

INTERNATIONAL TRADE AND ECONOMIC DEVELOPMENT

A CASE STUDY OF TRINIDAD AND TOBAGO

by

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PREFACE

The subject of my thesis arose out of my curiosity why Trinidad and Tobago, along with the other British Caribbean islands are among the underdeveloped countries of the world, especially since these islands have been described in the past as wealthy and prosperous sugar islands. I have also wondered why the Caribbean colonies which carried on trade at the same time and on the same basis as the British American colonies were left so far behind in their development. I realize, however, that it would require volumes to explore such a subject as each of the islands would have to be examined separately and analyses would have to be made from the eighteenth century when British Caribbean trade surpassed the trade of the American colonies.

There is very little literature on the development of the area. Apart from the histories on the period when "sugar was king," there is very little recording the economic progress from that time to the present day. Recently there has been a revival of research on the area,

but most studies concentrate on current developments within the last decade.

Because I am particularly interested in Trinidad and Tobago, this thesis is based on that country, and on account of the limitations set by the available data, I have restricted my analysis to the period beginning from 1930. A study covering one territory in the British Caribbean over such a short period merely scratches the surface of the work required to find out the reason for the plight of the West Indies, but if similar studies are undertaken, in time there should be enough literature to show where the Caribbean went wrong.

Most of the data used are official reports of the United Kingdom Colonial Office and of the Trinidad Government. The country's system of accounting was the pound sterling until January 1, 1935, when it was abandoned for the decimal system. For this reason, some of the data are expressed in pounds. One pound sterling is equivalent to \$4.80. Unless specified, all dollars refer to the pound equivalent of \$4.80. Measures expressed in tons and hundred-weight are 2240 lbs. and 112 lbs. respectively.

I am indebted to Mr. William Demas for helpful suggestions, to Mr. Clarence Bayne for the stimulating discussions and to Dr. Irving Brecher for his guidance. The

opinions expressed, however, are my own and none of them is to be held responsible for what I have written.

Montreal, Que.

Wilma M. Augustin

TABLE OF CONTENTS

Chapter	Page
PREFACE	11
I. INTRODUCTION	1
II. THE PRE-WAR ECONOMY 1930 - 1939	12
The major export industries	15
The petroleum and asphalt industry	20
The sugar industry	28
The cocoa industry	33
The export sector and development	36
Imports	40
Balance of trade	42
Fiscal policy	44
III. DEVELOPMENT DURING THE WAR AND IMMEDIATE POST-WAR YEARS	49
Changes in the economy	50
Effects of the war	52
Trade	56
Government policy.	56

TABLE OF CONTENTS (Continued)

Chapter	Page
IV. THE STRUCTURE OF THE ECONOMY 1951 - 1960 . . .	60
The agricultural sector, including forestry and fishing	60
The petroleum and asphalt sector	70
The manufacturing sector	76
The building and construction sector . . .	85
Gross domestic product	86
Population and employment	87
Distribution of income	90
V. PATTERNS OF TRADE	95
Ratio of exports to gross domestic product	95
Composition of trade	97
Direction of trade	98
Terms of trade	99
Balance of payments	102
Balance of payments and growth	109
VI. CONCLUSION	111
A SELECTED BIBLIOGRAPHY	123

LIST OF TABLES

Table	Page
1. Principal exports of Trinidad and Tobago in the pre-war period 1937-1939	16
2. Principal exports of Trinidad and Tobago 1929-1939	18-19
3. Output of the Oil Industry and its contribution to Government Revenue.	22
4. Government revenue and expenditure	23
5. Index numbers of prices of Trinidad cocoa in London	34
6. Imports of selected commodities by quantity and value	41
7. Balance of Merchandise Trade 1929-1939	43
8. Average annual revenue in the pre-war period. .	46
9. Average expenditure in the pre-war period . . .	47
10. Direction of trade 1939-1950	54
11. Principal exports of Trinidad and Tobago in the post-war period 1949-1951	57

LIST OF TABLES (Continued)

Table	Page
12. Distribution of farms according to size	62
13. Sugar-cane production and outturn	64
14. Disposition of Agricultural output.	67
15. Timber production and Imports	69
16. Value of Imports and Exports of Mineral Fuels and their relation to Total Imports & Exports.	73
17. Utilization of Natural Gas	75
18. Production and disposition of asphalt	77
19. Contribution of the Manufacturing Sector to gross domestic product	82
19a. Output of selected industrial products	83-84
20. Comparative rates of growth	93
21. Merchandise trade balance 1942-1960	96
22. Direction of trade 1953-1960	100
23. International Payments - Current Account 1951-1960	103-104

LIST OF TABLES (Continued)

Table	Page
24. Foreign and National Capital and their relation to Gross Capital Formation	107-108

LIST OF CHARTS

Chart	Page
1. Sectoral growth	88
2. Terms of trade in selected commodities.	101a

CHAPTER 1

INTRODUCTION

The ordinary means ... to increase our wealth and treasure is by Forraign Trade. ... This ought to be encouraged for upon it hangs the great revenue of the King, the honour of the Kingdom, the noble profession of the merchant, the school of our arts, the supply of our poor, the improvement of our lands, the nursery of our mariners, the walls of the Kingdom, the means of our treasure, the sinews of our wars, the terror of our enemies.¹

The above passage is indicative of the pervasive nature of trade. The importance of trade was recognized, not only by Mercantilist writers who gave it first place in economic development, but even the Physiocrats who relegated it to a subordinate position had to pay attention to the fact that through trade a country must obtain the goods it cannot produce within its boundaries. Adam Smith also who gave priority to agriculture, stating that capital should first be used in agriculture and the excess invested in trade, paid attention to the benefits that can be derived

¹Thomas Mun, England's Treasure by Forraign Trade, quoted by Lewis Henry Haney, History of Economic Thought, (4th ed.), p.121.

from international trade. Smith was preoccupied with economic development in relation to the range of the market. The wider the market, the greater the chance for economic growth. He saw trade as the medium of growth via extended markets. Thus while he did not formulate any trade theory as such, he advocated a policy of free trade pointing out that it would provide markets for a country's surplus produce, and these new markets would in turn encourage division of labour and the accompanying benefits of increased productivity. This trend of thought was continued throughout the classical period. Ricardo developed a pure theory of trade which his successors adopted and they all agreed on the benefits as outlined by their predecessor Smith. In addition, they saw trade as a means of allaying the impending stagnation which the economy (in their case Industrial England) was facing.

More recently, there have been doubts whether trade really increases or encourages the growth of an economy. Twentieth century economists, concerned with the development of backward countries, are divided in their opinion of the contribution of trade to growth.² While many economists

²This does not include the controversies over the validity of the comparative cost theory of trade. The arguments mentioned here are those which deal, not with the pure theory of trade but with the assumed benefits and spread effects which occur through trade.

accept the classical doctrine of the transmission of growth through trade (Cairncross, Haberler, Youngson and others), there are others who agree that underdeveloped countries are hindered rather than assisted through their participation in international specialization and trade.

The chief exponent of this line of thought is Dr. Prebisch, who divides the world in two sectors - the centre, which applies to advanced industrial countries, and the periphery, the underdeveloped areas. His argument is that international specialization does not benefit the peripheral countries as the classical arguments maintain because, first of all, the terms of trade tend to be always unfavourable to the primary producing countries. This conclusion was based on a United Nations study of Britain's terms of trade between 1876 and 1946. Secondly, the nature of international demand is such that underdeveloped countries do not receive any gains from trade. This occurs because the imports by the industrial countries are primary goods, and their income elasticity of demand tends to decline; while the income elasticity of demand for imports (i.e. manufactured goods) by the peripheral countries is relatively high. On the basis of Engel's law, increases in income and productivity result in reduced expenditure on imports by the industrial countries and increased expenditure on imports

by the underdeveloped countries. Thus the gains from trade are not equally divided. Dr. Prebisch writes:

The classical mechanism of the free play of market forces, either in its original form of wage adjustments or in its contemporary version of price adjustments through exchange rate movements, does not bring about that optimum solution. On the contrary, the periphery transfers to the outer world a greater part of the fruits of increased productivity than if the market forces had been contained at a certain point either through customs protection or some other form of interference in the process.³

Dr. Prebisch recommends import substitution and exchange depreciation or uniform protective duties for these peripheral countries until they can adjust to changing international conditions.

The same arguments in more modified form have been presented by Professors Lewis, Myrdal and Nurkse.⁴ The argument built up around the deteriorating terms of trade has been rebutted by Gerald Meier on the grounds that no allowance is made for changes in the quality of imports and exports and for falling transportation costs.⁵

Whatever the arguments may be with regard to the

³Raul Prebisch, "Commercial Policy in the Underdeveloped Countries," American Economic Review (1959), p. 256.

⁴These writers however maintain that the expansion of exports is still necessary although the conditions under which trade occurs are no longer favourable.

⁵Gerald M. Meier, International Trade and Development, (Harper & Row, N.Y. 1962) p. 55.

consequences of trade to underdeveloped countries, it would be difficult to disagree with Mill's dictum that:

the opening of foreign trade, by making them [less advanced countries] acquainted with new objects or tempting them by the easier acquisition of things which they had not previously thought attainable sometimes works a complete industrial revolution in a country whose resources were previously undeveloped for want of energy and ambition in the people; inducing those who were satisfied with scanty comforts and little work, to work harder for the gratification of their new tastes, and even to save and accumulate capital, for the still more complete satisfaction of those tastes at a future time.⁶

Closer examination of the arguments for and against trade will indicate that the controversy lies more in the region of trade policy and in the pure analysis of trade than in the question of trade per se as a means of stimulating economic growth. For instance, a review of the conditions under which the classical economists developed their arguments for trade will show that they explicitly pointed out that these benefits occur only under conditions of free trade. Their analysis was made within the framework of a perfectly competitive economy - mobility was emphasized. Mill was particular about his assumption of full employment

⁶ John Stuart Mill, Principles of Political Economy, With some of Their Application to Social Philosophy, (London n.d) p. 394.

and even questioned Smith's concept of "surplus produce" (vent for surplus theory) on the grounds that it implied either that without trade the surplus would be a waste or that the factors of production which were engaged in producing the surplus would remain idle. For Mill, "a country produces an exportable article in excess of its own wants, from no inherent necessity but as the cheapest mode of supplying itself with other things. Without trade articles would be produced at greater cost and the consumer suffers."⁷

The economists who emphasize the unfavourable effects of trade are making their analysis in an entirely different context. Protectionism has replaced free trade, monopolies have displaced perfect markets and the problem of unemployment is in the foreground. Trade under entirely different conditions cannot produce the same beneficial results. The problem therefore lies in the changed conditions. One should neither rebuke the classical economists nor blame the now advanced countries, if trade has become an instrument of exploitation. Instead, investigations of the existing institutions in the backward economies should be made to determine how they differ from those of the advanced industrial countries who made use of trade as a generator of growth. As Professor Kindleberger has proved,

⁷Ibid. p. 393.

expanding exports can either stimulate economic growth or retard it, and the same holds true for increasing imports and of tariffs which reduce imports; it all depends on the assumptions of the model. Therefore, one should not generalize about the consequences of changes in exports without specifying the assumptions of the model employed and their relevance to the historical scene.⁸ The consequences of the growth of an export sector of an economy cannot be predicted without a detailed analysis of several factors such as the nature of the export industry, the disposition of the income of this sector, demand and supply functions, technology, transportation, etc. Under these circumstances, one is not justified in denouncing international specialization and trade. One should also examine the trade policies and the framework in which trade is carried out to find the underlying forces that are an obstacle to growth. Should the pattern of trade be changed or should they be accepted and other variables adjusted? Such an analysis is necessary to determine how much one can rely on trade to launch a country to "sustained growth."

It has been universally recognized that the

⁸C.P. Kindleberger, "Foreign Trade and Economic Growth Lessons from Britain and France, 1850 - 1913," Economic History Review, Dec. 1961, pp. 289-290

Commercial Revolution and the expansion of trade provided the stimulus for England's Industrial Revolution; the successful development of many other countries can be attributed to trade, viz. the United States in the nineteenth century, Japan in the twentieth century. Yet, how can one isolate trade from other forces and credit it as the motive force in development? Development occurs through the interaction of many factors working in the economy. In order, then, to assess the merits of trade, its nature must be examined. Why does trade take place? The age old answers are: (1) because of differences in factor endowments, climate, etc., not all countries are equipped to produce all kinds of products; therefore, to obtain goods which are not indigenous to a country, trade must occur. (2) Because of comparative differences in cost (or price) it is better for a country to specialize in the production of goods in which it has a comparative advantage and export them for those goods in whose production its advantage is less. But even if these two reasons exist, so that countries may engage in trade, other conditions must be present. There must be ease of communications, and transportation cost must be low enough to permit profitable exchange; barriers to trade, such as tariffs and exchange controls, must also be at a level which would encourage rather than hinder trade.

Finally, the question of international demand is important in determining whether a country will import or export a particular commodity. There are cases of poorly endowed countries whose productivity in every activity is so low that they could maintain trade with high-productivity countries only in commodities whose demand is greater than world's supply. These countries which produce goods whose supply exceeds world demand, can trade only when special concessions are made to them.

In order to sensibly evaluate the importance of trade in economic development, one must assume that internal conditions warrant the participation of a country in any kind of external trade. Do all countries which engage in trade have a voluntary surplus or do they limit their consumption of particular goods because of necessity or by forced measures? Would the present state of the economy, with its existing institutions be responsible for the gains or losses from trade or do the assumed gains or losses occur independently of the historical, social and political environment.

These are the questions which must be present when any meaningful discussion of the importance of trade to a country is being discussed. Unfortunately, these very considerations are catalogued under "ceteris paribus" and as result much disagreement exists over the question of the

role of trade in economic development, especially in the case of underdeveloped countries.

It is the author's belief that the controversies on the question of trade with regard to growth are the result of the tendency to generalize once key factors, which present obstacles to growth in a given country, have been discovered. For this reason, the several recommendations proffered may be fruitful in some countries and prove unsuccessful in others. The fact is that analyses of the benefits of trade must be analysed within the institutional framework of the given country. Because the increased volume of exports of a country does not have multiplier effects, it is not sufficient reason to conclude that trade has unfavourable results. There are several related factors which must be analysed.

It is my purpose to make a case study of Trinidad and Tobago in order to find out what effects external trade had on the country's development and to what extent and under what conditions international specialization can be relied upon to launch the economy to sustained growth.

The country has been trading from the time of its discovery in 1498. Even if this early period of the country's trade is dismissed as negligible, one can date the beginning of large scale trade from the year of its colonization by

the British. That is, for more than one hundred and fifty years, Trinidad and Tobago has specialized in the production of goods, mainly agricultural, for export.

This study will cover the period 1930 - 1960 and will be divided into three main parts: (1) the pre-war years, 1930 - 1939, (2) the war and immediate post-war years, 1940 - 1950, and (3) the period 1951 - 1960. While the statistical data available for the years 1930 to 1950 are not quite adequate for a very incisive study, it is felt that an attempt should nevertheless be made to paint a picture of the economy for these years, because it is only over a fairly long period that conclusions may be drawn with regard to changes in the pattern of trade and the corresponding changes in the economy.

CHAPTER II

THE PRE-WAR ECONOMY 1930 - 1939

Trinidad, an island about sixty-five miles long and forty-eight miles broad, with an area of approximately 1,864 square miles and situated a few miles off the coast of Venezuela, was discovered by Columbus in 1498. It remained a Spanish possession until its capture by the British in 1797; and then it was formally ceded to the British Crown by the Treaty of Amiens in 1802.

The island of Tobago, situated about nineteen miles to the northeast of Trinidad, with an area of approximately 116 square miles, was also discovered by Columbus. This island changed ownership among the European powers several times until 1814 when it was permanently ceded to the British Crown.

In 1889, these two colonies were unified under one Government until by an Order in Council effective January 1, 1899, Tobago lost its identity as a colony and became a ward of the Crown Colony of Trinidad and Tobago.

Trinidad and Tobago retained the status of a British Crown Colony until 1950, when it was granted semi-responsible government. In 1958 the Colony became a unit of the short-lived West Indian Federation and was finally granted its independence in 1962.

Trinidad and Tobago, along with the other British colonies in the Caribbean, were considered by the English as "fresh fields for merchants and adventurers and fresh markets for English goods ... and were colonized in the way that would most exalt and enrich England, while leaving the colonies morally destitute."⁹ Consequently, the West Indian colonies developed as plantation economies supplying raw produce for English industry and importing food and manufactured articles. Sugarcane was found to be the most profitable product, and so the economic history of the West Indies was linked with the vagaries of the sugar industry in the area. The Cambridge History of the British Empire records that "the well-being of these possessions was bound up with the price and conditions of production of a single crop - sugar, with its by-products, rum and molasses."¹⁰

When due to changes in Britain's economic and

⁹W. Adolphe Roberts, The Caribbean, (The Bobbs-Merrill Co., New York, 1940), p. 196.

¹⁰J. Holland Rose, et.al., Volume II 1783-1870, p. 481

trade policy and the development of beet sugar in Europe, sugar cultivation was no longer a profitable concern and resulted in economic distress in the British Caribbean, the United Kingdom Government recommended that peasant cultivation be substituted for estates and that other tropical products should replace sugarcane. The West Indies, however, remained exporters of staple products, and their fortunes fluctuated with the changing price levels of their chief products and with world conditions.

In 1938 a Royal Commission under Lord Moyne was appointed to investigate social and economic conditions in the British West Indies. In general, they found excessive poverty in the area and a pressing need for large expenditure on social services and development. Their report on the conditions in Trinidad and Tobago was as follows:

Owing largely to the direct and indirect effects of the prosperous asphalt and oil industries, and to a sugar industry well up to the standard of management which we found in the West Indies, the Colony is the most prosperous of those which we visited. The tenor of the memoranda and evidence submitted to us indicated that it is also in many ways politically and socially one of the most advanced, and the standard of life and range of interests of the ordinary inhabitant are certainly well ahead of what may be found in the smaller islands. Owing largely again to the oil and asphalt industries and their contribution to public funds, the Government is in a sounder financial position than any other in the West Indies, and is well placed to finance schemes of development even beyond that already being put into operation.

The one serious exception to the comparative prosperity of Trinidad is the cocoa industry. Over-expanded and over financed in times of prosperity, it is now suffering the full weight of low prices, low yields and heavy debt charges, to which have been added in recent years the depredations of witch-broom disease. For the last few years a complicated subsidy system has been in operation which we consider to be palliative merely, and not conducive to the thorough rehabilitation which the industry requires. Whatever reforms may be effected in accordance with our proposals, we do not consider that the industry will again involve so large an acreage or afford a livelihood to so many workers. Indeed, the abandonment of unsuitable soil is, in our opinion, a necessary part of such reforms. It will be necessary therefore, for careful attention to be paid to the adoption of alternative types of agriculture for the workers and areas which are certain to be thrown out of cocoa.¹¹

Although the Colony was assessed as the most prosperous in the British Caribbean, one cannot draw conclusions as to the state of the economy. Being the most prosperous of a group of poverty-stricken colonies is no index of economic well-being. However, the report of the Commission is significant in that it provides a starting point for an analysis of the economic conditions of the Colony.

The major export industries. The relative prosperity of Trinidad and Tobago in the years prior to World War II was attributed to the major export industries. Table 1 shows that in the pre-war years 1937-39 petroleum

¹¹England, Colonial Office, West India Royal Commission Report (1938-39), Cmd. 6607, (H.M.S.O., London, June 1945), p. 408.

Table 1: PRINCIPAL EXPORTS OF TRINIDAD AND TOBAGO
 IN THE PRE-WAR PERIOD, 1937-1939
 (In United States dollars)

Commodity	Exports \$'000	Per cent of Total Exports
All commodities	100,081	100.0
Petroleum and petroleum products ...	43,366	43.3
Sugar and Molasses	16,546	16.5
Cocoa Beans	6,608	6.6
Natural Asphalt	3,465	3.5
Oil Kernels (Copra)	918	0.9
Citrus Fruits	645	0.6
Essential Oils (Lime oil)	476	0.5
Liqueurs (Bitters)	321	0.3
Tonka Beans	314	0.3
Rum	246	0.2
Residual Items	27,176	27.2

Source: Caribbean Commission, The Extra Caribbean Market, Movement, Diversification & Balance of Trade, 1937-1951, Statistical Unit, Research Branch, Central Secretariat, Kent House, Port of Spain, Trinidad, page 27.

and petroleum products accounted for 43.3 per cent of total domestic exports; sugar, including molasses, was 16.5 per cent; cocoa was 6.6 per cent and natural asphalt was 3.5 per cent. All other export items formed less than 1 per cent of total domestic exports.

A more detailed breakdown of the export trade of the country over a longer period, 1929-39, is given in Table 2. In this table the pattern of earnings of the major exports can be observed. For example, there was a general increase in the value of petroleum exports except during 1930-33, the depression years. The earnings of the second major export, sugar, fluctuated throughout the period 1929-39, with the years of depression standing out as the years of lowest yield. The pattern of cocoa exports is the most unfavourable. Export values of cocoa declined steadily from 1929-34. The slight increase in value that occurred in 1935 was not maintained and cocoa earnings reached its lowest in 1939 with a record of £253,000 - a drop of £1,193,000 or 82.5 per cent from its 1929 level.

Petroleum, sugar and cocoa, apart from being the major export commodities, are also the major economic activities of the country. In addition, the quantity of these goods exported is not much less than total quantity produced. In the case of cocoa, almost all the cocoa

Table 2:(continued) PRINCIPAL EXPORTS OF TRINIDAD AND TOBAGO 1929 - 1939

Commodity	Unit	1929	1930	1931	1932	1933	1934
TOTAL DOMESTIC EXPORTS	£'000	5,927	4,788	3,714	3,673	3,562	3,772
<u>Major Commodities:</u>							
Cocoa, raw	Th. cwt.	553	481	511	373	458	239
	£'000	1,446	1,136	826	579	556	350
Sugar	Th. cwt.	1,630	1,383	1,721	1,719	2,170	1,870
	£'000	1,050	776	903	846	1,116	916
Bitters	Th. galls.	58	23	16	11	12	17
	£'000	87	38	27	19	21	29
Rum	Th. galls.	74	72	86	139	64	50
	£'000	14	14	16	27	13	11
Asphalt	Th. tons.	164	118	93	51	52	55
	£'000	432	313	237	132	151	166
Copra	Th. tons.	11	13	9	7	9	8
	£'000	210	176	101	91	83	57
Petroleum and petroleum products	Mn. galls.	211	192	208	223	177	216
	£'000	2,439	2,206	1,493	1,861	1,492	2,068

Sources: Board of Trade, Statistical Abstract for the British Empire 1928 to 1937, Cmd. 5872, H.M.S.O., London, 1938, p. 297; Statistical Abstract for the British Commonwealth 1933 to 1939, Cmd. 8051, (1950), p. 215.

Table 2: (continued) PRINCIPAL EXPORTS OF TRINIDAD AND TOBAGO 1929 - 1939

Commodity	Unit	1935	1936	1937	1938	1939
TOTAL DOMESTIC EXPORTS	£'000	4,114	5,046	5,800	6,208	5,565
<u>Major Commodities:</u>						
Cocoa, raw	Th. cwt.	396	253	234	379	150
	£'000	527	488	643	494	253
Sugar	Th. cwt.	2,114	2,853	2,855	2,405	2,287
	£'000	942	1,277	1,274	1,033	1,060
Bitters	Th. Pf. galls.	13	7	11	11	9
	£'000	28	16	23	24	20
Rum	Th. Pf. galls.	6	121	157	84	183
	£'000	3	19	18	11	20
Asphalt	Th. tons.	74	58	77	60	66
	£'000	204	165	211	164	175
Copra	Th. tons.	4	4	8	4	6
	£'000	35	52	113	40	39
Petroleum and petroleum products...	Mn. galls.	264	323	355	441	359
	£'000	2,148	2,751	3,169	4,108	3,699

Sources: Board of Trade, Statistical Abstract for the British Empire 1928 to 1937, Cmd. 5872, H.M.S.O., London, 1938, p. 297; Statistical Abstract for the British Commonwealth 1933 to 1939, Cmd. 8051, (1950) p. 215

produced is exported. Thus changes in the export earnings of these commodities will be reflected in the national income of the country.

The petroleum and asphalt industry. The petroleum industry was a relatively young industry. The first oil well was drilled in 1867¹², and from that time until 1908 several attempts at exploration were made, but success was limited by the primitive nature of the equipment in use. Production in 1908 was approximately thirty-seven barrels. However, with the employment of better equipment production improved, although progress was marred by the lack of proper roads for the transportation of heavy equipment. Once the initial obstacles were overcome, the industry began to grow at a monumental rate. Total production increased from 47,295 barrels in 1909 to 17.7 million barrels in 1938, so that when the Trinidad Leaseholds Limited (a major company) celebrated its twenty-fifth anniversary on the 20th August, 1938, that Company was the largest oil refinery and Trinidad the leading oil producer in the British Commonwealth, contributing about 0.8 per cent of total world production.

This fast-growing industry helped to increase

¹²Economic Co-operation Administration, Special Mission to the United Kingdom, The Sterling Area An American Analysis, Research and Statistics Division, (London, 1951), p. 509, dates the beginning of oil production in Trinidad as 1897

Government revenues through royalties and licences. Prior to 1902, oil rights were not reserved by the Government when disposing of Crown lands, but after that date all Crown Grants reserved the oil rights. In order to work Crown oil a lease was necessary. Exploration licences were granted for one year, and gave power to examine the surface of the area for which they were issued, with the right to one or more Mining Leases as might be determined by the Governor over so much of the said lands as the licensee might select. Royalties had to be paid on oil won on mining leases.

The increase in the acreage of Crown lands leased and the increase in oil production consequently resulted in increased royalties and increased Government revenues, as Table 3 shows. Expansion of the oil industry also swelled Government revenues through income taxes and customs duties which were levied on the equipment for use in the industry. The Government of the Colony of Trinidad and Tobago was consequently described as being in a sound financial position and capable of financing schemes of development beyond what it had already undertaken. Unfortunately, the Government of the Colony at this period, was rather conservative in

Table 3: OUTPUT OF THE OIL INDUSTRY AND ITS CONTRIBUTION
TO GOVERNMENT REVENUE

Year	Total Production million barrels	Royalties, way leaves ¹ and fees paid to Gov't. \$'000
1930	9.4	370.8*
1931	9.7	405.8*
1932	10.1	444.8
1933	9.6	430.0
1934	10.9	418.7
1935	11.7	506.7
1936	13.2	619.8
1937	15.5	726.6
1938	17.7	912.1

¹Way leaves are in respect of oil pumped along the public roads of the Colony.

*Royalties only.

Source: Thomas Skinner and Co. Ltd., The West Indies and Caribbean Yearbook, 1931 to 1939.

its spending. Table 4 shows that there was a continuous budgetary surplus during the years 1933 to 1939.

Table 4: GOVERNMENT REVENUE AND EXPENDITURE

		\$'000
Year	Revenue	Expenditure*
1931	7,877	9,913
1932	8,132	8,151
1933	8,098	8,079
1934	8,210	8,190
1935	8,693	8,683
1936	12,560	9,171
1937	12,253	10,366
1938	13,445	12,230
1939	13,421	13,001

*The expenditure includes amounts transferred to a Reserve Fund: \$1,440,000 in 1931; \$255,808 in 1932; \$216,000 in 1933; \$96,000 in 1934; \$422,072 in 1935.

Source: Thomas Skinner and Co. Ltd., The West Indies and Caribbean Yearbook, 1936 to 1940.

These surpluses occurred during a period of severe unemployment in the country. The years 1934 and 1937 were marked by island-wide rioting which the Secretary of State for the Colonies, Mr. Malcolm MacDonald, believed was a protest against economic distress and its attending ills -

viz. uncertainty of employment, low rates of wages, bad housing conditions, etc. This fact is also borne out in a speech made by His Excellency the Governor in the Legislative Council of Trinidad and Tobago following the riots of 1937:

The Governor made certain adjustments, more particularly as regards Public Works Department labour, where in order to meet the unemployment problem labour had been spaced; that is to say, the men did only three or four days' work in each fortnight and it was divided between a large number of men in that manner. It seemed better and fairer to the working man to abolish that system and to give our men continuous work, so that they could have a continuous and sufficient wage. Other adjustments have been before this House on various occasions in its meetings this year, and without exception they have been accepted. I admit that we have not gone very far.¹³

The contribution of the oil industry to Government revenues, which was estimated as approximately one quarter of total revenue, did not seep through the rest of the economy because government chose to postpone its spending on development programmes. The benefit of the oil industry to the pre-war economy of the country must, therefore, be measured in terms of employment and income and the spread effects the industry may have had on other sectors of the

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Extracts from the debates in the Legislative Council of Trinidad and Tobago, Friday 9th July, 1937, reproduced in the Report of Commission, Trinidad and Tobago Disturbances 1937, (Cmd. 5641, H.M.S.O., London, January 1938), p. 107.

economy. But the oil industry, as an employer of labour, was not as significant as it was as a contributor to Government revenues. The industry should be considered more as an outlet for part of the increasing labour force rather than as an important employer of labour. In relation to the estimated population and labour force,¹⁴ the labour working in this sector was quite small, a characteristic of capital-intensive industries, which the petroleum industry is by nature. The average number of daily workers employed in the industry between 1932 and 1938 was as follows:

<u>Year</u>	<u>Average number of daily workers</u>
1932	5,769
1934	5,432
1936	7,796
1938	14,199

Unlike the traditional practice of concentrating only on the exploitation of a natural resource and leaving the secondary and tertiary stages of production to be carried on in the metropolitan country, the oil industry, from its inception, carried on the refining of oil and the

¹⁴The gainfully occupied population in 1931 was 192,242; Ministry of Labour, Co-operative Development and Social Services, Report on the Manpower Situation in Trinidad and Tobago, No. 1, March 1959, p. 42.

processing of oil products in the country. It is characteristic of the oil industry for a few large companies to undertake the search for oil and perform all the processes required until the refined products reach the hands of their ultimate users. Trinidad was fortunate in that all the operations were based at the source. The industry also introduced new skills, and while the managerial and technical staffs were recruited from abroad, local labour filled positions such as blacksmiths, boilersmiths, carpenters, electricians, fitters, masons, motor mechanics, rigbuilders, welders, etc.

In addition to the absorption of some of the growing labour force, the development of the oil industry also contributed to the urbanization of the surrounding areas which were formerly sparsely inhabited - and with this urbanization came the need for the services which are required with the growth of small towns. At the same time, there were also the usual adverse effects which accompany the development of industry. The oil field areas were centres of attraction with wages being substantially higher than those paid in the sugar industry, and the settlement of people in a hitherto sparsely inhabited area gave rise to the growth of slums where there was no authority to regulate the construction of buildings, etc. In a developed country, whenever a new area is being opened, speculators

and entrepreneurs with capital usually enter the construction field, providing the amenities which would be required. These are undertaken in accordance with the prescribed regulations enforced by the Government with regard to water, drainage, roads, etc. Apparently, in Trinidad there was a lack of enterprising men with foresight to see the profitability of providing proper housing for new labour that would be settling in the area - or if there were such men, then there was difficulty in obtaining capital. Private enterprise was not forthcoming; neither was the government, with its excess revenues, interested in investing in housing accommodation either as a profitable economic investment or as a social service. Urbanization in the oilfield area, therefore, took the form of a development of slums. In some instances, a few of the companies provided housing accommodation for their staff, and in one case a company laid out a village site on which plots of land were made available at a nominal rent to its work people for the construction of their own houses. The success of this project, however, depended on the ability of the would-be tenants to raise the desired capital to cover the cost of building.

The discovery of oil had always been described as a boon to the Colony because of the revenues it provided to support a colonial government. Unfortunately, because of

whole argument would be imbalanced by any and generalisation. The Prime Minister

the absence of sensible policy measures and of men with vision, the petroleum industry operated for twenty-five years without creating any serious impact on the rest of the economy.

The asphalt industry may be considered as a junior brother to the petroleum industry. The Pitch Lake in Trinidad is often described as one of the natural wonders of the world. It is formed by seepage from underground oil reserves, covers an area of over 109 acres and is 285 feet deep at the centre. This is Crown property and is leased on payment of royalties. The importance of this industry was also measured by the amount it contributed in the form of royalties and export duties to the revenue of the Crown. It was not significant as an employer of labour - an average of 650 labourers was normally employed during the pre-war years. The presence of natural asphalt did not give rise to such subsidiary industries as the manufacture of paints, waterproofing materials, tiles, roofing sheets, floors, etc. The natural asphalt was exported for processing overseas.

The sugar industry. Sugarcane cultivation has dominated the economy of the Caribbean from the time the sugarcane plant was introduced in the area in 1493. In the Colony of Trinidad and Tobago, sugar production was the chief agricultural pursuit until the late nineteenth century, when changes in British trade policy and competition from beet

sugar production forced sugarcane planters to diversify and switch to the production of other crops. In the pre-war years, cane sugar resumed its status as the leading agricultural export, since some stability was introduced in the industry through the granting of Imperial Preference (1919) and later the International Sugar Agreements (1937) which guaranteed a market for a specific quota at a reasonably remunerative price. But in spite of this, the proportion of exports of sugar and its products to total domestic exports continued to decline. Twentieth-century production of sugar cane showed a change from the dominance of a plantation crop to one carried on by peasant proprietors. In place of the large plantation of over 500 acres with its own mill, sugarcane cultivation was now carried on by several peasant proprietors or cane farmers who sold their canes to the six large companies which operated factories in the area. These independent cane farmers who contributed approximately 44 per cent of total cane production, farmed holdings which varied in size from a "back garden patch" to about 50 acres.

This change in cane growing was the inevitable result of the adverse economic conditions which the industry experienced, and it was not a unique feature of the Colony. Other cane-growing areas made the change over from plantation

*inadequate - 8.5
a few is 1000-5-
large estates
interior - not just a
matter of size
cf. p 65*

production in order to avoid the heavy overhead costs which were a burden during the periods of low prices. As a matter of fact, it was by resort to independent cane farmers that the industry was able to survive the difficult period of the 1890's, and that Fiji succeeded in maintaining output after India prohibited the export of indentured labour in 1916.¹⁵ In the case of Trinidad and Tobago, the class of independent cane farmers arose, not only to offset the overhead costs of plantation production, but also to encourage the indentured Indians to remain in the Colony, and so avoid the cost of repatriating them. As a result, most of the cane farmers in the Colony are East Indians.¹⁶

Because of the competition offered by beet sugar production, cane growers had to keep pace with modernization and improved technology. Thus the large cane factories co-operated with the cane farmers and assisted them to produce improved varieties of cane with more sucrose content. The twentieth-century sugar industry in the Colony was, therefore, greatly improved in the form of more scientific farming and advanced milling processes. Productivity was

¹⁵Vladimir P. Timoshenko and Boris C. Swerling, The World's Sugar, (Stanford University Press, Stanford, California, 1957), p. 74

¹⁶For a detailed description of the contribution of the indentured East Indian to sugarcane cultivation in Trinidad and Tobago, see Eric Williams, History of the People of Trinidad and Tobago, (PNM Publishing Co. Ltd., Trinidad, 1962) Ch. IX.

relatively high; one acre planted in sugarcane averaged 1.9 tons of sugar as compared with Cuba's yield of 1.6 tons during the year 1937-38.¹⁷ However, in spite of the high productivity per acre, it would appear that productivity per man remained low. The industry employed an estimated yearly average of 34,000 workers. Approximately 23.7 thousand field and factory workers were employed by the six large operating companies while the remainder were independent cane farmers. It would seem that the independent farmers secured favourable prices for their canes, as the Colonial Office Annual Report for 1933 stated: "Under the authorized valuation based on the relative price of sugar the value of a ton of cane would have been 7s. 1d. but the sugar manufacturers voluntarily paid 12s. per ton."¹⁸ The Cane Farming Control Ordinance of 1938 set the price of farmers' canes by a sliding scale based on the "standard value" of grey crystal sugar, with a minimum of \$2.64 per ton of cane.¹⁹ The rest of the labour, those directly employed by the sugar companies in factory and field, were poorly paid. The average daily wage for a male field labourer was

¹⁷Commonwealth Economic Committee, Plantation Crops, (H.M.S.O. London, 1963) p. 4.

¹⁸page 15

¹⁹Caribbean Commission, The Sugar Industry of the Caribbean, Crop Inquiry Series No. 6, (Washington D.C., 1947) p. 154.

was forty-five to eighty cents. This low wage which was also obtained in the cocoa industry may be interpreted as a measure of the opportunity cost of labour, as the result of low productivity, or as an excessive labour supply relative to demand. In fact, these three factors could have been operative. The agricultural sector (sugarcane and cocoa) was the low-wage sector as compared with the mining sector - petroleum and asphalt - where wages, even of the unskilled worker, were substantially higher.

Despite the continuous decline in world sugar prices during the inter-war years, the industry was encouraged by the preferences granted to colonial sugar, and the area under sugarcane increased from 60 thousand acres in 1933 to 72 thousand acres in 1939. Writing about the sugar industry in his report of the Trinidad and Tobago Disturbances, 1937, Chairman John Forster states:

In most cases the outturn of the factories in Trinidad has been almost doubled in ten years. This has been possible by the installation of new and improved machinery and by paying more attention to methods of chemical control. On the field side, the production of cane has been largely increased by the adoption of improved mechanical cultivation; by the more liberal and rational use of artificial manures, by the utilization of improved cane varieties; by planting increased areas; and by adopting a system of cost accounting. Large sums of money have been expended by the sugar companies in carrying out the above programme and the effort has been met with some measure of financial success. Concerns which for many years had earned no dividends have during the past three or four years found themselves in a more favourable position.

During this period of rationalization, labour contributed its share by continuing to accept a standard of wage and living conditions far below what is desirable. It would appear that during the period in question the resources of the estates must have been almost exclusively utilized in carrying out the programme outlined above.²⁰

Expansion of the sugar industry did not entail a larger wage bill and greater employment. It was mainly improvements in technique resulting in greater productivity per man. But labour did not get its share of the increased output as wages remained low. Consequently the industry's expansion could not make itself felt in the other sectors of the economy. The industry simulated Berrill's "fast expanding export 'enclave'" where the expansion of primary product is undertaken by foreign investment.²¹ The sugar industry, like the oil and asphalt industry, in the pre-war era, failed to make its expansion felt in the rest of the economy.

The cocoa industry. Cocoa production is the alternative crop which competes with sugarcane for use of the land. Because the sugarcane plant is a perennial, transfers of acreages from cane to cocoa can only occur over a long period and no spontaneous adjustment can take place when the market price of either crop is low. Cocoa had been for some time the chief agricultural export, until 1931 when sugar displaced

²⁰Page 12.

²¹K. Berrill, "International Trade and the Rate of Economic Growth," Economic History Review, XII (1960) pp. 351-359.

it. Ever since that time, because of witchbroom disease and uncertain weather conditions, production of cocoa has failed to maintain its prominence. In addition, the fluctuation of prices at a low level accentuated the unstable position of the cocoa industry. Table 5 shows the movement of the index of prices of Trinidad cocoa in London for the years 1930 to 1935.

Table 5: INDEX NUMBERS OF PRICES OF TRINIDAD COCOA IN LONDON

1927 = 100

Year	Index
1930	71
1931	49
1932	38
1933	29
1934	31
1935	30

Source: International Institute of Agriculture, The World Agricultural Situation in 1935-36, (Rome Villa Umberto I (110) 1937) p. 101.

Although sugarcane suffers from the same hazards as cocoa, the substantial preference on sugar allowed it to enjoy a price advantage. On the other hand, the nominal preference on cocoa was ineffective because the West African colonies were cheaper and larger producers and the market could not absorb the total preferential supplies.

Almost all the cocoa produced is exported, and fluctuations in the earnings of this peasant crop seriously disrupt the economy, since a large part of the labour force and population is dependent on the industry. The organization of the industry could also have been a factor why it could not withstand falling prices. At least the industry was not efficient enough to compete with the West African producers, even though Trinidad cocoa was known to be of superior quality. Unlike the sugarcane industry which made an effort to increase productivity through improved farming techniques and advanced methods of cultivation, it was observed that the cocoa proprietors sought to augment their profits only by extending the areas under cultivation. Therefore, when prices dropped, the marginal lands on which cocoa was grown became uneconomic. In addition, not much attention was paid to older fields (like replanting) whose yields were decreasing. It must be noted that a field of cocoa under the traditional methods of cultivation, increases its yield during the first fifteen to twenty-five years and then declines. When prices fell and proprietors stopped extending acreage and planting new fields, they were faced with a general fall in output. The industry was also a heavily mortgaged one, in that during the years when cocoa was profitable, (i.e., the early twentieth century), it was

not difficult to raise loans for planting the crop, and the mortgagees made little effort to redeem the mortgages. With the fall in price in the 1930's, the interest payments were an added burden on the industry.²²

The cocoa industry was not in any way capable of contributing to economic expansion during the years preceding World War II. In fact it was a drag on the economy, since there was a general revision of the tariff in 1935-36 in order to raise revenue to subsidize the industry. Under the "Cacao Industry Relief Ordinance" payments of a half penny per pound of cocoa, based on the 1934-35 crop, were made to cocoa proprietors for rehabilitating cocoa areas or converting them to alternative crops.

The export sector and development. Petroleum and asphalt, sugar and cocoa were the principal exports of the Colony of Trinidad and Tobago in the pre-war years. Previous analysis shows that the petroleum industry was a fairly successful and expanding one. So too was the sugarcane industry. The third export, cocoa, was declining, mainly because the planters could not maintain production due to the spread of disease, the hazards of bad weather conditions and poor management. These three industries, in addition

²²Trinidad and Tobago Disturbances 1937, pp. 15-19.

to being major export industries were also the main economic activities of the country and therefore were the chief sources of employment and income.

With regard to employment, both sugar and cocoa production used a great proportion of the labour force although this employment was seasonal. An estimated 34,000 labourers were employed by the sugar industry and 34,500 were engaged in cocoa, and in each case, about 100,000 persons were dependent on the industry. The estimated population at the time was roughly 424,000. The petroleum industry employed a lesser amount.

As a source of income, the petroleum industry was more important as export earnings increased steadily from 1934, while incomes from sugar and cocoa were uncertain. With regard to total incomes, therefore, it was the mining sector which was responsible for maintaining stability. But what was the general economic position of the Colony during these years?

Since there are no national income statistics available for this period, assessments must be made from export earnings, which were the chief sources of income, and also from government revenues. The value of merchandise exports had declined steadily during the early thirties, until 1934 when an upswing occurred. Between 1934 and 1939 total value of exports increased at an annual average rate

*The candidate is very
informed to his regional
data. There has been a
much discussion of this
problem in the literature
it seems amazing that
he is unaware of it.*

of 8.2 per cent. On the other hand, government revenues did not experience the same decline in the early thirties as did exports. There was a small reduction in revenue in 1933, and again in 1937; but between 1931 and 1939, government revenues increased at an annual average rate of 7.6 per cent, and between 1934 and 1939 the rate of increase was 9.5 per cent. On the basis of government revenues, many Commissioners described the Colony as prosperous relative to the other West Indian islands. For instance, Chairman Forster of the Commission on the Trinidad and Tobago Disturbances 1937, reports:

The financial position of the Colony appears to be very satisfactory. It was fortunate in being able to survive the period of the depression without any reduction in its available surplus balances and reserves; in fact, during the period 1930-5 (inclusive) surplus funds were increased by nearly 100,000 to 1,000,000 approximately.²³

The West India Royal Commission of 1939 also reported that Trinidad, "alone among the West Indian governments, is in easy financial circumstances, and in a position to undertake fairly extensive programmes of expenditure without external aid."²⁴ Yet a close look at the economy will reveal that most or all of the features which characterize underdeveloped

²³Page 10

²⁴West India Royal Commission Report (1938-39), p. 13.

countries existed in the Colony. There was unemployment which led to serious rioting; the greater part of the population depended on agriculture for a livelihood; and wages were generally low. This was the situation in an economy with a growing export sector and a relatively high value of trade per capita.²⁵

From the country's experience, one can safely say that the volume of trade or expanding exports alone is not a sufficient condition for inducing growth. One must also examine the disposition of incomes earned from the export industry and the country's propensity to import.

In the case of Trinidad and Tobago, the two expanding export industries were foreign-owned. The result was that part of the earnings leaked out in the form of dividends paid abroad. Also machinery and technical equipment were imported. Imports of machinery into the Colony increased by approximately 57 per cent between 1936 and 1938.

The growing demand for mechanical equipment, which was the outcome of the growth of the export industries, did not stimulate industrial enterprise as it did in Industrial England of the eighteenth century or Germany, Belgium and

²⁵ In 1938 the country's per capita export of US\$65 and per capita import of US\$75 were comparable with Canada's per capita export and import of US\$77 and US\$66 respectively.

Q. But's growth model. This conclusion does not read the literature on growth economics.

France in the nineteenth century, This may be attributed to the fact that the colony is devoid of the mineral resources (iron and steel) required for industrial production. Although absence of such resources should not²⁶ exclude a country from engaging in industrial activity. There was, therefore, no development of producer-goods industries - the industries where the acceleration principle is keenly felt.

Imports. Another feature of the country was that a significant proportion of total imports was of consumer goods, chiefly foodstuffs. This practice of concentrating on exports and importing food was of historical tradition and not based on comparative advantage, bearing in mind that both sugar and cocoa were now heavily subsidized industries. Not many attempts were made to explore the possibilities of alternative products. For example in 1930-31, there were only 9,000 acres cultivated with rice, which is the staple diet of the community. There is evidence, however, that there was a domestic market for rice, judging from the quantity imported. (Table 6). Total rice production in 1930

²⁶ W. Arthur Lewis, "The Industrialization of the British West Indies," Caribbean Economic Review, II, (May 1950), p.24 states: "...a country can have quite a sizeable industry making hardware, agricultural implements, tin cans, or machinery, even though it has no iron ore, and iron and steel industry in the narrow sense. And similarly it can engage in making commodities out of ingots of aluminium or copper, out of plastic powders, or out of artificial fibres even though it is quite incapable of producing the intermediate product."

Table 6: IMPORTS OF SELECTED COMMODITIES BY QUANTITY & VALUE

Commodity	Unit	1930	1934	1938
TOTAL IMPORTS	£'000	5,334	4,486	7,395
<u>Food:</u>				
Flour, wheaten	Th. cwt. £'000	530 398	595 288	614 371
Rice	Th. cwt. £'000	325 220	385 164	389 208
Fish, all kinds	Th. cwt. £'000	59 127	59 85	72 121
Cocoa, raw	Th. cwt. £'000	87 150	93 129	68 109
Milk, condensed or otherwise preserved	Th. cwt. £'000	37 118	50 95	80 155
Meat, all kinds	Th. cwt. £'000	39 116	45 88	64 157
<u>Raw materials:</u>				
Coal and coke	Th. tons £'000	60 80	34 36	47 58
Wood and timber, dressed	Th. Super ft. £'000	15,118 164	11,311 96	... 189
<u>Manufactured articles:</u>				
Machinery <u>1/</u>	£'000	875	559	731
Iron and steel	£'000	...	518*	1,348
Cotton piece goods	£'000	212	143	224

1/ Owing to changes in classification, the 1938 figure is not comparable with earlier years.

* 1935 figure.

Source: Board of Trade, Statistical Abstracts, Cmd. 5872 and Cmd. 8051, H.M.S.O., London.

was 40,000 cwt. compared with imports of 325,000 cwt. Total imports of Class I goods, (food, beverages and tobacco) were generally high. In 1933 imports of these goods amounted to £1.3 million, while total imports were £4.0 million. Class III goods which include machinery and manufactured articles totalled £2.4 million in 1933.

Balance of trade. Notwithstanding the high propensity to import, the Colony, during the period 1930-39, maintained a favourable balance of visible trade for every year except 1937 and 1938. This surplus of visible trade was boosted by the fact that Trinidad, as a distributing centre for the southern Caribbean and the northern part of South America, and an entrepôt for ships, did a fairly large amount of business supplying ships' stores and bunkers. Table 7 gives the value of domestic exports, ships' stores, re-exports and total imports. Although there was a surplus of merchandise trade, it would appear that the country's balance on current account was unfavourable. While there are no available data to substantiate this premise, it may well be the case since the West Indies in general were known to be dependent on foreign agents for marketing, insurance, shipping and other services. In addition, the large amount of foreign investment in the leading industries would also necessitate large payments of interest and dividends. On

*was a heavy firm
of trade?*

Table 7: BALANCE OF MERCHANDISE TRADE
(in thousand pounds sterling)

Year	Domestic Exports	Ships' Stores	Re-exports	Total Exports	Total Imports	Balance of trade
1929	5,927	728	465	7,120	5,932	+1,188
1930	4,788	652	362	5,802	5,334	+ 468
1931	3,714	319	331	4,364	3,911	+ 453
1932	3,673	421	264	4,358	3,692	+ 666
1933	3,562	822	215	4,599	4,002	+ 597
1934	3,772	922	578	5,272	4,486	+ 786
1935	4,114	686	222	5,022	4,372	+ 650
1936	5,046	631	561	6,238	5,664	+ 574
1937	5,800	845	376	7,021	7,466	- 445
1938	6,208	886	275	7,369	7,395	- 26
1939	5,565	1,947	271	7,783	7,242	+ 541

Compiled from Board of Trade, Statistical Abstracts, Cmd.5872 and Cmd. 8051, H.M.S.O., London.

the other hand, the main channels whereby the Colony exported services were through its entrepôt trade and tourism.

Tourism in the 1930's was not a highly developed industry.

The volume of trade, relative to the economic position of Trinidad and Tobago, emphasizes the fact that trade, while a forceful factor in development, is not sufficient, but that the interaction of other forces, the existing institutions and the milieu under which trade is carried on, are important factors to be considered.

Economic forces alone cannot foster development. "The key to development lies in men's minds, in the institutions in which their thinking finds expression and in the play of opportunity on ideas and institutions."²⁷

The opportunities that the Colony of Trinidad and Tobago could have derived from foreign trade were allowed to slip by, mainly because of the absence of these other factors.

Fiscal policy. The Colony of Trinidad and Tobago, with its dependence on foreign trade, felt the impact of the depression. This is noticeable in the pattern of the country's export earnings. Export earnings recovered simultaneously with improvements in incomes in the United

²⁷A.K. Cairncross, Factors in Economic Development, (George Allen & Unwin Ltd., Ruskin House Museum Street, London) p. 214.

States and the United Kingdom. This parallel movement between exports and the economic climate of its trading partners, supports the "vulnerability" argument of a country dependent on foreign trade. Fortunately, the United States and the United Kingdom (advanced industrial countries) were on the upswing from the mid-1930's^{27a}, and so the Colony was pulled along and the volume of its trade improved. The fact is, however, that despite the stimulus which the recovery gave to the country's trade, no change occurred; that is, increased exports did not give rise to the growth of other activities. It has already been pointed out that the low wage of the sugar industry prohibited any spread effects. The oil industry did not offer much employment. It was already a fully integrated industry, producing and processing the crude product. The spill over which the industry had, flowed through the hands of the government in revenues.

During the years 1933 to 1939, the administration maintained budgetary surpluses. Tables 8 and 9, giving the estimates of revenue and expenditure averaged over a three-year period, show that extraordinary expenditure on public works averaged 9.7 per cent of total expenditure; agriculture was only 2.4 per cent, forestry 0.7 per cent, poor relief 1.6 per cent. In general, expenditures were low in the very

^{27a} Philip Neff and Annette Weifenbach, Business Cycles in Selected Industrial Areas (University of California Press, Berkeley and Los Angeles, 1949) p. 266.

Table 8: AVERAGE ANNUAL REVENUE IN THE PRE-WAR PERIOD

Note: Figures exclude grants received from H.M. Government and the revenue of self-balancing departments. Averages are calculated for revenues received during the three years ending on the latest date up to which financial returns were available during the Moyne Commission of 1938.

Source of Revenue	Average £'000	Per cent
TOTAL REVENUE COLLECTED LOCALLY....	2,372.7	100.0
<u>Customs:</u>		
Import duties	881.0	37.1
Export duties	26.0	1.1
Tonnage dues	37.1	1.6
Package tax	2.2	0.1
Other customs revenue	2.1	0.1
Excise	391.0	16.5
Licences	171.1	7.2
Income tax	256.6	10.8
Estate and death duties	20.2	0.9
Land taxes	86.3	3.6
Fees of Court and office	62.0	2.6
Rents and other revenue from land (other than land taxes)	28.6	1.2
Interest on Sinking Fund	67.1	2.9
Reimbursements	63.6	2.7
Miscellaneous	24.5	1.0
Proceeds from sale of lands	5.4	0.2
Other extraordinary revenue	78.7	3.3

Source: Colonial Office, West India Royal Commission Report (1938-39), June 1945, London, H.M.S.O., Cmd. 6607, p. 482.

Table 9: AVERAGE EXPENDITURE IN THE PRE-WAR PERIOD

Note: Expenditure of self-balancing departments is excluded. Averages are calculated for expenditure during the three years ending on the latest date up to which financial returns were available during the Moyne Commission of 1938.

Item of Expenditure	Average £'000	Per cent
TOTAL EXPENDITURE	2,057.1	100.0
Public works, recurrent	305.4	14.8
Public works, extraordinary ...	201.1	9.7
Debt charges	196.5	9.5
Police and prisons	194.3	9.4
Education	190.7	9.2
Medical	189.5	9.2
Subventions and subsidies	131.9	6.4
Pensions and gratuities	131.5	6.4
Deficit on self-balancing depts.	91.2	4.4
Legal and judicial	55.0	2.7
Customs	54.2	2.6
Agriculture	49.0	2.4
District Administration	31.6	1.6
Poor Relief	32.5	1.6
Printing and stationery	18.5	0.9
Land, surveys and mines	19.2	0.9
Treasury and finance	15.7	0.8
Forestry	13.6	0.7
Military	13.0	0.6
Secretariat	9.8	0.5
Governor and legislature	8.2	0.4
Audit	5.8	0.3
Veterinary	1.4	0.1
Miscellaneous services	97.6	4.7

Source: Colonial Office, West India Royal Commission Report (1938-39), June 1945, London, H.M.S.O., Cmd. 6607, p. 483.

areas where they would have had multiplied effects. On the revenue side, import duties and excise taxes were the two largest contributors, with income taxes placing third. The importance of import duties and excise taxes as sources of revenue is another characteristic of underdevelopment. Specific duties were levied on roughly half of all dutiable goods entering the country. On other dutiable goods, ad valorem rates of ten per cent on imports entitled to Imperial Preference, and 20 per cent on imports from foreign countries were levied. In addition, effective from May 30, 1930, a surtax of 15 per cent of the duty was levied on all dutiable goods. In 1935-36, there was a general upward revision of the tariff in order to raise funds to finance the Cacao-Subsidy Plan.²⁸ If the sources of revenue are observed from another angle - direct versus indirect taxes - it will be seen that the tax structure tended to be regressive since indirect taxes (import duties, package tax and excise) accounted for more than half of total revenue. There is some presumption that there was scope for increasing income tax and the proceeds of such taxes could have been used to finance development expenditure.

²⁸United States Tariff Commission, Commercial Policies and Trade Relations of European Possessions in the Caribbean Area, Report No. 151, (1943) p. 150.

CHAPTER III

DEVELOPMENT DURING THE WAR AND IMMEDIATE POST-WAR YEARS *

The period from the outbreak of World War II to 1951 may be described as a period of transition. As it had been with previous wars, so it was with World War II; the Caribbean area benefitted from world unrest, especially with regard to its staple, sugar. The International Sugar Agreement was suspended during the war and the United Kingdom Government bought all Colonial sugar until a new agreement, the Commonwealth Sugar Agreement, was made in 1951. From the beginning of the war in 1939 when the price of raw sugar was £10. 8s. per ton, there was an annual increase in sugar prices until 1949 when the price remained at the 1948 level of £27. 5s. per ton.

In Trinidad and Tobago, higher prices induced larger areas to be planted in sugar cane, especially since

*Most of the data in this chapter are based on Colonial Office, Colonial Report, Trinidad and Tobago, 1946 to 1950.

the alternative cash crop, cocoa, was persistently afflicted by the witchbroom disease. However, the export earnings of sugar fluctuated in spite of the constant rise in price. In some instances, reduction in earnings was due to shipping difficulties which were experienced during the war.

Changes in the economy. There was a general reconstruction of the economy to suit wartime needs. The construction of United States' defence bases on large areas of land²⁹ simultaneously eased the pressure of the labour force on agriculture, and competed for the skilled labour employed elsewhere, at wages higher than the standard. In addition, the recruitment of armed personnel helped to change the pre-war situation of unemployment to one of shortage of labour, so that immigration laws were relaxed, and two hundred labourers were imported from Barbados. On the recommendation of the Moyne Commission, the Colony had intended to launch a \$14 million Five-Year Development Plan, but with the outbreak of the war, the Plan was subordinated to the various wartime requirements. A large share of the annual expenditure went to special military and war services. However, government expenditures on old age pensions and housing increased. There arose in general a consciousness

²⁹ Thirty-five thousand acres of land were leased to the United States' Government for defence bases. There is no information available showing how the leased area was previously utilized.

of the need for a national policy. The report of the Commissioner of Development and Welfare for 1940-42 noted that the Colony had spent considerable sums on harbour improvements, road developments, housing schemes, education; and that programmes for hospital improvements and improved water supplies had been drawn up. It also referred to the appointment of a committee to "formulate a long-term policy for agriculture and to lay down the broad lines for research and, in general, to submit comprehensive proposals for the betterment of agriculture." ³⁰

The "Grow More Food" campaigns of the war years also encouraged the production of crops for domestic consumption. This was necessitated by the ban on, and subsequent control of imports, the disruption of trade routes, and the shortage of shipping facilities. As a result, the acreage of land under food cultivation increased by ten thousand acres between 1941 and the middle of 1942. Throughout this period, with the aid of increased taxation,³¹ government maintained budgetary surpluses, most of which was loaned, interest free, to the Imperial Government to assist

³⁰Report by Sir Frank Stockdale, Development and Welfare in the West Indies, 1940-42, (Colonial Office, London, 1943), p.11

³¹Excess profits tax was increased from thirty-three and one-third per cent to 80 per cent.

the war effort, and the remainder was allocated to development schemes.

Effects of the war. The consequences of the war were not purely favourable. Along with the benefits of more employment and high prices for agricultural exports, there were the adverse effects of shortages of imported foodstuffs, increased taxes and of social dislocation which the establishment of United States' defence bases caused. The adverse effects continued after the war through the links which the Colony had with the United Kingdom. Measures which Great Britain used to solve her post-war balance of payments difficulties, did not always work to the advantage of the Colony. Exchange-control restrictions introduced in 1947 and the devaluation of the pound sterling in 1949, to some degree, affected the trade of the Colony. Exchange control had a two-way effect in that it gave advantage to some exports into the United Kingdom, but at the same time the Colony was deprived of cheaper sources of supply of its imported goods. In some instances, it limited the expansion of industry, as in the case of the oil industry where further exploration was curtailed because the equipment could not be obtained in the United Kingdom and dollars were not available for procuring the machinery from the United States.

The sugar industry also suffered in a similar manner.

The same dilemma was evident with regard to currency devaluation.³² While it might have been an efficient tool for improving the United Kingdom's balance of payments and securing her internal stability, it resulted in a sharp increase in the cost of living in the Colony, as the country was highly dependent on imports of the basic consumer goods (flour, fish, dairy produce, meat and textiles) supplied by hard-currency areas. Another factor was that because a significant percentage of the Colony's imports was from hard-currency areas while the bulk of its exports was to the United Kingdom and Commonwealth, the Colony could not really gain by the price/quantity change which devaluation would ordinarily effect. Note the change in the direction of trade, especially of imports in Table 10.

³²The Trinidad dollar is tied to the pound sterling so that devaluation of the pound to the equivalent of \$2.80 U.S. automatically devalued the Trinidad dollar to the equivalent of 58 1/3 cents U.S.

Table 10:

DIRECTION OF TRADE 1939 - 1950

(in percentages)

Country	1939	1940	1941	1942	1943	1944	1945	1946	1947	1948	1949	1950
Imports from:												
United Kingdom	36	32	21	19	14	11	14	28	23	33	37	40
Canada	15	12	31	29	31	31	34	35	30	18	12	9
United States	25	28	25	32	33	28	27	15	23	16	16	8
Exports to:												
United Kingdom	56	53	35	43	34	36	30	54	50	43	37	31
Canada	10	12	30	14	6	11	12	8	8	9	14	14
United States	5	8	12	20	23	22	13	6	5	14	5	8

Source: Colonial Office, Colonial Report, Trinidad and Tobago 1946, London, (H.M.S.O.) 1948.

If there were any gains through devaluation, they were outweighed by the high cost of living which accompanied it. Imports of essential foodstuffs, e.g. flour, rice, condensed milk, dried salted fish, corned beef, cooking butter, pickled pork, were subsidized out of the general revenue and from the Import and Export Department's trading account. The amounts spent in subsidies on these foodstuffs in 1949 and 1950 were \$3.4 million and \$3.5 million respectively. Thus, in an attempt to keep the cost of living down, protection was given, not to local production, but to foreign commodities. It may be mentioned that price controls were placed on locally grown foods. Whatever stimulus devaluation could have given to domestic production was thwarted by the measures taken to keep prices down. The cost of living index, calculated to measure the changes in the cost of living of the working class community, increased as follows:³³

	1935 = 100
January 1946	200
1948	226
1950	228
1951	233

The small increase between 1948 and 1950 reflects the effects of the subsidies and price controls.

³³Overseas Economic Surveys, British West Indies, (London, H.M.S.O., August 1951) p. 5.

Trade. Although several changes occurred during the post-war period, the staple exports maintained their importance. Petroleum and its products remained at the top of the list of exports, averaging 68.7 per cent of total domestic exports for the period 1949-51. Sugar, while it retained its position as chief agricultural export, declined in proportion to 11.0 per cent and cocoa to 4.7 per cent. The production of rum for export achieved some importance, contributing 1.6 per cent to total domestic exports; and several minor exports increased in value. (Table 11).

On the import side, expenditure on food headed the list and the Colony faced a continual deficit in merchandise trade, except in the years 1948 and 1950.

Government Policy. The early post-war period was characterized by the increasing role Government played in domestic affairs, as opposed to the pre-war years when the strict Smithian laissez-faire policies were observed. For example, it is recorded that in order to promote industry:

- (1) For ten years from 1948, certain raw materials used in the manufacture of glass were exempt from customs duties.
- (2) Trinidad Leaseholds Ltd. had been allowed to import free of customs duties for a period of twenty-five years, commencing January 1, 1949, crude oil and/or charging stocks or blending stocks for its own account or for processing and re-export.

*This is what the
these imports are
about. It is a heavy
hand and put on
much, but grow on
material is shown
relevant.*

Table 11: PRINCIPAL EXPORTS OF TRINIDAD AND TOBAGO**IN THE POST-WAR PERIOD, 1949-1951****(In United States dollars)****Note:** Figures have been adjusted to reflect the 1949 devaluation of the pound sterling.

Commodity	Exports \$'000	Per cent of Total Exports
All commodities	320,612	100.0
Petroleum and petroleum products ...	220,220	68.7
Sugar and Molasses.....	35,289	11.0
Cocoa Beans	15,130	4.7
Natural Asphalt	5,322	1.7
Rum	5,090	1.6
Preserved Fruits ¹	2,100	0.7
Coffee	1,510	0.5
Liqueurs (Bitters)	1,099	0.3
Citrus Fruits	1,070	0.3
Vegetable Oils (Cocomut oil)	956	0.3
Residual Items	32,826	10.2

1/ Includes fruit juices \$2,086,000.

Source: Caribbean Commission, The Extra Caribbean Market, Movement, Diversification & Balance of Trade, 1937-1951, Statistical Unit, Research Branch, Central Secretariat, Kent House, Port of Spain, Trinidad, page 27.

Use of U.S.
dollars necessitates
specification of
other dollars
used.

A similar concession enabled Brighton Terminals Ltd. to import crude oil up to 300,000 barrels a month free of import duty, for twenty-five years, commencing November 1, 1950.³⁴

(3) In an endeavour to attract capital and technical skill for the establishment of local industries, the Government passed the "Aid to Pioneer Industries" Ordinance in 1950. Under this ordinance, concessions in the form of exemptions from income tax and from import duty on machinery, equipment and factory building materials, and also depreciation allowances, were granted to the industries which qualified for "pioneer" status.³⁵ (4) The Income Tax (In Aid of Industry) Ordinance, 1950, made provisions for relief from income tax in aid of certain industries. It also provided for the writing off of assets within a shorter period and allowed the expenditure on scientific research to be deducted when computing company's profits.³⁶ In response to incentive legislation the following new industries were established: glassmaking (bottles, etc.), brewing of lager beer and box-making.

But Government incentives were not directed only towards industry. The government financed a cocoa

³⁴

Caribbean Commission, The Promotion of Industrial Development in the Caribbean, (Kent House, Port of Spain, Trinidad, 1952) p. 44.

³⁵ Overseas Economic Surveys, British West Indies, p. 27

³⁶ Colonial Report, Trinidad and Tobago, 1949

rehabilitation scheme and embarked on drainage and reclamation projects. Provisions were also made for the training of local surveyors in Canada, for technical education, for the building of more primary schools so that the Compulsory Attendance Ordinance could be enforced. All these projects were financed out of local funds.

Perhaps the best measure of the change which took place in this period can be taken by comparing the change in the composition of government revenues. For instance, in the pre-war years, customs revenue averaged 40 per cent while income tax averaged 10.8 per cent of total revenue. In 1950, customs revenue and income tax contributed almost equal amounts - \$17.6 million and \$17.5 million - that is, they each contributed approximately 17.6 per cent to total revenue.

Because of the several changes - social, political³⁷ and economic - which took place during the war and the years immediately after, the period can be delineated as the beginning of a transition period in the Colony's development, a period when the foundations were being laid for the growth which was to take place in the decade of the fifties.

³⁷In 1949, agreement was reached on a new constitution. This became effective when a general election was held at the end of 1950. The number of elected members of the Legislative Council was increased, the Executive Council now had a majority of elected members and a ministerial system of Government was introduced.

*might what?
Sentinel incomplete*

CHAPTER IV

THE STRUCTURE OF THE ECONOMY 1951 - 1960

*note: for agriculture
dominates. The
economy is in a stage of
transition*

The agricultural sector, including forestry and fishing. The productivity of agriculture is a critical factor in the colony's development owing to the limited area of arable land relative to its population. A 1956 land survey covering 1,050,000 acres of the total land area of 1,267,000 acres, estimated that 94.3 thousand acres or 7.4 per cent of the land was unused. Unused land included: (1) cultivable land which was in fallow, rough pastures, and forest or bush in secondary growth for less than ten years; and (2) land not suitable for cultivation or pasture. Expansion of the agricultural area is therefore limited. It is believed that the land has already reached the limit in the number of families it can support. Consequently, for agriculture to play its part in assisting the economy to achieve sustained growth, improvements in technology and mechanization are imperative.³⁸

*I would agree with
dominant, be
in a stage like
this.*

³⁸In an economy where labour is not a scarce factor, it may be argued that mechanization is not a requisite. There are however, forms of mechanization, like the tractor, which must be viewed, not as a labour saving device, but as a tool for increasing productivity per acre, which is the aim of countries with limited arable land.

In fact, the change-over to more mechanical farming techniques has resulted in a decline in both the absolute and proportionate numbers of the labour force employed in this sector; yet still, productivity per worker in agriculture is almost fifty per cent less than per capita productivity in other industries. In 1956 the output per person in agriculture was approximately \$1,289 whereas the average output per worker for the country was \$2,326.³⁹ The fact is, that most of the progress in agricultural technique has occurred chiefly in the cultivation of sugarcane and a few export crops like citrus, while the production of other food crops is still carried on in an almost primitive manner. There is need for more efficient utilization of the land, especially by the peasant farmers who cultivate small plots of land. A sample survey of holdings less than one hundred acres in size showed that there were 19,000 persons with farms less than five acres, and 34,100 persons with farms less than 100 acres. Table 12, giving the distribution of farms according to size, shows a large concentration of small farms. The majority falls below the average size of 13.61 acres. While the economical size of a farm will vary with

³⁹ Government of Trinidad and Tobago, Economic Survey 1958, (Office of the Premier and Ministry of Finance, Dec. 1959) page 26.

Table 12: DISTRIBUTION OF FARMS ACCORDING TO SIZE**Note:** Figures relate to 1946 census.

(i n a c r e s)

Size of farm	Number of farms	Average size per farm	Total area in each group
TOTAL - ALL SIZES.....	30,511	13.61	414,937
1 and under 2 acres..	8,027	1.21	9,746
2 " " 3 " ..	5,383	2.17	11,686
3 " " 5 " ..	4,710	3.54	16,677
5 " " 7 " ..	4,040	5.49	22,170
7 " " 10 " ..	2,202	7.65	17,728
10 " " 15 " ..	2,402	11.41	27,401
15 " " 20 " ..	1,317	16.43	21,640
20 " " 30 " ..	968	23.32	22,579
30 " " 50 " ..	634	37.02	23,469
50 " " 100 " ..	372	67.95	25,277
100 " " 200 " ..	212	135.61	28,749
200 " " 500 " ..	130	304.78	39,621
500 " " 1000 " ..	52	717.36	37,303
1000 acres and over	44	2,520.2	110,891
Size not stated	18	-	-

Source: Government of Trinidad and Tobago, Central Statistical Office, Annual Statistical Digest 1960, p. 144.

the type of product grown, there may be some increase in overall productivity if the number of small farms is reduced. Fragmentation of land can be a retarding factor in the general growth in productivity of agriculture.

Since the war, there has been greater diversification in agricultural products, yet, sugar-cane growing remains the foremost agricultural crop in terms of income and employment. Sugar-cane production has, so far, kept abreast with technological development in the rest of the world. Productivity per acre is greater than that of Cuba, although it is lower than many of the cane-growing areas in the Commonwealth. The yield of sugar is determined, not only by the output per acre of cane, but also by its sucrose content and efficiency of the extraction process. Weather conditions, such as too much rain or a severe drought can hamper the sucrose content of the cane.

Production of sugar-cane is still divided between the peasant cane farmer and the sugar estates owned by the operating companies. The price paid to the farmers depends largely on the sucrose content of their produce, and therefore, farmers' incomes are in a precarious position, since the sucrose content varies with weather conditions. Table 13 shows that in 1957, 9.26 tons of cane produced a ton of sugar, while in 1951, it required 10.19 tons of cane per ton of sugar.

yes - as business
argument p. 28

Table 13: SUGAR-CANE PRODUCTION AND OUTTURN

Year	O u t p u t			Outturn tons cane/ ton sugar	Price per ton cane \$
	Estates	Farmers	Total		
	(Thousands of tons)				
1951	945.6	487.1	1,432.7	10.19	7.99
1952	966.4	355.1	1,321.5	9.62	10.86
1953	1,047.9	451.0	1,498.9	9.82	11.36
1954	1,111.5	548.3	1,659.8	9.61	11.81
1955	1,183.7	644.0	1,827.7	9.48	11.97
1956	1,062.3	568.8	1,631.1	10.18	10.98
1957	1,102.3	452.2	1,554.5	9.26	14.53
1958	1,310.0	641.0	1,951.0	10.60	11.44
1959	1,177.2	647.1	1,824.3	10.07	..
1960	1,449.0	758.4	2,207.4	10.13	..

Sources: Government of Trinidad and Tobago, Central Statistical Office, Annual Statistical Digest 1960, p. 145; Economic Survey of Trinidad and Tobago 1953-1958, Office of the Premier and Ministry of Finance, December 1959, p. 29.

The area under cocoa in 1958 was estimated at 122,400 acres, the largest for all agricultural products. Rehabilitation of the industry is still in progress, and estates are being replanted with clonal cocoa, an improved and more productive type. It is reported that the clonal cocoa planted in the colony will yield between 1,000 pounds and 1,500 pounds per acre, whereas West African producers get about 300 to 500 pounds per acre.⁴⁰ However, the cultivation of this highly productive type of plant has not yet achieved a large scale, and the yield per acre of the other plantations is just about two hundred to three hundred pounds. Since most of the total product is exported in its raw state, the incomes are quite vulnerable to world market conditions. For example, export prices for the years 1954, 1957 and 1958 were respectively \$85.30, \$75.15 and \$53.14 per hundred pounds. The corresponding exports by value and quantity were as follows:⁴¹

Year	Quantity Exported	Value of Exports
	million lbs.	\$mn.
1954	17.6	15.0
1957	15.9	8.5
1958	18.2	12.7

⁴⁰Government of Trinidad and Tobago, Five Year Development Programme 1958-1962, (Government Printing Office, Trinidad, B.W.I. 1958) p. 8

⁴¹Economic Survey 1958, p. 10

The production of coconuts, citrus fruits and coffee is increasing in importance from the point of view of their relation to external trade. Production of these crops, like all other agricultural crops, fluctuates mainly because of the inability to control disease, pests and other tropical hazards. For this reason, the Government allocated \$45,000 for agricultural research in its Five Year Development Programme 1958-1962.⁴²

In addition to the cash crops which are grown chiefly for the export market or to be processed for later export, there are several other food crops produced for domestic consumption. The share of these crops in the total agricultural output can best be estimated by looking at the proportion of that output which is sold to households. Table 14 shows that households are consuming a greater share of the total agricultural output. Keeping in mind that the major agricultural products are sold to manufacturers or exported, one can conclude, after making allowance for price changes, that more and more food crops for local consumption are being produced.⁴³

⁴²Page 50.

⁴³Subsidization of imported food terminated in 1954.

Table 14: DISPOSITION OF AGRICULTURAL OUTPUT

Year	Total Sales		Sales to Households		Sales to Manufacturers		Exports	
	\$mn.	Per cent	\$mn.	Per cent	\$mn.	Per cent	\$mn.	Per cent
1953	80.9	100.0	30.2	37.3	35.3	43.6	15.4	19.1
1954	93.8	100.0	35.5	37.8	38.0	40.5	20.3	21.7
1955	96.1	100.0	41.7	43.4	38.3	39.9	16.1	16.7
1956	99.3	100.0	47.3	47.6	35.6	35.9	16.4	16.6
1957	107.9	100.0	54.2	50.2	40.5	37.5	13.2	12.3

Source: Government of Trinidad and Tobago, Economic Survey 1958, (Office of the Premier and Ministry of Finance, Dec. 1959) p. 26.

In the 1956 Land Utilization Survey, it was estimated that roughly 54 per cent, or 689,800 acres, of the total land area is covered by forest and secondary growth. Of this forest area, almost 95 per cent belongs to the Crown and is administered by the Forest Department. The primary function of the forest is protective, that is the maintenance of suitable climatic conditions for crops, the preservation and regulation of water supplies, the prevention of erosion and the provision of sanctuary for wild life.

As a source of supply of timber, the forests provide almost five million cubic feet of wood annually which is far

short of local requirements. Table 15 on page 69 gives the quantity of timber produced locally and that imported.

It is believed that with suitable regeneration methods, the forests of the country can be made a successful commercial enterprise, and the Government has undertaken a forestry expansion project by the establishment of large-scale plantations of teak and pitchpine.

There is no organized fishing industry, although some assistance has been given to fishermen by the Government. The fish caught must be sold fresh, as storage facilities are limited and there is no fish processing industry. Between 1954 and 1960, an average of 6.7 million pounds of fish per annum was delivered to the principal fish markets for sale. In 1958, an estimated twelve million pounds of fish were produced. Imports of processed fish for that same year were estimated at 7.9 million pounds.

The country has not yet reached the stage where it is self-sufficient in meat, although increases in output have been recorded between the years 1953 and 1960.

Table 15: TIMBER PRODUCTION¹ AND IMPORTS²

Year	Timber	Other Splitwood	Firewood	Charcoal	Total	Imports Bd. ft. 000's
(T h o u s a n d s o f c u b i c f e e t)						
1951	3,366	177	396	1,476	5,416	15,361
1952	3,244	90	376	1,459	5,258	8,212
1953	3,199	645	388	1,375	5,607	12,337
1954	3,889	76	324	1,252	5,042	15,219
1955	3,756	193	223	1,180	5,352	16,655
1956	3,164	681	256	1,242	5,342	14,503
1957	3,165	329	210	1,075	4,779	15,684
1958	3,448	366	186	733	4,733	17,538
1959	3,545	228	148	757	4,678	8,998
1960	3,555	181	130	831	4,697	22,977

1/ Cubic feet equivalent in round wood timber.

2/ Wood shaped or simply worked in board feet. Imports of wood in the round are not included.

Sources: Government of Trinidad and Tobago, Central Statistical Office, Annual Statistical Digest 1960, p. 159;
Overseas Trade Reports, 1951 - 1960.

inf. Reinstated & built
the Federal Shipping Service
discussion of building timber

In the food balance sheet for 1958, the estimates of local production and the net supply of meat were as follows:⁴⁴

Meat	Local Production (thousand pounds)	Net Supply
Fresh, chilled or frozen		
Beef or veal	3,382	9,017
Mutton.....	122	820
Pork.....	1,891	2,533
Poultry.....	6,250	8,654
Other fresh chilled or frozen meats.....	---	749
Dried salted or canned meat and meat preparations ...	---	7,438

It is only in the production of poultry that domestic produce contributes a significant share of the meat supply.

Total output of the agricultural sector, measured in current prices, increased from \$55.6 million in 1951 to \$108.4 million in 1960. The average rate of growth in this sector was 7.2 per cent per annum.

The petroleum and asphalt sector. The decade of the fifties was a period of rebirth for the oil industry. After the relative stagnation during the war and immediate

⁴⁴Annual Statistical Digest 1960, p. 153

post-war years, the industry went through a stage of spectacular growth which became quite obvious in 1955. Expansion occurred in every sphere of activity. Drilling operations, which maintained a yearly average footage of approximately 650 thousand in the preceding period, increased its average to over one million feet in the period 1951 to 1960. The total footage drilled, on both land and sea, in 1960 was 111.7 per cent greater than that drilled in 1951. Production of crude oil also increased from 20.8 million barrels in 1951 to 42.3 million barrels in 1960.

Because of the complex geological structure of the island, exploration and production costs are very high; and in spite of the increase in total production, it must be noted that Trinidad's output per well is much lower than other oil-producing areas. Wells are usually brought in flowing only a few hundred barrels a day, and this rapidly declines, so that the overall average production per well is only 38.7 barrels per day. In contrast, the average daily production per well in Saudi Arabia is five thousand barrels, Venezuela 247 barrels, and Colombia 64 barrels.⁴⁵ In 1955 exploration extended to offshore areas and the average productivity of these marine wells is greater than the land wells.

⁴⁵ Shell Trinidad Limited, Background Notes on the Oil Industry in Trinidad, (24th August, 1962) p. 2.

Very little of the crude oil produced is exported. In fact, the country is a net importer of crude petroleum. Almost from the start of oil mining activity, the island developed as a refining centre. The refineries which were built initially to provide the Allied navies with fuel oil, shifted in the 1920's and 1930's to the production of motor gasoline. In 1941 a new refinery produced aviation gasoline⁴⁶ and today the refineries in the island produce a wide assortment of petroleum products. In 1956, refining capacity was approximately 135 thousand barrels per day, much beyond the daily production of 79 thousand barrels per day. This accounts for the great amount of crude petroleum and other refinery needs imported into the country. Imports of crude petroleum and other refinery needs, in addition to being a significant proportion of refinery throughput - approximately 41 per cent in 1958 - also form a major part of the country's total imports, 31 per cent in 1958.

On the other hand, exports of petroleum and its products comprised 82.3 per cent of domestic exports in 1958. Table 16 shows the relation between mineral fuels and the country's exports and imports. These figures clearly show that the existence of the industry is , in a great measure, dependent on favourable international trade conditions. They

⁴⁶

David Lowenthal, "Physical Resources" The Economy of The West Indies, ed. G.E. Cumper, (Kingston, United Printers Ltd., 1960) p. 58.

**Table 16: VALUE OF IMPORTS AND EXPORTS OF MINERAL FUELS
AND THEIR RELATION TO TOTAL IMPORTS AND EXPORTS**

Year	I m p o r t s ¹			E x p o r t s ²		
	Mineral fuels \$mn	Total \$mn	Per cent of total	Mineral fuels \$mn	Total \$mn	Per cent of total
1956	87.0	301.8	28.8	262.3	332.0	79.0
1957	97.1	356.2	27.3	314.1	380.0	82.7
1958	126.9	412.5	30.8	339.9	412.8	82.3
1959	144.4	448.6	32.2	364.5	434.9	83.8
1960	171.1	504.6	33.9	392.9	476.4	82.5

1/ Imports are valued c.i.f.

2/ Exports are valued f.o.b.

Source: Government of Trinidad and Tobago, Central Statistical Office, Quarterly Economic Report July - September 1961, p. 2.

also emphasize the relationship between the industry and the country's total trade.

Because of the connection between oil and gas, it followed that with increased production of crude oil, natural gas also increased. The availability of natural gas as a cheap fuel enhances the country's potential for industrial development. At present, the oil refineries and fields are the largest consumers of the gas, but other industries are recognizing natural gas as a source of energy power. For example, the Trinidad and Tobago Electric Corporation uses natural gas to generate electricity and the cement factory employs it as a fuel. Use of natural gas as a raw material by chemical industries began in 1959. Table 17 shows the production and utilization of natural gas for the period 1954-60.

highly desirable
have been of great
importance
in the
country's
economy.

Table 17: UTILIZATION OF NATURAL GAS
(In million cubic feet)

Use	1954	1956	1958	1960
TOTAL	38,394	51,742	79,191	97,652
Gas used as fuel.....	18,179	19,319	23,403	27,042
Gas reinjected into formation.....	3,227	7,406	11,187	10,777
Gas not collected.....	6,595	8,338	16,375	18,313
Gas vented as surplus ¹ ..	7,171	14,349	23,862	37,545
Losses unaccounted for ²	3,222	2,330	4,364	3,975

1/ This represents the difference the difference between average and peak demand for fuel on the oilfields and occurs at widely scattered and varying points. It is generally not possible to utilise.

2/ This is mostly produced by atmospheric pressure at well heads and would be uneconomic to collect.

Sources: Government of Trinidad and Tobago, Central Statistical Office, Economic Survey of Trinidad & Tobago 1953 - 1958, p. 36; Quarterly Economic Report July - September 1961, p. 20.

The contribution of asphalt to this sector is negligible. In contrast with the expanding oil industry, the production of asphalt has been fairly stagnant. Production in 1960 remained almost at its 1951 level. The demand for natural asphalt as a road material is declining, mainly because petroleum bitumens are a good substitute. Consequently, exports are declining; but domestic consumption of the product is increasing, as shown in Table 18.

The petroleum and asphalt sector, including mining and refining, increased its output, measured in current prices, from \$93.5 million in 1951 to \$263.4 million in 1960. The annual rates of growth were quite impressive except for the years 1953-54 and 1957-58 when the sector registered negative growth rates.

The manufacturing sector. The principal industrial products are based on the agricultural crops grown in the country. For example, just as sugar-cane is the chief agricultural crop, so too is the manufacture of sugar and its by-products among the chief outputs of the manufacturing sector. The manufacture of edible and raw oil, laundry and toilet soap, margarine, butter and lard substitutes have as their basic input, copra - the dried nut of the coconut palm. Grapefruit and orange juices depend on the output of the citrus crops. Thus, the agricultural sector and the manufacturing sector are closely linked and changes in one sector

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Table 18: PRODUCTION AND DISPOSITION OF ASPHALT
(in thousand tons)

Item	1954	1956	1958	1960
TOTAL PRODUCTION	142.1	141.1	133.0	154.2
Asphalt removed for export	95.4	85.7	76.5	83.4
Domestic consumption	46.7	55.4	56.6	70.8
Export of dried asphalt	51.0	45.8	46.4	55.8
Export of asphalt cement	22.6	13.5	14.6	7.6
Value of exports of asphalt and its products...\$mn.	3.8	2.5	1.9	n.a.
Export value as percentage of total exports	1.5	0.8	0.5	n.a.

Sources: Government of Trinidad and Tobago, Central Statistical Office, Annual Statistical Digest 1960, p. 165; Economic Survey of Trinidad & Tobago 1953 - 1958, p. 10.

will have repercussions in the other.

There are other industries whose success depends on the output of the other major sector - oil and asphalt - from the point of view that it provides a cheap source of fuel supply. There are also industries not based on the raw materials provided by domestic agricultural produce. These are mainly textiles, paint, cement, gin, beer and stout, which enjoy "pioneer status" and whose development may be said to be induced by the Aid to Pioneer Industries Ordinance of 1950, along with other favourable conditions which exist in the economy. These pioneer industries are relatively young, and while they are growing, their contribution to the Gross Domestic Product is not yet as great as the traditional sugar, rum and molasses trio. Their existence, however, introduces a certain amount of diversification in the output of the country and it is hoped that they will eventually be large enough to act as a buffer to the instability which is associated with industries rooted in agricultural raw materials. Fortunately, the manufacture of sugar does not face the problem of unstable income because, under the Commonwealth Sugar Agreement, it is assured a market for a given amount of its produce at a price considered to be "reasonably remunerative to efficient producers." This price, for each year after 1952, has been calculated on the basis of a formula designed to reflect changes in the level

of wages and other cost factors in exporting territories since a base year, originally 1949-50, subsequently revised to 1953-54 and later to 1957-58.⁴⁷ As long as the agreement remains effective, (the present agreement will expire in 1970), the industry is safe. However, the fact that expansion of the industry will be limited by a quota, introduces the problem of finding employment for the labour that the industry would otherwise have employed.

Manufactures based on the copra product cater largely for the domestic market. Some exports go to markets in the Caribbean area, but the industry is well protected under the annually negotiated Oils and Fats Agreement of the British West Indian territories.⁴⁸

The production of orange and grapefruit juices is sheltered under a Price Assistance Scheme (1955) and a contract which the United Kingdom Ministry of Food had made with the British Caribbean to purchase annually, from 1950, up to five thousand tons of orange concentrate for the Children's Welfare Scheme, for a period of ten years.⁴⁹

⁴⁷Commonwealth Economic Committee, Plantation Crops, p. 174.

⁴⁸Economic Survey 1958, p. 47 reports: "The Oil and Fats Agreements provide for, inter alia, central supervision of the distribution of all copra and derived products produced in the area; fixing annually the export price for products sold by one territory to another within the area; and control of the trade in copra and derived products between participating territories and the outside world when such cases arise."

It appears that as long as the country can keep renewing commodity agreements, these agriculturally based industries can survive. But all these agreements are tinged with some sort of protective policy or concessions made by the principal trading partner, viz. the United Kingdom; and in the light of the changes which the United Kingdom is attempting to make in her foreign policy, it would be well for these industries to try to improve their efficiency while protection lasts, so that eventually, they will be able to hold their own in a competitive world.

There are several other industries which operate on a small scale for the domestic market. Expansion in some of these industries will depend on their ability to gain markets abroad - that is, a lot depends on their efficiency. Most of these industries enjoy "pioneer" status and thus, are recipients of some form of subsidy and protection. This group of industries is quite important to the sector and to the economy as a whole in that (1) they are providing the diversification that the economy and the sector needs; (2) they are outlets for the excess labour force which cannot be used on the land, and (3) they are creating incomes which

will help to support the other sectors of the economy, especially those which cater for the domestic market.

From the enactment of the pioneer legislation in 1950 to 1960, seventy companies with an estimated investment of \$68.6 million were established. These companies employed a little over three thousand persons. The investment and employment figures indicate that these industries are truly small-scale. Perhaps, expansion of the already existing industries will be more advantageous to the economy - through economies of scale - than the establishment of more of these small industries. With expansion and lower costs, the protective element can be removed, with benefit to the community as a whole. On the other hand, an infinite number of small-scale industries requiring subsidies and protection will create a heavy tax burden for the whole economy.

The contribution of the manufacturing sector to gross domestic product is shown in Table 19; and the output, by volume, of a few manufacturing industries is contained in Table 19a. The sector's output, measured in current prices, more than doubled over the period 1951-60, and one may surmise that this growth was due, not so much to expansion in the old industries (e.g. sugar and rum), but to the establishment of new ones.

Table 19: CONTRIBUTION OF THE MANUFACTURING SECTOR
TO GROSS DOMESTIC PRODUCT
(In millions of dollars)

Item	1951	1953	1955	1957	1959
GROSS DOMESTIC PRODUCT ¹	312.1	383.5	473.2	654.7	793.1
TOTAL MANUFACTURING.....	43.4	50.8	59.4	77.9	103.1
Sugar ²	14.3	18.3	22.4	25.8	31.0
Alcoholic beverages.....	8.1	5.4	4.9	7.1	9.2
Tobacco and cigarettes.....	1.4	1.8	1.9	2.6	2.9
Shoes and other footwear, other clothing, inc. textiles.....	8.2	10.9	11.0	13.5	18.7
Furniture and fixtures and other wooden articles.....	2.1	2.2	2.3	4.8	6.3
Printing and paper products...	1.7	2.3	2.8	3.7	5.0
Leather and leather products excluding footwear.....	0.2	0.3	0.3	0.4	0.6
Chemical products.....	1.3	1.8	2.0	3.5	5.0
Bricks, clay and concrete products and other non- metallic mineral products....	1.2	1.4	4.7	6.1	8.2
Repair and manufacture of metal products other than machinery.....	1.2	1.4	1.7	2.2	3.0
Repair and manufacture of motor vehicles and other transport equipment.....	2.1	3.3	3.5	5.0	7.2
Misc. manufacture and repair..	1.6	1.7	1.9	3.2	6.0
<u>1/</u> At factor cost.	<u>2/</u> Includes other sugar manufactures.				

Source: Government of Trinidad and Tobago, Central Statistical Office, The National Income of Trinidad and Tobago 1951-1961, p. 10.

Table 19a: (continued) OUTPUT OF SELECTED INDUSTRIAL PRODUCTS

(in millions)

Item	Unit	1951	1953	1955	1957	1959	1960
Sugar ¹	tons	.141	.153	.193	.168	.181	.218
Rum	Pr. gallons	2.883	1.392	1.166	1.365	2.236	2.993
Molasses.....	"	5.989	7.368	8.483	7.085	10.916	14.286
Beer and stout....	liquid gallons	.855	.749	.706	.821	1.612	2.232
Cement	tons	---	---	.121	.131	.177	.174
Edible oil	gallons	1.661	1.630	1.873	2.011	1.861	1.798
Laundry soap.....	pounds	10.667	10.399	9.246	8.716	8.047	9.585
Matches.....	gross small boxes	.324	.351	.276	.246	.360	.348

Table 19a: (continued) OUTPUT OF SELECTED INDUSTRIAL PRODUCTS

(in millions)

Item	Unit	1951	1953	1955	1957	1959	1960
Raw oil.....	gallons	2.579	2.459	2.604	2.801	2.347	1.901
Margarine	pounds	.288	1.195	2.474	2.625	3.093	3.250
Butter substitute.....	"	.430	.375	.284	.327	.269	.282
Lard substitute.....	"	---	1.559	1.836	2.235	2.146	2.053
Toilet soap	"	---	---	.008	.036	.052	.280
Cigarettes	"	1.303	1.425	1.627	1.728	1.861	1.854
Other manufactured tobacco	"	.045	.037	.037	.032	.022	.024

¹Includes refined sugar.

Source: Government of Trinidad and Tobago, Central Statistical Office, The National Income of Trinidad and Tobago 1951 to 1961, (Trinidad - M. 16/62) p. 29.

The building and construction sector. The construction sector contributes the least, measured in dollars, to the gross domestic product of the country. The output of this sector for the years 1951 to 1960 was as follows:⁵⁰

Year	Output \$mn.	Year	Output \$mn.
1951	8.4	1956	17.0
1952	9.3	1957	20.7
1953	8.1	1958	32.3
1954	10.0	1959	36.3
1955	14.1	1960	40.6

It should be observed, that from the low figure of \$8.4 million in 1951, output increased almost five-fold during the ten year period. This sector grew faster than the other sectors. Because of the nature of the industry, growth in construction can be used as an index of the growth in the economy. Upswings in construction usually follow upswings in the rest of the economy. However, in the case of Trinidad and Tobago, much of the construction was the indirect result of government incentives. For instance, the development of new industries required the building of factories. Another factor which could have encouraged ex-

⁵⁰

Calculated from The National Income of Trinidad and Tobago 1951 to 1961, p. 2.

pansion in this sector was the announcement of the island as the capital site for the West Indian Federation.

Gross domestic product. The period 1951-60 was one of general improvement for the country. Real gross domestic output (1960 prices)⁵¹ increased by approximately 97.1 per cent. This expansion in real output occurred in all sectors of the economy, with the construction sector making the most impressive strides - an increase of 272.5 per cent. Real output in the petroleum and asphalt sector increased by 116.4 per cent and in the manufacturing sector by 103.4 per cent. Agriculture registered the lowest increase - 48.9 per cent.

Although the agricultural sector had the lowest growth rate, its contribution to total real output was the second largest after petroleum, until in 1959 and 1960 when its contribution equalled that of the manufacturing sector. That is, the proportion of the agricultural sector to the total real output declined while the manufacturing sector's share remained fairly constant. The petroleum and asphalt sector's contribution to total output increased throughout the period.

51

Calculations of the gross domestic product and its components, at constant prices, have been made by Mr. Frank Rampersad, "Growth and Structural Change in the Economy of Trinidad and Tobago 1951-1961" Research Papers, (Central Statistical Office, December 1963) p.p 82-176.

The changing pattern of the sectoral growth in relation to total output, shown in Chart I, is a reflection of the changes which the economy experienced during the decade.

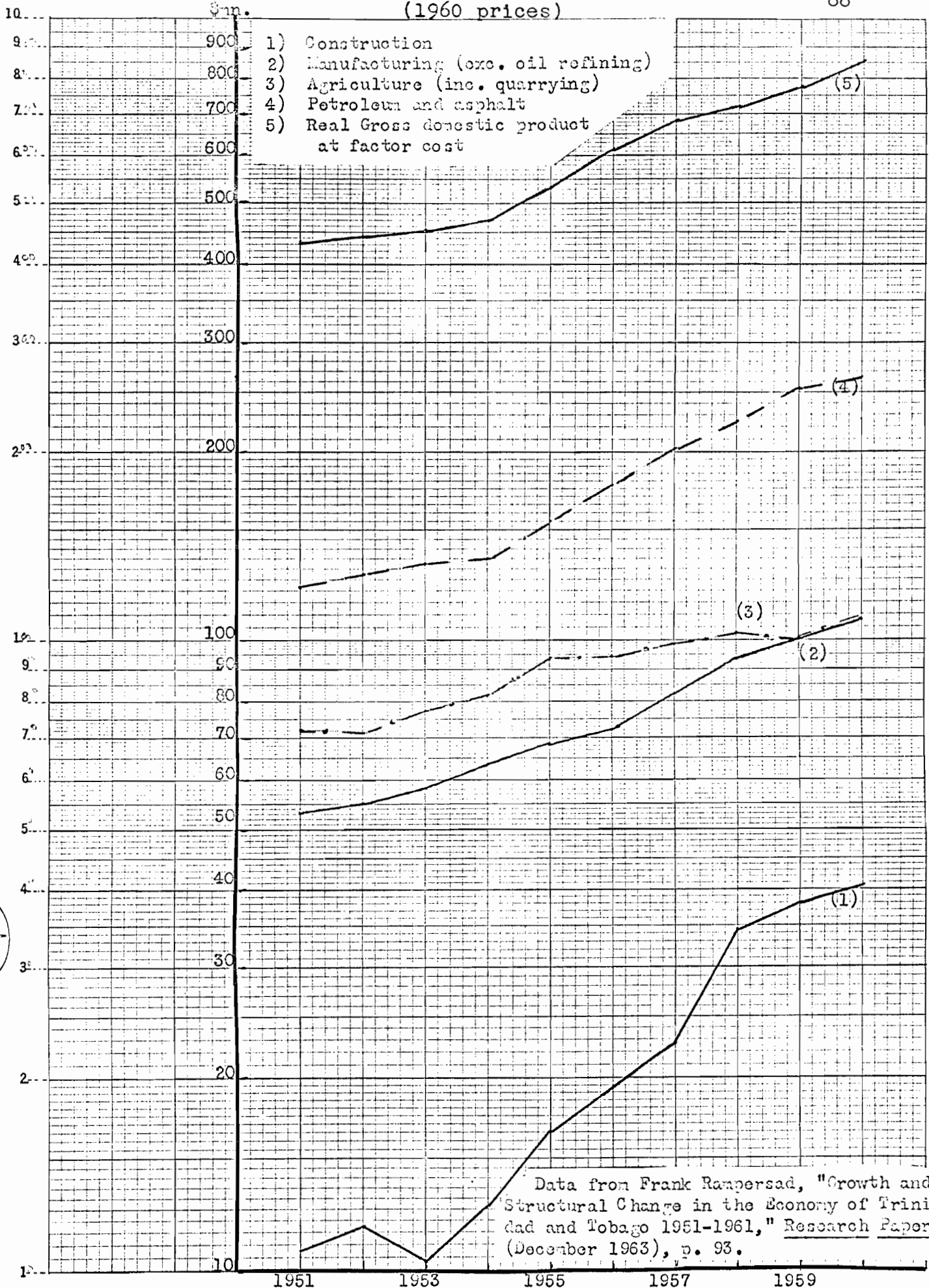
Population and employment. With expansion in output during this period, population increased at a rate higher than during the years 1931-46. The average annual rate of population growth for 1951-60 was roughly 3.0 per cent, compared with a rate of 2.1 per cent during the intercensal period 1931-46. Up to 1957, the high rate of population growth could be attributed mainly to natural increase (i.e. excess of births over deaths), but later, the increase in population growth was greatly influenced by overseas migration, especially in 1959 when the increase in population due to net immigration was roughly 21.8 per cent of natural increase.

In spite of this high rate of population increase, the average annual rate of growth of total real output was 7.9 per cent and of real national income per capita, 3.8 per cent. Thus, productivity outstripped population growth - a feature which many underdeveloped countries have difficulty in acquiring.

It is without doubt that population growth is a

Chart I: SECTORAL GROWTH
(1960 prices)

- 1) Construction
- 2) Manufacturing (exc. oil refining)
- 3) Agriculture (inc. quarrying)
- 4) Petroleum and asphalt
- 5) Real Gross domestic product at factor cost



Data from Frank Rampersad, "Growth and Structural Change in the Economy of Trinidad and Tobago 1951-1961," *Research Papers* (December 1963), p. 93.

factor which influences the level of employment. Unfortunately, the level of unemployment cannot be measured accurately since the data at the different census periods are not comparable. Prior to 1955 the labour force was measured in terms of those gainfully occupied persons ten years old and over. The concept has now been changed to mean those persons fifteen years and over, who are employed and also those who are seeking and available for work. By adjusting the 1946 data in terms of the more recent definition, the labour force showed an increase of 51.6 thousand between 1946 and 1955. However, between 1955 and 1957, the increase was only 1,000. Nothing much can be said of the changes in the level of unemployment, except that in 1955, the number unemployed was 17,300 and in April 1957, at the peak of seasonal employment, the number unemployed was 14,500.⁵²

With regard to the occupational structure, data available for the years 1955, 1956 and 1957 show that the proportion of the labour force engaged in agriculture (including forestry, fishing and hunting) is declining, although it remains the largest of the industrial groups. Employment in commerce has also declined over the three-year period 1955-57, while in the other industries - viz. manufacturing, transportation, construction and services - it has increased.

⁵²

Annual Statistical Digest 1960, p. 49.

Distribution of income. The share of the national income paid out in wages and other payments to employees increased by 149.8 per cent over the period 1951-60. A rough estimate of real wages,⁵³ however, showed an increase of 78.9 per cent. Wages and salaries in agriculture lagged behind wages and salaries in the other sectors. In 1957, the agricultural sector contained the lowest proportion of workers earning \$600 and more per annum. The percentage of workers in the income range of \$600 and over, for the year 1957 was divided as follows:⁵⁴

Industry	Male	Female
All industries.....	63.7	26.0
Agriculture, forestry, fishing and hunting.....	26.3	4.7
Mining and quarrying.....	94.6
Manufacturing.....	70.4	25.9
Construction.....	81.7	54.0
Commerce.....	68.3	49.3
Transport, storage and communications.....	86.2
Services.....	80.7	28.7

The number of women in mining and in transport and communications was too small to permit satisfactory classification

53

Real wages were estimated by deflating current wages with the index of private consumption expenditure.

54

Jack Harewood, "Employment in Trinidad and Tobago," Research Papers, (Central Statistical Office, Trinidad, Dec.1963) p.75

by income. It is reported that the average earnings of the lowest paid unskilled workers in large non-agricultural firms employing ten persons or more, was \$632 per year in Services including Commerce; and \$641 per year in Manufacturing of wearing apparel. In no other industry group was it less than \$700 per annum; in the oil industry and in Transport and Communications (including Port Services), the lowest paid workers received well over \$1,200 per annum.⁵⁵ In the Agricultural sector, except for administrative, technical and clerical workers whose average incomes were \$1,226 per annum, the average yearly earnings were \$480.

One important aspect of the economy which must not be overlooked, however, is the large discrepancy between the gross national product and the gross domestic product. This gap is inevitable since the industries contributing the most to total output are foreign-owned. For instance, the oil and sugar industries are foreign-owned and more than 80 per cent of the investment in the pioneer industries established between 1950 and 1959 came from abroad.⁵⁶ With increases in the domestic product, the factor income payments to the rest of the world also increased. So far,

⁵⁵ Economic Survey 1958, p. 111

⁵⁶ Government of Trinidad and Tobago, Draft Second Five-Year Plan 1964-1968, (National Planning Commission 1963) p. 219.

this large share of output which accrues to foreign factors does not present any difficulty to the country's balance of payments, since it is observed that in most cases these incomes are ploughed back into their respective companies. This, however, can become a major problem in later years if the investment policies of these companies change. Table 20 shows the comparative rates of growth of gross domestic and gross national product. Over the years, both series have grown at almost the same average rate, so that the share of foreign factors of production has been relatively constant.

One can conclude that the period 1951-60 was one of widespread growth - with all sectors growing at different rates. This expansion in output of the various sectors was relatively slow during the first half of the decade but accelerated after 1955. Agriculture was the only sector whose domestic product did not double over the period. However, agriculture became more diversified and the production of food crops for domestic consumption increased in value. There appeared to be a close relation between the growth in agriculture and the growth in manufacturing between 1951 and 1956, but with the introduction of new industries which were not rooted in agricultural raw materials, the

Table 20: COMPARATIVE RATES OF GROWTH

Year	Current Gross Domestic Product		Real* Gross Domestic Product		Real* Gross National Product	
	\$mn.	Per cent increase	\$mn.	Per cent increase	\$mn.	Per cent increase
1951	312.1	----	434.5	----	415.3	----
1952	341.1	9.3	447.7	3.0	430.6	3.7
1953	383.5	12.4	453.5	1.3	449.7	4.4
1954	408.3	6.5	470.7	3.6	489.5	8.9
1955	473.2	15.9	534.6	13.7	534.5	9.2
1956	552.2	16.7	617.1	15.4	566.0	5.9
1957	654.7	18.6	688.1	11.5	633.4	11.9
1958	714.2	9.1	722.1	4.9	677.5	7.0
1959	793.1	11.0	777.4	7.2	708.3	4.5
1960	856.6	8.0	856.6	10.6	761.4	7.5
Average annual rate of growth		11.9		7.9		7.0

*1960 prices.

Source: Frank B. Rampersad, "Growth and Structural Change in the Economy of Trinidad and Tobago 1951 - 1961," Research Papers, Number 1, December 1963, p. 165.

expansion in manufacturing outstripped that in agriculture. Construction, whose contribution to the gross domestic product was \$8.4 million in 1951 more than quadrupled during the ten year period. It was the oil sector, however, which carried the most weight in the general expansion of the economy; but the overall growth was achieved, not only through the expansion in this sector, but also through the co-operation of a national policy designed to attract capital in other sectors and itself contributing to investment in capital scarce areas. Total government expenditure on development during the period 1958-62 amounted to \$218.5 million.

I cannot see that this chapter contributes to the Thesis. The subject of the Thesis is the impact of international trade on the development of the two islands. Whether we have industries examined, whether export or domestic, we have sector analysis (crude and not directed to international trade), we have the growth of national income, the distribution of the rewards. If the other chapters were not more relevant, I'd fail this Thesis on the basis of this chapter.

CHAPTER V

PATTERNS OF TRADE

Trinidad and Tobago experienced an overall favourable balance of visible trade during the period 1951-60. This is in contrast with the preceding nine-year period 1942-50, when the general pattern was one of adverse trade balances for every year except 1948 and 1950. (Table 21). The trade pattern for 1951-60, however, corresponds with the pre-war pattern, in that there was a surplus of visible trade in both periods. The value of merchandise exports during 1951-60 increased at an annual average rate of 9.7 per cent, while imports increased at a rate of 9.5 per cent.

Ratio of exports to gross domestic product. The rate of increase of the gross domestic product, at current prices, exceeded the rate of increase in the value of exports. Consequently, the ratio of exports to gross domestic product at market prices declined from 72.8 per cent in 1951 to 60.7 per cent in 1960. However, when this ratio is measured in constant (1960) prices, instead of a decline,

Table 21: MERCHANDISE TRADE BALANCE

(in millions of dollars)

Note: The figures for 1942-50 have been adjusted to secure comparability with those for 1951 onwards: in respect of exports, to include estimates of Parcel Post and to exclude estimated re-exports from Customs Warehouses and also re-exports of cinematograph films which are rented for exhibition; and in respect of imports, to exclude imports into Customs Warehouses and imports of cinematograph films on lease for exhibition. The figures for 1951 onwards have also been adjusted to exclude non-commercial imports of personal baggage of immigrants and emigrants.

Year	Export	Import	Balance	Year	Export	Import	Balance
				1951	214.5	218.6	- 4.1
1942	46.2	53.8	- 7.6	1952	229.8	243.7	-13.9
1943	40.8	59.1	-18.3	1953	256.5	236.0	+20.5
1944	53.1	68.8	-15.7	1954	261.6	249.5	+12.1
1945	58.4	64.5	- 6.1	1955	285.3	294.4	- 9.1
1946	60.8	75.0	-14.2	1956	330.2	301.5	+28.7
1947	86.1	118.4	-32.3	1957	392.6	355.9	+36.7
1948	131.9	131.0	+ 0.9	1958	424.9	412.0	+12.9
1949	137.6	153.8	-16.2	1959	449.1	448.1	+ 1.0
1950	176.3	168.4	+ 7.9	1960	491.3	504.0	-12.7
Balance 1942-50 =-\$101.6				Balance 1951-60 =+\$72.1			

Source: Government of Trinidad and Tobago, Central Statistical Office, Annual Statistical Digest 1960, p. 193.

there is an increase from 57.5 per cent to 60.7 per cent. One might have construed the decrease in the ratio of exports to gross domestic product at current prices as the results of the development of the construction sector and the increased production of goods for the domestic market; but with an increase in the ratio at constant prices, one can only say that the country is getting more dependent on foreign trade and that the developing industries are finding markets abroad. The contradictory trends of the two measures can be interpreted as the result of increasing prices of domestic output and the declining prices of exports.

Composition of trade. There were no marked changes in the composition of trade. Petroleum products and sugar (excluding by-products) continued to dominate exports, accounting for a yearly average of almost 90 per cent of domestic exports. The remaining ten per cent comprised mainly the agricultural products, cocoa, coffee, citrus and the industrial products listed in Table 19a on pages 83 and 84. These industrial products, however, were more significant as supplies for domestic consumption in contrast with the chief exports, oil and sugar, where the domestic market consumed only a small proportion of total production.

Imports were not as concentrated; while mineral fuels* formed the largest share - an average of approximately twenty per cent - food, manufactured goods and machinery also held significant shares in the total imports. Expenditure on imports of food maintained an average of 13 per cent of the National Income.

Direction of trade. The United Kingdom remained, as it had always been, the chief trading partner of the country. However, trade with the United Kingdom had not kept pace with the country's expanding total trade, and so its proportion of total trade is gradually declining. The position of Venezuela as a trading partner has surpassed that of Canada and the United States, mainly because of the large quantities of crude petroleum imported from that country. But in terms of a market for domestic exports, Venezuela is not very important. The top six markets for the country's exports in 1958 were, in descending order of importance, the United Kingdom, the United States, Brazil, Curacao, Canada and Sweden. Since 1956 the United States has been buying more from the country. Official records attribute some of the increased United States' purchases to the fact that in 1957 one of the large oil refineries changed

*

Standard International Trade Classification.

hands from British to American ownership. The chief suppliers were the United Kingdom, the United States and Canada, supplying the bulk of the imported food, machinery, manufactured goods and chemicals. Venezuela, the Middle East (Saudi Arabia), Colombia and Aruba were the main suppliers of crude oil.

Trade with the British Caribbean is very small relative to the country's trade with the rest of the world. British Guiana is important as a supplier of rice, and the other islands of the Caribbean supply mainly livestock and fresh fruit and vegetables. Petroleum is naturally the largest item of export. The islands of the Eastern Caribbean have always been viewed as potential markets for the new manufactured goods which the country is now producing; however, the low level of incomes together with their tariff structure leave much doubt as to the extent to which the islands can become major markets for the country's produce. Table 22 gives the values of trade with selected countries.

Terms of trade. The commodity terms of trade, calculated from the base year 1951, deteriorated in 1952, then improved until 1955, when a rise in the average price index of imports and a decline in the corresponding export index, made the terms of trade less favourable. Since 1957, the average values of both imports and exports have declined,

Table 22:

DIRECTION OF TRADE 1953 - 1960

(in millions of dollars)

Country		1953	1954	1955	1956	1957	1958	1959	1960
All countries	- Imports	236.3	249.8	294.7	301.8	356.2	412.5	448.6	504.6
	Exports	257.0	262.3	285.9	330.5	393.0	425.4	449.5	491.8
	Total	493.3	512.1	580.6	632.3	749.2	837.9	898.1	996.4
United Kingdom	Imports	89.3	94.6	112.3	104.6	129.0	134.9	146.3	150.2
	Exports	102.5	103.3	112.2	116.0	128.6	110.5	143.3	152.8
	Total	191.8	197.9	224.5	220.6	257.6	245.4	289.6	303.0
Canada	- Imports	19.1	23.0	26.0	26.9	24.9	25.2	27.8	28.1
	Exports	13.8	15.6	16.8	17.5	11.9	15.4	23.4	24.9
	Total	32.9	38.6	42.8	44.4	36.8	40.6	51.2	53.0
United States	- Imports	19.2	21.4	27.8	36.1	50.4	57.4	58.5	69.5
	Exports	12.3	12.8	8.4	18.6	28.5	83.5	67.6	96.1
	Total	31.5	34.2	36.2	54.7	78.9	140.9	126.1	165.6
Venezuela	- Imports	58.3	62.5	75.7	71.3	77.1	79.2	93.1	111.5
	Exports	0.6	0.4	1.0	0.7	0.5	1.7	2.0	1.8
	Total	58.9	62.9	76.7	72.0	77.6	80.9	95.1	113.3
British Guiana-	Imports	5.7	4.4	5.5	4.7	4.9	3.6	8.1	8.2
	Exports	4.5	5.7	7.0	8.1	9.8	9.2	8.7	11.8
	Total	10.2	10.1	12.5	12.8	14.7	12.8	16.8	20.0
West Indies	- Imports	3.2	3.5	3.8	3.4	3.3	3.7	3.4	3.9
	Exports	10.3	10.8	15.0	16.3	17.5	18.1	21.2	26.0
	Total	13.5	14.3	18.8	19.7	20.8	21.8	24.6	29.9

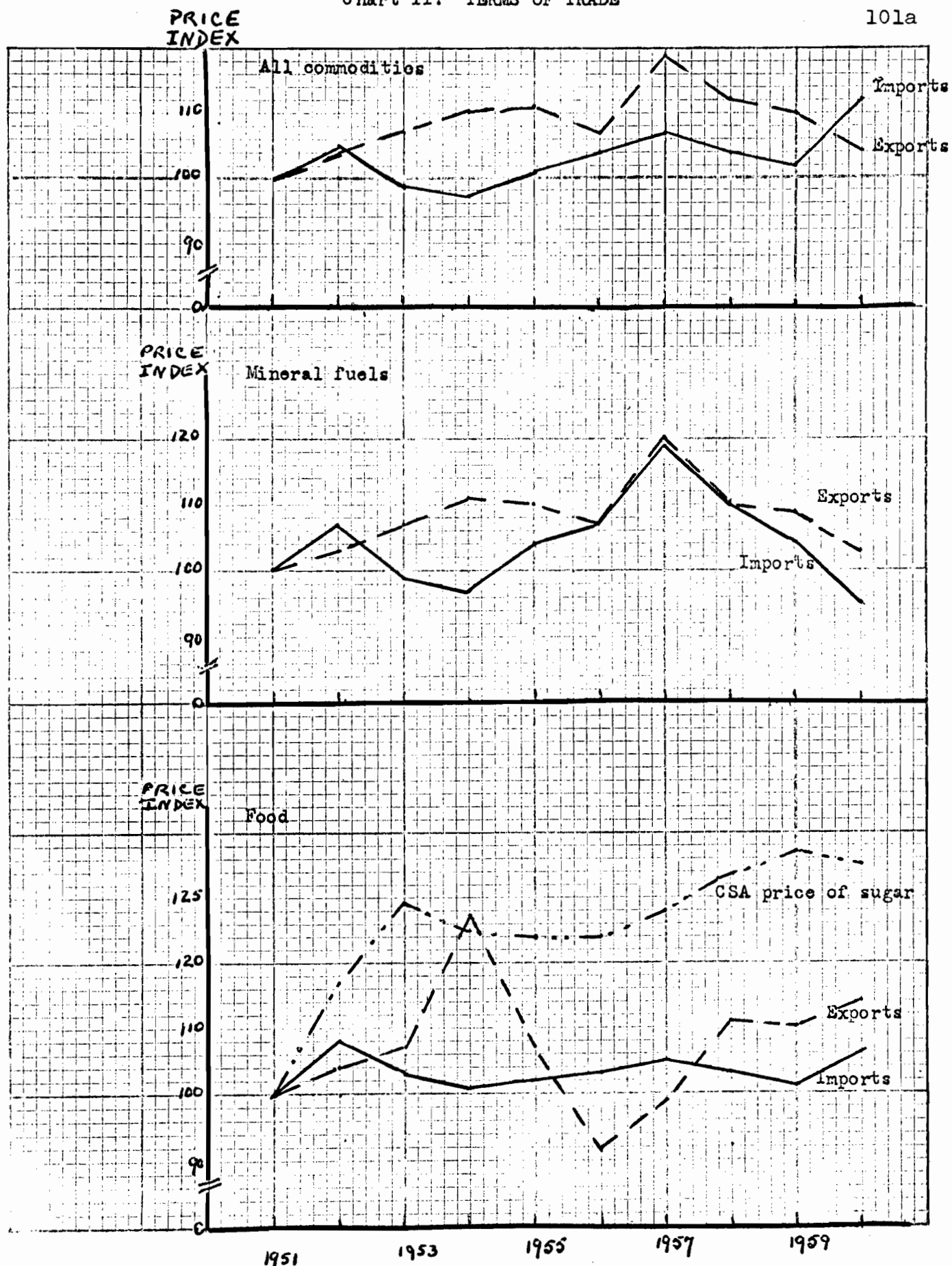
Source: Government of Trinidad and Tobago, Central Statistical Office, Annual Statistical Digest 1960, pp. 197-200

and in 1960 there was an upturn in the index of import prices while export prices continued to decline. The changes in the terms of trade over the period 1951-60 have been influenced greatly by the price changes in mineral fuels, and to a lesser extent, by the price changes in food. In fact, the pattern of the general terms of trade corresponds closely to the terms of trade for mineral fuels. (See Chart II). The average values of exports of food have fluctuated widely over the period. The bulk of the food exports of the country consists of sugar, cocoa, coffee. It is significant to note here, that although the exports of sugar dominate the total food exports (more than fifty per cent), changes in the prices of cocoa and coffee seem to influence greatly the value of food. The export price of sugar,⁵⁷ after having increased considerably between 1951 and 1953, declined slightly until 1956 when prices again increased annually. The export price index of food seems to relate more closely to fluctuations in the prices of the other food products - cocoa and coffee - which reached a peak in 1954 and then dropped sharply. The chief items imported under food are cereals, dairy products and meat, and the average import price index of food in general has been fairly stable. In general, the country tends to maintain favourable terms of trade in its key commodities.

⁵⁷The price under the Commonwealth Sugar Agreement.

Chart II: TERMS OF TRADE

101a



Source: Government of Trinidad and Tobago, Central Statistical Office, Annual Statistical Digest 1960, p. 194.

Balance of payments. In an open economy dependent on foreign capital there may be a divergence between the domestic output and the national income. This fact was observed in the preceding chapter, noting the large discrepancy between the gross national product and the gross domestic product, brought about by the fact that the major industries are foreign-owned. This difference between the national and domestic product appears in the country's balance on current account as "net factor income payments," that is the difference between receipts and payments of profits, rents, dividends, interest, wages and salaries to foreigners. Because of the magnitude of this item, the country, in spite of its favourable balance in commodity trade, has suffered yearly deficits in its balance on current account. (See Table 23). In the analysis of the trade pattern for the pre-war period, this deficit was assumed. The existence of a deficit during the 1951-60 period lends plausibility to the assumptions made with regard to pre-war trade.

The deficit in the country's balance on current account for the ten-year period 1951-60 was \$440.1 million. On the other hand, the balance on goods and services, omitting net factor income payments, shows a surplus of \$188.8 million. But when the balance on goods and services only is measured in real terms (1960 prices), there is a deficit of

Table 23: INTERNATIONAL PAYMENTS - CURRENT ACCOUNT 1951 - 1960
(in millions of dollars)

Item	1951	1952	1953	1954	1955
Credit					
Export of goods.....	216.7	231.1	257.6	262.9	286.5
Export of services.....	24.8	26.6	28.5	29.8	32.4
Factor income receipts.....	5.8	6.2	6.7	8.2	8.2
Remittances received - Private....	0.4	0.7	0.7	0.8	1.4
Public.....	1.3	0.8	1.3	1.0	0.9
Total receipts.....	<u>249.0</u>	<u>265.4</u>	<u>294.8</u>	<u>302.7</u>	<u>329.4</u>
Debit					
Import of goods.....	219.9	244.3	235.9	249.7	295.4
Import of services.....	16.7	18.9	21.3	23.8	22.9
Factor income payments.....	33.2	28.0	39.8	36.1	43.0
Remittances paid - Private.....	0.6	0.5	0.5	0.6	1.0
Public.....	0.5	0.9	1.0	1.1	1.8
Total payments.....	<u>270.9</u>	<u>292.6</u>	<u>298.5</u>	<u>311.3</u>	<u>364.1</u>
Balance on current account.....	-21.9	-27.2	- 3.7	- 8.6	-34.7

Table 23: (continued) INTERNATIONAL PAYMENTS - CURRENT ACCOUNT 1951 - 1960

(in millions of dollars)

Item	1956	1957	1958	1959	1960
Credit					
Export of goods.....	331.2	394.6	427.1	451.3	490.4
Export of services.....	39.4	50.4	54.9	55.2	61.3
Factor income receipts.....	8.2	9.2	9.8	10.9	11.6
Remittances received - Private....	1.3	1.7	1.7	2.0	2.9
Public.....	1.3	1.1	0.4	1.8	1.9
Total receipts.....	<u>381.4</u>	<u>457.0</u>	<u>493.9</u>	<u>521.2</u>	<u>568.1</u>
Debit					
Import of goods.....	302.6	357.7	411.7	447.1	509.3
Import of services.....	25.6	33.3	34.4	40.5	52.9
Factor income payments.....	76.9	117.8	99.0	128.5	106.8
Remittances paid - Private.....	0.7	1.0	0.8	1.0	1.1
Public.....	2.2	1.4	4.2	3.8	5.3
Total payments.....	<u>408.0</u>	<u>511.2</u>	<u>550.1</u>	<u>620.9</u>	<u>675.4</u>
Balance on current account.....	-26.6	-54.2	-56.2	-99.7	-107.3

Source: Government of Trinidad and Tobago, Central Statistical Office, The National Income of Trinidad and Tobago 1951 to 1961, (Trinidad - M. 16/62) p.

\$106.3 million. This shows that the country received more for her exports than she paid for her imports - that is, the terms of trade were in her favour.

The deficits in the country's account were offset by the large inflows to foreign owned business (mainly re-investment of undistributed profits) and other capital inflows for the purchase of real estate etc. This present pattern of the country's balance of payments presents a sort of vicious circle where a large amount of foreign capital offsets a deficit in the current account which is due mainly to the large amount of foreign investment. The fact must not be overlooked, however, that these foreign investments contribute a great deal to the growth in output of the country, since they are concentrated in the industries that contribute the most to domestic output. It is fortunate too, that these industries are export biased and therefore earn foreign exchange. Oil and sugar together contribute an average of ninety per cent to total domestic exports.

The pattern of behaviour in the balance of payments is one which is not unusual to open economies. The situation accentuates the extent of the country's vulnerability to changes over which she has no control. Many countries, in order to avoid this problem, have adopted the policy of

currency control or have opposed private foreign investment. Some nationalistic countries have gone as far as nationalizing foreign concerns, and of late the "take-over" tax on foreign investors seems to be gaining popularity. However, in spite of all the attempts made to overcome the disadvantages of foreign investment, it is a very rare case that a country was able to develop without the aid of foreign capital. Countries rely on foreign capital during their early economic development in order to industrialize at a more rapid pace than would be possible if solely dependent on their own resources. It would appear that the chronic deficit problem faced by countries which rely on foreign investment to launch their development is caused by the fact that many of these countries never seem to realize when they have achieved the ability to finance their own development, or in other words to contribute a greater portion of their output to total investment. One would think that the growth of savings and investment would occur naturally with the growth of total output, but this is not usually the case. The level of savings varies with the distribution of income and with government tax and expenditure policies. If the ratio of national investment to foreign investment could be increased over time, then the proportionate share of output which accrued to foreign factors would decline. Table 24 compares capital inflows

Table 24: FOREIGN AND NATIONAL CAPITAL AND THEIR RELATION TO GROSS CAPITAL FORMATION
(continued)

(in millions of dollars)

Item	1956	1957	1958	1959	1960
1. Gross domestic product	552.2	654.7	714.2	793.1	856.6
2. Gross domestic capital formation.....	125.5	172.5	206.2	249.3	285.8
3. Capital inflows to foreign-owned business..	48.3	100.6	69.6	109.2	97.8
4. National savings (a) Private ¹	35.7	45.0	50.8	44.6	58.0
(b) Government.....	10.5	26.3	37.9	35.3	37.3
5. Capital outflows ²	- 18.5	- 37.2	- 3.5	- 10.9	+11.8
6. Private domestic investment ³	17.2	7.8	47.3	33.7	69.8
7. Line 2 as a percentage of line 1	22.7	26.3	28.9	31.4	33.4
8. Line 3 " " " " " 2	38.5	58.3	33.8	43.8	34.2
9. Line 4a " " " " " 2	28.4	26.1	24.6	17.0	20.3
10. Line 6 " " " " " 2	13.7	4.5	22.9	13.5	24.4

³

This item is private savings minus capital outflows.

Source: Government of Trinidad and Tobago, Central Statistical Office, The National Income of Trinidad and Tobago 1951 to 1960, (Trinidad - M. 16/62) p.

(i.e. foreign investment) with local savings and gross domestic capital formation. Except for the years 1953 and 1954 when private savings exceeded capital inflows, foreign capital has consistently contributed a greater share to the gross domestic capital formation.

Balance of payments and growth. It has been noticed that foreign capital is greater than private national savings. For the financing of domestic investment, the share of foreign capital inflows is even greater. All the capital inflows are for investment in the country. On the other hand, not all the national savings go towards domestic investment. A considerable amount - about an average of 22 per cent of private national savings - leaks out in overseas investment of life insurance companies and overseas balances of local banks. Thus the contribution of local savings to gross domestic capital formation is quite small. (See Table 24). Thus it is foreign and government investments which account for the growth in total investment,⁵⁸ and consequently for the growth in total output. It is the inflow of foreign investment which enables the country to maintain its import surplus without any concurrent drain on its international reserves.

⁵⁸ Depreciation is not accounted for, because it would have to be allocated to all three components - foreign, private domestic and government.

The importance of foreign investment to the development of the economy should not be underestimated, but incentives should also be given to increase the amount of local participation in domestic investment. The fact that part of local savings leaks abroad is proof enough that investment can be increased without any reduction in consumption. It is in this region that attempts can be made to improve the deficit in the country's international payments. This would require a revision of the financial institutions so that there would be a development of local capital markets and less dependence on overseas agents.

*This is a good chapter, relevant to the subject and justifies passing the thesis for degree.
There are still some omissions from the literature.*

CHAPTER VI

CONCLUSION

The high value of total trade, the emphasis on production for export, the concentration of exports on a few items and the large share of foreign capital participating in the economic activity of the country, all emphasize the country's dependence on foreign trade. This dependence on foreign trade is, however, not new - from the time of its colonization, external trade has been an integral part of the country's economy. Thus Trinidad and Tobago can be considered as an old trading country which had contact with the industrializing countries of Western Europe and with pre-industrial America, and which maintained that contact after those countries had attained the position of advanced industrial nations.

Through the trade carried on with the more advanced countries, particularly the United Kingdom, capital was provided to exploit the natural resources of the country. At first the country specialized in the production of sugar,

cocoa and coffee for export. Later, with the discovery of oil, petroleum and its products were added to the list of exports. Partly because of the nature of the two types of exports, partly because of different demand conditions, the earnings of petroleum surpassed those of agricultural products and petroleum became the chief export of the country.

Apart from the prominence of petroleum in the total exports of the country, not much change took place in the trading pattern of the country, even though the total trade grew in value over the years, multiplying tenfold in the last eighteen years. But what effect did this long-standing trade association with the advanced countries of the world have on the economy of the country? Did increased trade have multiplied effects on income, did it put pressure on industry and provide the incentive to innovate and invest and later to industrialize? Mainly because of the lack of statistical data, attention is paid only to the period beginning from 1930. Even from this late date, the data available are not quite adequate, and therefore, the assessment of the economy for the period 1930-50 was made by drawing inferences from the various reports concerning social and economic events which were occurring at that time. From 1930 to the beginning of World War II the country maintained a favourable balance in its visible

trade. There were deficits in 1937 and 1938, but these were outweighed by the previous surpluses. There are no data on its balance of international payments. The leading export industry, petroleum, contributed, as it still does, a great deal to public funds, putting the Government in a sound financial position. The oil and sugar industries also made use of new production techniques in order to keep up with growing exports, and capital was also available for the expansion of these industries. However, there is no evidence of large-scale capital investment or innovation taking place in the other economic activities. The greater proportion of the population depended on agriculture for a livelihood and received very low wages whenever they were employed. The extent of unemployment and the low level of wages gave rise to intermittent disturbances during the period.

With the advent of World War II, changes were inevitable. Large areas were leased to the United States for defence purposes, and consequently a portion of the labour force was employed in the construction of the defence bases. Others were recruited for army service, thus alleviating to some extent the heavy unemployment that previously existed. Expansion of sugar production was encouraged since other sources of British supply were cut

off. The oil industry, however, suffered a setback due to lack of equipment. The rapid growth which the industry had made in the previous period came to a halt and output remained fairly stagnant throughout the war and immediately after. Production of food crops for domestic consumption was developed as a war programme, since the country suffered severe food shortages through the disruption of shipping facilities and in some instances supplies were lost en route to the country. It was during this period that the recommendations of the West India Royal Commission of 1938 were implemented. While the report was not published for fear that it might be used for propaganda purposes, the recommendations for the establishment of a welfare fund, financed from the Imperial Exchequer for a period of twenty years in order to carry out development programmes in the British Caribbean, were followed. Because of the accumulated budgetary surpluses, Trinidad and Tobago did not receive financial assistance from the fund, except in cases where projects, beneficial to the whole area, were located in the country. Thus it was that the local Government, which was the only one in the area in a sound financial position, embarked on expenditure in social overhead capital through road building, harbour improvements, housing schemes, education and health. This participation of the public sector in local development continued after the war, when several

measures to encourage private investment were instituted. Throughout the war and immediately after, total trade fluctuated widely, with a negative change in 1943. The balance of visible trade remained unfavourable until 1948 when there was a small surplus. In 1949 the deficit was \$16 million; since then there has not been so large a deficit. From 1953 the country experienced favourable trade balances, except in 1955 and 1960.

The country made impressive strides during the decade of the fifties, increasing its per capita real national product by 43.7 per cent and its real gross domestic product by 97.1 per cent. This expansion, which began slowly during the first half of the decade, accelerated in the second half and was shared by all sectors of the economy. The inflow of capital into the oil and sugar industries continued, most of it being the reinvestment of profits; while the new attitude of government participation allowed for investment in other agricultural activities through research programmes, aid to small farmers and the establishment of agricultural loan funds. Investment in other manufacturing industries was spurred by the various tax privileges granted to young industries.

The achievements of the economy in the decade of the fifties, specifically from the mid-fifties onwards, stand in contrast with its performance in previous years. Whether this upsurge is the beginning of a new phase in the

country's economic history or whether it is a spurt which will soon die out will depend on several factors. First of all, it has been noticed that the oil industry has been mainly responsible for this growth. Fortunately for the country, the industry is not being "milked" that is, the profits are being plowed back for further investment. This behaviour on the part of the owners is likely to continue as long as world demand for oil remains buoyant. This means that providing nothing occurs in the importing countries to change their trade relations with the territory, profits will be reinvested, the industry will grow, and so will the economy of the country. The upsurge which began in the mid-fifties will then be prolonged. If, on the other hand, the world situation is such that the foreign directors do not deem it desirable to reinvest their earnings in the industry, then the industry and subsequently the economy will decline. The success of the oil industry must also be analysed from the supply side. It was pointed out earlier that the costs of production of Trinidad's oil are higher than those of other oil producing countries. This is because of the geological structure of the island. In addition, oil surveys show that the proved reserves will permit production to continue at its present rate for the next nine years. On the basis of this assessment and because there

have been very few new oil discoveries, the government has predicted that the rate of growth of the industry will decline.⁵⁹ So from the point of view of supply, too much dependence cannot be placed on the industry.

*15 more years?
can "go back"
be justified?*

In order to prevent the economy from succumbing to any setbacks which may occur in the oil industry, greater diversification of production is necessary. An economy cannot be built up on an uncertain and wasting asset; and it is doubtful that the costs of building up new industries would not be outweighed by the probability of lower incomes should the oil industry fail. On the other hand, if new reserves were discovered and the industry kept expanding, the economy could not be worse off by the existing new industries. Rather than incurring any real costs, diversification could only result in adjustments in the economy in that local savings going abroad could be diverted to domestic investment and government expenditure could be reallocated between productive and social activity. There is already evidence of the development of new industries, but this development ought to be more intensive. These new industries will naturally be catering to an export market since the political boundary of the country is too small to provide

⁵⁹ Draft Second Five-Year Plan 1964-1968, p. 58.

a wide enough domestic market. Thus efficiency in the use of resources must be stressed in order that the new industries can meet world competition. In addition, intensive measures should be introduced to channel the domestic savings of the country into these new industries rather than to depend wholly on loans from abroad. The capital accounts show that a large proportion of private local savings leaks abroad through the overseas investments of local banks and insurance companies. This should not occur while opportunities for profitable internal investment exist. Local savings should be channelled into those areas where capital is scarce rather than being allowed to go overseas to capital-abundant countries.

Secondly, the chronic deficit on current account, which has not yet become a problem, may soon be a factor influencing the country's economic future. Greater participation of domestic capital in the economic activity of the country will help to reduce the proportion of output going abroad as payments to factor incomes. That the country can contribute more towards domestic investment, is indicated by the capital outflows of the private sector.

Although emphasis has been placed only on the

diversification of industry and increased domestic private investment, the importance of the public sector must not be minimized. The expenditure on education, health, communications and public utilities is essential in inducing the private sector to engage in productive activity at home. Government expenditure in building up the infra-structure and private expenditure in productive activity must reinforce each other to ensure sustained economic growth. It is this feature of the economy - Government spending on development - which began during the War on the recommendation of the West India Royal Commission, which distinguishes the post-war economy from the pre-war economy. This aspect of government cooperation or lack of it, may throw some light on the question why many countries fail to develop even though they have had long-standing trade relations with the advanced industrial countries.

How does the development of Trinidad and Tobago relate to the controversial theories of trade and development? One might answer that the territory did not gain much from international specialization, considering the present level of the economy in relation to the number of years it has been trading with advanced countries. But on the other hand, would the country have been better off had it done otherwise? This is a question which will never be

resolved. However, it may be argued that the territory could have benefited more from international specialization if the "conditions" had been different. For example, the expansion of the two leading export sectors might have induced greater growth in the rest of the economy if there were (1) regulations concerning the level of wages, and (2) institutions which would divert the outflow of income into productive use. The persistent low level of wages limited any expansion of the domestic demand for secondary and tertiary products and consequently the development of secondary and tertiary industries. At the same time, if the maintenance of low wages was a form of forced savings, did the excess profits go towards the building up of capital? In nineteenth-century England, wages were known to be low but the increased profits were used to increase capital accumulation in other profitable industries. The sugar industry did improve its technology at the expense of labour, but was this the most efficient outlet for the forced savings? Would there have been greater expansionary effect if, rather than building up capital in an industry which could survive only on the basis of subsidies (and was not a young industry which needed support for a limited time), the free forces of the market were left to determine where the capital should go? Perhaps there might have been a

development of industries with greater demand which would have contributed more to the economy.

In the oil industry the level of wages was higher, but the labour employed was small. A very small proportion of the labour force receiving high wages could not make itself felt in the domestic market. So expansion could not occur through wages. However, the oil industry was a profitable one which improved its technology and built up its capital formation. It was capital-intensive, and therefore growth of the economy via increased employment by the industry was not to be expected. But the industry contributed a significant share of its profits to government revenues. The revenues received by the Government did not go towards development, but were deposited in overseas banks. Had this leakage been replaced with investment in roads, communications, education and health, the gains from trade would have been greater. It is for this reason the point has been made that if "conditions" were different, greater gains might have accrued through trade.

Thus in the case of Trinidad and Tobago, while international specialization and trade contributed to the country's development in that the industries supporting the economy were foreign-owned and export-oriented, the

potency of the expansion of trade was dampened because of the framework within which the trade was effected.

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Protections and inadequate. An economist does not include Ricardo and Smith in a bibliography, unless writing about them. It is assumed they are a part of our general education. By contrast, one would expect the candidate to be familiar with the literature on trade and development. I do not find this too satisfactory as a bibliography.

