry. Puerto Rico is exempt from American taxes. so all rum taxes are remitted back to Puerto Rico. Rum remittances of \$160 million provided the necessary revenue to finance the initial development effort in the late 1940's. Rum still provides the major source of revenue for the Puerto Rican government. Total rum taxes paid in fiscal year 1968 amounted to \$19,327,430.11 Rum, popular in the United States, has provided a large, positive contribution to the balance of Trade.

⁸Robert A. Crampsey, Puerto Rico, (Harrisburg, Pennsylvania: David & Charles Stackpole Books, 1973, p. 92.

**Politid., p. 95

**10Statistical Office of the United Nations, 1963 & 1973.

**11The Commercial and Financial Chronicle, October 3, 1968, p. 11.

One of the most vital industries of Puert oRico is the tourist industry which has sustained a 7.12% annual growth rate over the last five years. In 1950 only \$6,816,000 were earned, but by 1972 tourist receipts amounted to a tremendous \$258,942,000. The industry has suffered a decline in only two years, 1961 and 1971, both of which were recession years in the United States, Puerto Rico's number one tourist.

By examining the composition of government expenditures, one is struck by the high proportion spent on social welfare programs. Puerto Rico is in the enviable position of requiring absolutely no defense expenditures. The United States has guaranteed the island's protection, both militarily and diplomatically.

The 1973 Commonwealth budget allocated \$1,430,000,000 as follows:12

General Government and other functions	32.6%
Public safety and correction	10.1%
Economic Development	8.9%
Health and Welfare	19.4%
Education	29.0%

Ignoring the agricultural sector, Puerto Rico has clearly made enormous economic gains. The island has also made important advances in the social and political spheres.

One of the most critical problems a less developed country must overcome is excessive population growth. Puerto Rico has significantly reduced its population growth rate over the past two decades. In 1950 the rate of population growth was 2.86% which fell to 2.68% by 1960. The population rate has continued to decline and is presently 1.94%. On the surface, the population problem appears to be solved. Unfortunately, Puerto Rico has an added handicap, very limited living space. Presently, there are over 800 people per square mile, ¹³ which is more than the land can comfortably support. Puerto Rico cannot afford even a slow population growth rate; it needs to achieve zero population growth.

Puerto Rico was extremely fortunate that over a million of her people migrated to the United States, thus reducing the pressure on welfare programs and on the unemployment rate. Puerto Rico has experienced a declining death rate as well as a rapidly decreasing infant mortality rate due to improved health care. Life expectancy has increased from 61 years in 1950 to 72 years in 1970. Puerto Rico proudly boasts that her leading causes of death are now old age ailments such as heart attacks rather than infectious diseases.

Strides have been made in the area of education as well. The literacy rate has improved from 75.3% in 1950 to 89.3% in 1970. Because so much of the government's budget has been appropriated for education, Puerto Rico can provide the individual with much more than a primary education. Over the last five years, university enrollment has increased at an annual 10.95%

¹²Commonwealth of Puerto Rico, Department of the Treasury, Economy and Finances— Puerto Rico — 1973, PRISSN 0079-7871, p. 26. ¹³Kal Wagenheim, Puerto Rico: A Profile, (New York: Praeger Publishers, 1970), p. 35.

rate. Education and business administration are the most popular college majors. Despite the high percentage invested in education, only \$278 is spent per student as compared with \$696 spent in the United States.¹⁴

To properly understand Puerto Rico's success, it is important to understand its Commonwealth status with the United States. Puerto Rico received Commonwealth status in 1952 and is free at any time to apply for statehood should a popular referendum support the move. It is unlikely that Puerto Rico will wish to change its status in the near future because Commonwealth status has important, unique advantages. Exemption from all United States federal taxes is a decided advantage in attracting industry to Puerto Rico. The United States also provides defense and handles foreign diplomacy. Puerto Ricans, though American citizens, are allowed their own constitution and autonomy over domestic affairs. They also receive considerable grants from the United States and are more often considered an economic region of the United States than a separate nation.

Commonwealth status has negative aspects as well. Puerto Rico has no voting representatives in Congress yet was subject to the military draft. Puerto Rico, like Hawaii, is required by federal law to use costly American ships to transport her products to market which hurts her competitive position. Although some Puerto Ricans strongly favor full independence while others favor statehood, most seem content with the present Commonwealth status. By far the most important political characteristic is the government's stability which has been an important attraction to foreign industry and investment.

Historically, Puerto Rico has been hampered by a lack of natural resources. Although the island has a good climate for agriculture, only about one-third of the topsoil is considered of good or medium quality. ¹⁵ The land has been abused over the centuries by poor agricultural practices and by the destruction without replacement of its trees. During the 1950's, deposits of clay, sand, gravel, and limestone were exploited in the new cement industry. Other known resources were salt, silicate, marble, and blue limestone. By far, Puerto Rico's most valuable resources have been its good climate and beautiful beaches, though these were not exploited until the decade of the fifties. As the island has been explored more extensively, important mineral deposits have been discovered which should have a major impact on Puerto Rico's future. The most important discovery has been a \$3 billion copper deposit. Negotiations are still in progress trying to work out an agreement to exploit the resource without fouling the environment. Deposits of nickel, zinc, and cobalt have also been found but not yet tapped.

The tremendous success of Puerto Rican development can be attributed to a variety of reasons. Perhaps most important is the special Commonwealth status the island has with the United States. American investors need not fear nationalization in Puerto Rico any more than they do in California. They operate under a judicial system almost identical to that in the United States. Foreign investors, by locating in Puerto Rico, are able to penetrate the huge Caribbean market tax-free. The United States not only provides a sizeable

¹⁴Ibid., p. 202. ¹⁵Ibid., p. 31.

market for Puerto Rican goods but also a refuge for unemployed, unskilled Puerto Ricans. The Puerto Rican government is also able to raise revenue through tax-free bond sales in the United States. Because the United States pays for Puerto Rico's defense, weather bureau, postal system and diplomatic and commercial relations with foreign nations, Puerto Rico can afford to concentrate more intensely on education, welfare, health, housing, and development.¹⁶

Association with the United States cannot fully explain Puerto Rico's phenomenal economic success, for it had had a special position for many years yet remained stagnant economically. The Puerto Rican people themselves deserve a large share of the credit for their country's economic success. During the 1940's, they agreed upon the necessity of development and elected and supported a government dedicated to this purpose. The Munoz-Marin government provided imaginative and creative leadership as well as political stability, both vital for economic development. The leadership approached problems practically rather than clinging to any particular economic dogma. Hence, they were able to reap the benefits of various economic systems without incurring certain drawbacks characteristic of each. They were not hindered by the inefficiency and political decision-making of a totally socialist system. Nor were social costs and benefits ignored as under pure capitalism.

An example is the pineapple cannery built by the government. Because there was no cannery, farmers were unwilling to produce pineapples. Because farmers were not producing pineapples, there was no incentive for private capital to construct a cannery. Yet, pineapples were an ideal crop for Puerto Rico. The government encouraged pineapple production and built and operated the cannery while private firms distributed the product. The government is by no means dedicated to socialism; they actively encourage private enterprise as well. Their main concern is development, not dogma.

The large migration of Puerto Ricans to the Mainland during the 1950's was instrumental in improving the island's economy. Over 446,800 people emigrated from 1950-1960 which reduced the population growth by an estimated 67%. 18 Approximately 85% of the migrants were in the most fertile 15 to 44 years age group that also accounts for the largest share of the labor force. Friedlander estimates that without migration, unemployment would have reached as high as 25 to 33%. 19 Fortunately for Puerto Rico, most of the migrants were unskilled so their departure meant an upgrading of the labor force. The Commonwealth government was relieved of the burden of providing welfare and education for the migrants and was able to allocate more money for government investment in the economy.

During the 1960's, the migration flow reversed itself. Many Puerto Ricans became homesick and tired of their low social status on the Mainland. Large, prolonged return migration could have disastrous consequences for

Patri Parker Hanson, Pherio Rico, Ally for Progress, (Princeton: D. Van Nostrand Company, Inc., 1962), p. 92.
 Stanley Friedlander, Labor Migration and Economic Growth, (Cambridge, Massachusetts: 19bid., p. 162.

¹⁶Lewis, p. 183. ¹⁷Earl Parker Hanson, Puerto Rico, Ally for Progress, (Princeton: D. Van Nostrand Company, Inc. 1962), p. 92.

Puerto Rico's development effort. To date, Puerto Rico has been able to absorb the return migrants because the migrants have developed skills while in the United States. Unfortunately, those without new skills refuse to work in the agricultural sector which desperately needs workers.

Puerto Rico, though predominantly Roman Catholic, has widely accepted birth control practices. The people do not seem to take the Church's position seriously, preferring economic progress instead. It is interesting that many Puerto Ricans choose sterilization rather than less radical birth control methods which indicates their firm commitment to modern living. The change in attitudes is apparent when one notes that as late as 1939 distributing birth control information was considered a felony. 20 The government did not openly promote island-wide birth control until 1970,21 fearing the political consequences of strong opposition from the Church, However, private organizations were allowed to provide birth control information. They operated successfully in public health clinics and hospitals. Because of the government's open support of birth control, further decreases in the birth rate are expected.

Puerto Rico's development effort has also benefited from the severance of relations between the United States and Cuba. Since American tourists are no longer able to visit Cuba, Puerto Rico has become an ideal substitute as well as a stepping stone to the rest of the Caribbean and Latin America. Puerto Rico is also attempting to replace Cuba as the leading cigar making country in the Caribbean, Puerto Rico's strategic value to the United States has increased due to Cuba's communist revolution. American bases on Puerto Rico provide a source of revenue and improve Puerto Rico's balance of payments to the United States.

As mentioned earlier, the government has played an active role in the economic development program. The modern development of Puerto Rico began during the 1940's under the governorship of Rexford Tugwell, an FDR appointee and strong supporter of the New Deal approach to problems. He was later replaced by the popularly elected Munoz-Marin, the father of Puerto Rican economic development.

A land reform program was initiated in 1941 designed to enforce the 500 Acre Law which prohibited land holdings larger than 500 acres. Marginal sugarland was given to small scale farmers. This program, though socially desirable, quickly failed as production fell. The scale of production was too small, Rapid population growth destroyed any gains that were achieved. More successful was Title IV of the land reform law which created the proportional profit farm. The idea behind the proportional profit farms was to combine public ownership, efficient management, good land, and an equitable distribution of profits between workers and managers to create highly productive farms.²² The government bought the land from the sugar companies and then leased it to experienced farmers. Managers received a salary plus a fixed percentage of the farm's net profits. The hired workers were to receive the remainder of the profits. A worker's share was computed on the basis of the

²⁰Wagenheim, p. 170.
²¹The New York Times, February 22, 1970, p. 55.
²²Thomas D. Curtis, "Employment and Land Reform in a Labor-Surplus Economy: A Case Study of Puerto Rico," Land Economics, November 1967, p. 454.

number of hours he worked. Incentive was introduced into the sugar industry in hopes of increasing production. The proportional farms ceased being profitable in the early 1950's. The general fall in the sugar industry's earnings and the lack of capital equipment employed account for the failure. The government was responsible in part for sabotaging its own program by trying to re-coup its initial investment too quickly through very high rents.²³

The sugar corporations were not hurt by land reform. They received full compensation and their land was taken from them gradually. The sugar corporations shifted into the operation of sugar mills while the proportional

profit farms provided a reliable supply of raw cane.24

By 1946, the Puerto Rican leaders decided that the island's future lay in industry, not agriculture. This decision was motivated by awareness of the extremely small amount of arable land available in comparison with the massive population. The land reform program, though never officially abandoned, was discontinued.

During the late 1940's Puerto Rican leaders undertook a socialist experiment. The funds from rum remittances were used to build six government owned and operated industries. These included factories to produce cement, glass, bottles, paper cartons, shoes, and clay products. ²⁵ A local fruit processing plant was also built. Most of these industries operated at a loss and were beset with labor problems. Strong disapproval from the United States Congress and investors further convinced the Puerto Rican leaders to sell their industries to private industrialists. The socialist experiment had one tremendous success — Hotel Caribe built in 1947. The hotel demonstrated the profitability of a tourist industry, and other enterprisers rapidly entered the field. The hotel aided the new development effort of attracting foreign businessmen to Puerto Rico.

Although Puerto Rico's first development efforts were less than successful, the leaders remained dedicated to the principle of economic development. Knowing that a socialist solution was unacceptable to their powerful neighbors, the Puerto Rican leaders wisely adopted a program to encourage private investment. They hoped also to attract industries to the island to provide jobs and higher incomes. The popular name for the new approach to development was Operation Bootstrap.

Operation Bootstrap actively courted foreign investment and did not fear imperialism. Fomento, Puerto Rico's Economic Development Association, coordinated the program. A large public relations campaign was undertaken to create a favorable image of Puerto Rico as the ideal place to live and work. Colorful, full-page ads were purchased in popular American magazines and newspapers. Rum and tourism were promoted in the process. After five years of promotion, the revenues of a stagnating rum industry jumped from \$3.4 million to \$15.6 million.²⁶

²³Ibid., p. 455.

²⁴Thomas D. Curtis, Land Reform, Democracy and Economic Interest in Puerto Rico, (Tucson: University of Arizona, 1966), p. 52.

^{**}Wagenheim, p. 104. The American of Puerto Rico: A Political Study of Changing Values and Institutions, (Cambridge, Massachusetts: Harvard University Press, 1969), p. 151.

Despite its beautiful climate, more substantial incentives are needed to convince businessmen to locate in an unfamiliar environment. By far the most attractive incentive is exemption from all Puerto Rican taxes including income, personal and real property taxes, excise and municipal taxes, and license fees.27 The tax holiday lasts for ten, twelve, or seventeen years depending upon the location of the industry. The more underdeveloped the location, the longer the tax holiday. Under the tax exemption program, a company can extend its tax privileges by constructing a separate industrial unit or by substantially expanding its present facilities to provide more jobs.

Fomento furnishes further assistance to potential investors. Low interest loans are extended to firms that normally do not qualify under the standard banking requirements. As of 1971 the Government Development Bank has lent \$200 million for private investments and \$7,721,000 for public expenditures.28 Fomento also provides free technical advice on plant location and recruits and trains a suitable labor force. The Accelerated Industrial Training Program gives intensive, custom-made training courses for a particular factory.29 The cost burden is shared between the manufacturer and Puerto Rico. The program has been highly successful in training productive workers. Fomento also arranges the construction or leasing of industrial buildings on liberal terms for new businessmen. All of these services are extended to local businessmen as well. A substantial increase in the percentage of domestic firms promoted by Fomento has occurred, though as of 1967, 69% of all firms promoted were foreign owned.30

The tax holiday and exemption from federal income taxes enhance Puerto Rico as a potential location for businesses. In 1950, 96 firms were promoted by Fomento of which 84% were foreign owned. 31 By 1970. Fomento had promoted 1,829 firms. Most of the early factories were labor intensive, capitalizing on low Puerto Rican wages. The most common industries were textiles, wearing apparel, footwear, electronic equipment, and other plastic and metal articles assembled in Puerto Rico for sale in the United States.³² Women were employed extensively in the new factories which significantly helped improve their social position in machismo-dominated Puerto Rico.

Since the early 1960's, industry has shifted from labor intensive to capital intensive. Over a billion dollars have been invested in the oil refining industry.33 Petrochemicals and synthetic fibers industries have developed as well. Unfortunately, the shift to capital intensive industries has decreased the supply of new jobs for a country that definitely needs jobs.

Many feared that when the tax holiday expired, industries would leave

²⁷A. Curtis Wilgus, ed., *The Caribbean: Current US Relations*, (Gainesville: University of Florida Press, 1966), p. 20.
²⁸Commonwealth of Puerto Rico, *Puerto Rico USA*, (Washington, D.C., September 1971),

p. 20. 20 Lloyd G. Reyonlds and Peter Gregory, Wages Productivity, and Industrialization in Puerto Rico, (Homewood, Illinois: Richard Irwin, 1965), p. 144. 20Rita M. Maldonado, The Role of the Financial Sector in the Economic Development of Puerto Rico, (Federal Deposit Insurance Corporation, 1970), p. 27.

³²Wells, p. 152.

³³Economist, October 24, 1970, p. 89.

the island en masse. A 1966 study has allayed these fears. Of the 265 companies whose exemption expired, 218 companied remained.34

The Puerto Rican development effort has been hampered by the collapse of its agricultural sector. A considerable amount of revenue has been lost as the production of sugar, coffee, and tobacco fell. A healthy agricultural sector could provide many jobs that are so desperately needed in Puerto Rico. The farms could also absorb some of the excessive population of the cities.

Between 1950 and 1965 over 257,000 jobs were created by Fomento, but 165,000 jobs were lost in the traditional sector of agriculture.35 Agriculture was not strongly supported by the government and generally collapsed. Unfortunately, agriculture is deemed demeaning and people have continued to move to the cities. However, agriculture improvements have been made,

though not in the traditional export crops.

In 1953 the United States Department of Agriculture sponsored a study of Puerto Rican non-export agriculture.36 Agriculture was found to be inefficient, unreliable, and under-financed. The products were of low-quality, as grading had not yet been introduced. Marketing techniques were also poor. High income people refused to purchase Puerto Rican products, preferring instead high-status American goods. Historically, Puerto Rican agriculture has produced to satisfy an export market, not the local market. The farmers themselves were divorced from the marketing aspects of agriculture. Insufficient warehouse facilities and processing plants were responsible for quite a bit of spoilage and waste. Koenig blamed the government for most of the agriculture's problems. He claimed that the tax system discouraged agriculture by taxing the materials and equipment necessary for efficient farming. He estimated that the selling price of farm products was 5 to 15% higher due to excessive, misplaced taxes.37

Puerto Rico's non-export agricultural sector made significant strides in the 1950's. Food marketing techniques were improved as goods were graded and properly packaged and transported to market. One of the most significant developments was the introduction of the supermarkets in 1955. Food prices fell while the products themselves were gradually improved. Over 30,000 small grocery store owners and workers lost their jobs, but the net effect has been an increase in employment. By 1963, 63% of Puerto Rican food passed through commercial channels as compared with 44% in 1949.38

In 1956 a free food program was established to give food to all needy families which cost approximately \$25 million in 1965.39 However, the program has aided the developing local food industry. No longer do retailers have to extend credit to the poor. There is also not as much loss due to robbery. Because of the program, the market for extremely low quality food

³⁴Wagenheim, p. 102.

³⁴Wagenheim, p. 102.
351bid., p. 99.
36Nathan Koenig, A Comprehensive Agricultural Program for Puerto Rico, (Washington, D.C.: Department of Agriculture, 1953).
371bid., p. 268.
39John R, Wish and Kelly M. Harrison, Marketing — One Answer to Poverty: Food Marketing and Economic Development in Puerto Rico, 1950-1965, (Eugene, Oregon: University of Oregon, 1969), p. 96.
6000 (1960), p. 96.

has disappeared, forcing farmers to improve the quality of their goods. Local food production has been one of the healthiest sectors of agriculture. Many hope that continuing improvements in local food products will decrease Puerto Rico's dependence on American food and will significantly improve the island's balance of payments.

Conditions in Puerto Rico's export crop production have not improved; in fact, they have worsened over the past twenty years. Sugar, coffee, and tobacco have all suffered tremendous declines due to incredibly inefficient methods of production. One hundred and fifty pounds per acre is Puerto Rico's average annual yield of coffee. Countries employing modern techniques average a ton per acre. 40 Due to the climate, geography, and soil conditions, the Puerto Rican sugar industry has the highest per unit cost among Caribbean sugar producers. Puerto Rico has been unable to compete on the world market and has had to rely upon the quota provided by the United States. Unfortunately, whenever the sugar industry shows signs of becoming competitive with American sugar interests, repressive measures are undertaken in Congress. Such measures include decreasing Puerto Rico's sugar quota and enforcing the Jones-Costigan Law which restricts the amount of sugar refined in Puerto Rico. 41 Colonialism has not died. Lately, Puerto Rico has been unable to fulfill its quota. Hopefully, the recent surge in demand for sugar will stimulate the lagging sugar sector. Tobacco, though high quality, has also been hurt by inefficient production methods.

Why are Puerto Rico's export crops so inefficient? Part of the blame must be placed on the mountainous geography which hinders the introduction of mechanization. Small holdings in tobacco and coffee also hamper productivity. Perhaps most important has been the attitudes of the workers. They have vigorously resisted the introduction of mechanization. Many others have refused to work in agriculture altogether, allowing the crops to rot in the fields. They prefer unemployment in the modern cities to low status employment in the "backward" agricultural sector.

Another cause for stagnation in export crops has been an international surplus and stiff competition. The government has tried to restrict tobacco production to bring supply in line with demand. Thomas Curtis concludes that the fundamental solution in the agricultural sector lies in increasing world demand, not increasing Puerto Rican supply. 42

The Puerto Rican government finally realized in the 1960's that it could no longer afford to neglect agriculture. More money was pumped into agriculture. In 1962, \$1 million was alloted to plant new sugar cane fields. Unemployment compensation was extended from 16 to 52 weeks to re-train displaced sugar workers.43 In 1963 Marin announced a \$30 million plan for credit to mechanize the sugar industry to halt the further decline in production.44 In 1970 another \$100 million program was announced to rehabilitate

 ⁴⁰Crampsey, p. 87.
 41Did, p. 83.
 42Control of Economics, p. 452.
 43Cid, throld Mitchell, Caribbean Patterns, (New York: John Wiley & Sons, 1972), p. 112.
 44Ibid., p. 113.

sugar. 45 Despite all of this money, production has continued to fall. What are really needed are trained agronomists and people eager to earn a living in agriculture.

A recent publication by the Commonwealth of Puerto Rico46 confirms the leadership's renewed emphasis upon agriculture, at least on paper. Included in their new program are incentive payments to sugar and coffee producers who adopt new machinery and increase production. They urge diversification into the more successful areas of agriculture such as vegetables, beef, and dairy production. Price support will be guaranteed for tobacco and coffee. The government also encourages the organization of a marketing system to keep supply and demand equal. It remains to be seen how effective their new policies will be. It seems that they are still neglecting the major source of the problem — lack of trained agronomists and willing workers.

The liberal Commonwealth government of Puerto Rico has played a vital role in the island's development process. Without their dedicated and creative responses to challenging problems, it is doubtful that Puerto Rico would have attained its high level of development. The government made the right decision in emphasizing industry during the fifties. The land area per person was under an acre and could not have supported the growing population. Industrialization offered the only realistic solution. The leaders wisely repressed their fears of imperialist domination and actively sought foreign investment to provide immediate improvement in the lives of their people. The Puerto Ricans alone could not have generated enough investment to start industries and to provide needed jobs. Though Marxists condemn the government's policy, foreign investment and location has certainly benefited all concerned. Puerto Ricans themselves, as they accumulate funds, are increasingly becoming owners and managers of businesses.

The adoption of the Industrial Incentives Act, which established tax exemptions for new industry, was excellent policy. Puerto Rico suffered from a dearth of natural resources. Industries had no real reason to locate in Puerto Rico without the tax holiday. The length of the tax holiday being directly tied to the economic development conditions of the location site helped in distributing industry more evenly. By inducing industries into more backward parts of the island, the government insured increased spending on roads and communication.

The government must also be praised for its position on the minimum wage. Puerto Rico won exemption from the Fair Labor Standards Act which established the American minimum wage. The American minimum wage level would have been devastating to Puerto Rican employment. However, the government refused to allow its citizens to be exploited by foreign industries. The Puerto Rican leaders stressed the fact that they hoped to raise their minimum wage level as high and as quickly as possible. Low wages were not to be used as an incentive to attract foreign industry. Wages have indeed risen over the years. Rather than setting one blanket rate for all industries, the government permits each industry including agriculture, to establish its own

⁴⁵Ibid., p. 117.
⁴⁶Commonwealth of Puerto Rico, Puerto Rico USA.

rate consistent with high employment and reasonable profits. To date, this policy has been quite successful.

The government can fairly be critized for its half-hearted stand on birth control. Puerto Rico's economic success is closely linked to zero population growth, yet the government did not announce its support until 1970. Then after its late announcement, the government only allocated a paltry sum of \$200,000 for this vital program. The success that has been achieved in reducing population growth rate belongs to a dedicated group of private individuals who manned the clinics and distributed information.

The Puerto Rican leadership has been consistently unable to cope with the problems of the agricultural sector. They are willing to allocate money but fail to perceive the root problems. Studies should be undertaken to determine if sufficient future demand exists to warrant present efforts to save their three traditional export crops. Certainly the recent demand for sugar should offer ample inducement for increased sugar production. If the studies find that tobacco and coffee cannot hope to become competitive, then land should be shifted into more productive uses. New crop suggestions are pineapples, vegetables, and beef and dairy cattle.

Should Puerto Rico, remain loyal to its traditional export crops, then mechanization is mandatory. Liberal loans and extended re-training programs would ease the hardship. A public relations campaign stressing the joys of agriculture should be launched to attract young, healthy, dedicated farmers to the fields. Presently, the farms are worked by the very old and the very young who were unable to leave the fields for the city. College students should be encouraged to become agronomists rather than school teachers. Perhaps the government should subsidize agricultural wages to make farm work more attractive. Consolidating the average holdings in the coffee and tobacco sectors should also be a major policy objective of the government.

Puerto Rico should now try to lessen its dependence on foreign capital. Many people can afford to save more than they do, and they should be encouraged to do so. Likewise, Puerto Rico could significantly improve its balance of trade position by relying more fully upon its own agricultural sector. Impressive improvements have occurred in local food production and every effort should be made to encourage further improvements. Puerto Rico must be very careful that it does not pollute its environment. Tourism depends upon the beauty of the island. Unfortunately, with industrialization comes pollution. The government has wisely shown restraint in its recent negotiations over the expoitation of its newly discovered mineral wealth. The copper will not be removed until the companies can provide adequate safeguards to the environment.

One of the most disappointing aspects of the Puerto Rican development effort has been the persistently high unemployment rate. New jobs barely keep pace with population growth and loss of jobs in decaying sectors. Since the sixties, the trend has been towards capital intensive industries, yet labor intensive industries are needed to absorb the excess labor force. Since the wage rate has risen, Puerto Rico is no longer an attractive location for labor intensive industries. There is no easy answer to this dilemma. Possibly further

tax benefits could be offered to large labor employing industries. More skill training might also reduce the problem by allowing more people to enter the service sector which will be growing as incomes rise.

Puerto Rico's competitive position could be enhanced if it could win exemption from the American law requiring all its exports to be shipped on American vessels. The law was intended for the continental states whose shipping is negligible compared with that carried on by Puerto Rico. Puerto Rican products would certainly become more attractive to American buyers.

However impressive Puerto Rico's progress might appear, it is important not to be unduly swayed by glowing reports. Terrible slums are still widespread. Great sums have been spent on housing but not nearly enough to keep pace with the population growth and the mass move to the cities. Over 40% of all urban housing has been classified as "inadequate." Foor health conditions, high infant mortality, and high crime rates are characteristic of the slums. Drug addiction has become a serious problem throughout Puerto Rico. Pollution is also on the rise. The beautiful island paradise is rapidly becoming an industrialized country with the many problems that accompany industrialization. Puerto Rican leaders seem as unable to cope with the problems as most other leaders of industrial states.

Puerto Rico's immediate future is intimately tied to that of the United States. As long as American businesses and investment flow into Puerto Rico, economic progress will continue. However, should the American economy experience a long recession or depression, Puerto Rican development will be severely crippled.

The unemployment rate is unlikely to fall, given the present lack of encouragement to labor intensive industries. Also, because so many Puerto Rican jobs are tourist-related and tourism depends upon a healthy world economy, employment will probably contract.

Assuming that the world economic situation improves, Puerto Rico's future looks bright. They have an educated and productive work force, a modern infra-structure, a stable, creative government, and newly-discovered natural resources. The industrial sector is becoming increasingly Puerto Rican owned and managed, a trend which should continue as the people become more wealthy. The population growth rate will further decline as the standard of living effect becomes stronger and as women become more emancipated. Pressure for jobs and for social services will lessen as the population rate declines. Finally, the trade deficit should improve as local food is substituted for expensive American imports.

Progress in Puerto Rico's export crops is essential to the future development effort. A healthy agricultural sector could provide jobs and export revenues. The present sugar shortage should spur improvements in the sugar fields. However, immediate progress is doubtful in the coffee and tobacco sectors. They suffer from insufficient world demand and severe competition in addition to endogenous problems of small holdings and general worker disdain for agricultural employment. The government fails to recognize the

⁴⁷Wagenheim, p. 172.

root problems of export agriculture, so little progress is likely in the foresee-able future.

Despite its problems, Puerto Rico is certainly one of the most developed of the world's less developed countries. Providing that the Puerto Ricans maintain their current Commonwealth status and their creative approach to development, their economic troubles are not insurmountable. Continued economic progress is to be expected.