

Report No. 4202-TR

Trinidad and Tobago: Development Issues for the 1980s

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CURRENCY EQUIVALENTS

Until December 1971

US\$1.00	=	TT\$2.00
TT\$1.00	=	US\$0.50

From December 1971 to July 1972

US\$1.00	=	TT\$1.84
TT\$1.00	=	US\$0.54

From July 1972 to June 1976

The TT\$ was allowed to float
in line with sterling.

As of May 1976

US\$1.00	=	TT\$2.65
TT\$1.00	=	US\$0.38

Since June 1976

US\$1.00	=	TT\$2.40
TT\$1.00	=	US\$0.42

ABSTRACT

Trinidad and Tobago is a two island nation situated in the South-eastern Caribbean. The bulk of the population lives on Trinidad which is relatively developed. Tobago, with 40,000 people, remains undeveloped with agriculture and tourism as the main sources of economic activity.

Trinidad and Tobago has an economy that is dominated by petroleum and natural gas. As such, it was subjected to the same forces as the OPEC countries during the 1970s, including the largess of 1973-74, the shortfall of earnings in 1978, the renewed revenues of 1979-80 and finally the fall of 1982 and 1983. A long history of petroleum in Trinidad, a responsible government, and a realization that the resources are very limited led to the placing of most of the additional petroleum earnings in a long term development fund, to a relatively slow growth in public sector expenditures and to a concerted program aimed at the alleviation of poverty. The bulk of the development fund was spent on the establishment of an energy based heavy industry complex at Pt. Lisas, including iron and steel, cement, ammonia, urea and methanol. However, light industry, behind the protection of quantitative restrictions and enjoying a market of 1 million people, remains very underdeveloped, while agriculture, dominated by high cost sugar, has been in a steady decline.

In 1983 the momentum of the public sector investment program, dominated by heavy industry, and the continued growth of the subsidy programs coupled with a sharp decline in government revenues, has led to a fairly substantial public sector deficit which if unchecked could quickly spill over on to the balance of payments and mar Trinidad and Tobago's heretofore excellent creditworthiness; external debt now stands at 15% of GDP while the ratio of service payments to exports will be 12% in 1983. The heavy industry program is almost complete and is characterized by indigestion rather than inefficiency; attention must be paid to sound management and to marketing. Subsidies are in the process of being eliminated or sharply reduced while there is still a need to broaden the revenue base by increasing indirect taxation. A four year development plan is about to be issued which will emphasize consolidation, slower economic growth and a program under which the economy of Trinidad and Tobago can return to living within its now reduced means.

This report is based on the findings of an economic mission to Trinidad and Tobago in May 1982 consisting of Nicholas Carter (Mission Chief), Theresa Jones (Economist), Michael Pearson (Petrochemicals), Harbaksh Sethi (Heavy Industry), Ernst Bolte (Manufacturing), Emmanuel Ndungutse (Employment), Maurice Perkins (Agriculture-Consultant) and Dolores Velasco (Research Assistant). The mission was designed to assist the Government in the preparation of the National Development Plan and the report was discussed with the Government on several occasions during the latter part of 1982. Final production was delayed until June 1983 pending the completion of the Development Plan.

TRINIDAD AND TOBAGO: Development Issues for the 1980s

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COUNTRY DATA - TRINIDAD & TOBAGO

<u>AREA</u>	<u>POPULATION</u>	<u>DENSITY</u>
5128.0 km ¹ /	1,059,800 (mid-1980)	224.2 per km ¹ /
	Rate of Growth: 1.2 (from 1970 to 1979)	680.5 per km ¹ / of arable land

POPULATION CHARACTERISTICS 1979

Crude Birth Rate (per 1,000)	22.5
Crude Death Rate (per 1,000)	5.4
Infant Mortality (per 1,000 live births)	24.0

HEALTH 1975

Population per physician	1967.3
Population per hospital bed	224.7

INCOME DISTRIBUTION 1975

% of national income, highest 5	16.9
lowest 20	4.2

DISTRIBUTION OF LAND OWNERSHIP 1963

% owned by top 10% of owners	31.1
% owned by smallest 10% of owners	1.5

ACCESS TO PIPED WATER 1970

% of population - urban	100.0
- rural	95.0

ACCESS TO ELECTRICITY 1976

% of population - urban)	
- rural)	77.0%

NUTRITION 1977

Calorie intake as % of requirements	103.0
Per capita protein intake	65.1

EDUCATION 1977

Adult literacy rate %	95.0
Primary school enrollment %	96.0
Secondary school enrollment %	56.0

GNP PER CAPITA in 1980¹: US\$4,370

GROSS NATIONAL PRODUCT IN 1980

	US\$ Mln.	%
GNP at Market Prices	6,115.5	100.0
Gross Domestic Investment	1,877.3	30.7
Gross National Saving	2,239.4	36.6
Current Account Balance	334.7	5.5
Exports of Goods, NFS	3,140.2	51.4
Imports of Goods, NFS	2,368.4	38.7

ANNUAL RATE OF GROWTH (% , constant prices)

	1974-79	1980
	9.6	8.0
	18.3	-9.9
	4.2	12.4
	.	.
	-7.1	-5.5
	11.5	-17.1

OUTPUT, LABOR FORCE AND PRODUCTIVITY IN 1980

	Value Added		Labor Force ² /		V.A. Per Worker	
	US\$ Mln.	%	Thousand	%	US\$	%
Agriculture	150.8	2.4	41.3	9.8	3,651.3	24.4
Industry	3,656.7	58.0	163.8	38.9	22,324.2	149.1
Services	2,492.0	39.6	215.6	51.3	11,558.4	77.2
Unallocated	.	.	.	.	.	.
Total/Average	6,299.5	100.0	420.7	100.0	14,973.9	100.0

GOVERNMENT FINANCE

	General Government			Central Government		
	(TT\$ Mln.)	% of GDP		(TT\$ Mln.)	% of GDP	
	1980	1980	1978-80	1980	1980	1978-80
Current Receipts	6,572.7	42.4	38.6	6,561.9	42.3	38.5
Current Expenditure	2,666.4	17.2	17.9	2,673.6	17.3	17.9
Current Surplus	3,906.3	25.2	20.7	3,888.3	25.0	20.6
Capital Expenditures	1,556.7	10.0	11.0	1,556.7	10.0	11.0
External Borrowing (net)	148.3	1.0	1.5	148.3	1.0	1.5

1/ The Per Capita GNP estimate is at 1980 market prices, calculated by the same conversion technique as the 1981 World Atlas. All other conversions to dollars in this table are at the average exchange rate prevailing during the period covered.

2/ Total labor force, unemployed are allocated to sector of their normal occupation. "Unallocated" consists mainly of unemployed workers seeking their first job.

.. not available
 . not applicable

COUNTRY DATA - TRINIDAD & TOBAGO

<u>MONEY, CREDIT and PRICES</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>
		(Million TT\$ outstanding end period)			
Money and Quasi Money	2102.8	2573.8	3308.0	3783.5	4521.7
Bank Credit to Public Sector	-2782.5	-3288.9	-3564.9	-4863.8	-5685.2
Bank Credit to Private Sector	1719.0	1165.6	2668.2	3229.4	3972.3

(Percentage or Index Numbers)

Money and Quasi Money as % of GDP	26.7	29.0	23.5	24.4	26.5
General Price Index (1975 = 100)	121.5	133.9	153.6	180.3	206.3
Annual percentage changes in:					
General Price Index	11.8	10.2	14.7	17.4	14.4
Bank credit to Public Sector	-2.9	18.2	8.4	36.4	16.9
Bank credit to Private Sector	-1.4	-32.2	128.9	21.0	23.0

BALANCE OF PAYMENTSMERCHANDISE EXPORTS^{1/} (AVERAGE 1979-81)

	<u>1978</u>	<u>1979</u>	<u>1980</u>		<u>US\$ Mn.</u>	<u>%</u>
Exports of Goods, NFS	1573.3	2081.4	3137.7	Mineral fuels & Lubricants ^{2/}	1408.8	62.6
Imports of Goods, NFS	1412.9	1810.4	2407.3	Food, Beverages & Tobacco	66.7	3.0
Resource Gap (deficit = -)	160.4	271.0	730.4	Chemicals	103.0	4.6
Interest Payments (net)	100.6	99.9	162.2	All other commodities	670.2	29.8
Workers' Remittances	-	-	-	Total	2248.7	100.0
Other Factor Payments (net)	-187.2	-354.4	-492.4			
Net Transfers	-38.0	-45.7	-65.5	<u>EXTERNAL DEBT, DECEMBER 31, 1981</u>		
Balance on Current Account	35.8	-29.2	334.7		<u>US\$ Mn.</u>	
Direct Foreign Investment	127.0	173.5	202.5	Public Debt, incl. undisbursed ^{3/}	881.3	
Net MLT Borrowing	107.0	55.1	61.5	<u>DEBT SERVICE RATIO for 1981 ^{4/}</u>		
Disbursement	112.1	60.6	231.9			<u>%</u>
Amortization	-5.1	-5.5	-170.4	Public Debt, incl. guaranteed	2.0	
Allocations of SDRs	-	11.0	11.3			
Other Capital (net)	71.2	126.1	-14.8			
Other items n.e.i.	-2.0	22.9	-1.6			
Increase in Reserves (+)	-339.0	-359.4	-593.6			
Net Reserves (end year)	1647.3	2017.6	2642.3			

RATE OF EXCHANGEIBRD/IDA LENDING, December 1981Until December 1971

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	<u>IBRD</u>	<u>IDA</u>
Outstanding & Disbursed	54.1	.
Undisbursed	20.0	.
Outstanding incl. Undisbursed	74.1	.

- 1/ Including domestic exports and re-exports.
 2/ Net of trade under petroleum processing agreement.
 3/ Includes guaranteed debt.
 4/ Ratio of Debt Service to Exports of Goods and Non-Factor Services.

.. not available
 . not applicable

Summary and Conclusions

- i. The economy of Trinidad and Tobago is nearing the end of a decade-long boom generated by petroleum. As the international price softens and as the nation's oil reserves begin to dwindle rapidly, the economy can expect to go through an extended period of readjustment. Trinidadians have experienced rapid increases in real income as well as impressive gains in the provision of basic needs to the poorest. The task facing the authorities in the years to come is managing with dwindling oil income to maintain the progress of the 1970s. This report examines the current economic situation, looks in some detail at agriculture, heavy industry, and at manufactures and discusses the policy options that might be undertaken. It also looks at issues raised by the Government's Task Force for the Multisectoral Plan while the mission was in the field.

- ii. After the dramatic increase in petroleum revenues in 1974, economic growth more than doubled in the last half of the decade compared to the first half, rising to an average annual rate of nearly 8%. Revenues from petroleum fueled much of the economic growth through increases in consumption and government capital spending. However, real output in the petroleum sector has declined gradually since 1974. During the 1970s, economic growth was concentrated in construction, services and manufacturing, while agricultural performance deteriorated. The country's promotion of capital-intensive, energy-based industries as yet has not changed the economic structure of the country, in part because many projects still are under construction. During the decade, the average annual growth in consumption outstripped that of GDP, as the country consumed half of its terms of trade gain. Real growth in fixed investment was higher, increasing at an average annual rate of 16% a year during the latter half of the decade.

- iii. Preliminary estimates indicate that GDP growth slowed down in 1981. Agriculture, manufacturing, oil production, and refining all fell in real terms while the rest of the economy, buoyed by a continuing construction and consumption boom, rose at a rate of 9.6%, giving an overall growth of 4.3%. The pattern of tertiary sector expenditure-led growth which continued to be exhibited in 1981 is not a secure base for future economic expansion. Government expenditures have been the main force behind the growth of the non-oil economy and in the past five years public sector projects have accounted for as much as 80% of all construction activity. Given the modest outlook for petroleum earnings, the completion of most of the large investment projects of the boom years, and the slow growth of government revenues, the prospects are for extremely limited growth unless the base for development can be significantly broadened.

- iv. The present orientation of the economy is one that encourages consumption. Relatively high employment, wage increases that continue to

outstrip productivity, and large consumer subsidies have reinforced this behavior while at the same time extensive price controls discourage production. This consumption boom, which includes subsidies that are presently equivalent to over 5% of GDP has been financed largely by the terms-of-trade windfall gains from the sale of petroleum. It is neither prudent nor wise to plan on further gains being present in the future and the near term outlook is for a stagnation in revenues. Therefore, structural adjustment, which will be difficult for all parts of the Trinidad and Tobago economy, must be initiated in the near future.

v. The increase in tax revenue from petroleum dramatically strengthened the fiscal performance of Trinidad and Tobago during the latter half of the 1970s. Over the period 1974-79 the current account surplus averaged 18% of GDP. Overall central government accounts also showed a surplus every year but 1979. Much of the Government's surplus revenue after 1974 was placed in Special Funds for Long-Term Development in order to reserve and at the same time sterilize the surplus resources until the development program was drawn up and expanded. In total, during the period 1974-1980, TT\$7.5 billion was appropriated to the Special Funds, 55% of the Central Government's revenue from petroleum. Current expenditures of the Central Government expanded by an average annual rate of over 30% during the period 1977-80. The fastest growing component of spending was subsidies and transfers which reached TT\$943 million in 1980, accounting for over a third of current expenditures. Because of the sharp rise in receipts from the petroleum sector, total Central Government revenue rose from 20% of GDP at the beginning of the decade to an average of 35% between 1974 and 1979. In 1980 the share rose to 41% when receipts from the petroleum sector accounted for 65% of total revenue.

vi. Capital expenditures expanded even more during the decade than current expenditures, the former growing at an average annual rate of 46% between 1972 and 1980. During the period 1977-80 capital spending, which includes the acquisition of assets and net lending (including transfers) to the rest of the public sector as well as capital formation, represented about half of total government spending. Transfers and net lending to the rest of the public sector rose sharply after 1978, to reach nearly a quarter of capital outlays. Central Government capital formation accounted for slightly over 8% of GDP in 1980, compared to an average of less than 3% during the period 1972-76. A rough analysis of project expenditures during 1980-81 shows that the largest outlays went for roads and the energy-based or heavy industry projects. Nearly 50% of the capital expenditures from the Special Funds in 1980-81, roughly TT\$1.7 billion, represent construction activities.

vii. Public sector capital expenditures now amount to almost 70% of investment and 20% of GDP. It is therefore not unexpected that there are difficulties in the execution and management of the Public Sector Investment Program. As a result of relatively little spending constraint in recent years, most projects do not have reliable estimates of costs,

benefits, phasing, or current expenditure implications. Ministries have often received direct Cabinet approval without any centralized analysis of national priorities or of absorptive capacity. The Finance Advisory Committee, which is empowered to carry out the technical analyses necessary for a Cabinet decision on a project, has neither sufficient time nor information to do so. If a project is financed by a Special Fund (a portion of petroleum earnings set aside in an earmarked capital fund), there is little or no control during execution. If the project is internally funded, monitoring is hampered by the lack of information flows to the Project Analysis Unit in the Ministry of Finance and Planning and by generally weak monitoring units in the executing ministries. While the situation is generally better on projects that have received external financing, government-to-government arrangements have been especially prone to lack of planning or analysis. On many projects there is no clear estimate of final cost.

viii. As a result, it is impossible to ascertain what is happening in the public sector investment program on a project-by-project basis or to forecast expenditures for on-going projects. While a rough overall estimate can be made from considerations of national absorptive capacity, the actual level and distribution of public capital expenditure, and thus the degree to which it supports national economic policies, is unknown until after the fact. The Government has recognized these problems and has already taken some initial measures. The priorities are, first, to prepare a complete inventory of all large (over TT\$50 million) projects complete with phasing; second, to ensure that for each new project a task force, including a representative of the Ministry of Finance, is set up for the purpose of monitoring; and third, to establish uniform formats and procedures for effective project evaluation and monitoring throughout the public sector. Proper management of public sector capital expenditures will be vital in the coming years when resources will be relatively scarce.

ix. The balance of payments is dominated by the petroleum sector. In recent years, 85% of merchandise exports have come from this source, but crude exports have fallen from a peak of 54 million barrels in 1978 to 39 million barrels in 1982 and are expected to continue falling in the future; earnings including refined Trinidad petroleum are now slightly over US\$2.0 billion. Trinidad also processes some 50 million barrels of imported crude primarily into residual fuels for the North American market. Net earnings from this business amounted to some US\$110 million in 1980, but have fallen sharply with the drop in U.S. demand. Energy sector exports have almost quadrupled in value in the past four years, while manufactures, outside the energy sector, have grown at a moderate rate but are still less than US\$100 million. Imports in recent years (1977-80) have risen at an average annual real rate of 17%; food, which is about 10% of merchandise imports, has been increasing in real terms by almost 15% each year. As a result of buoyant earnings from petroleum, the current account generally showed a surplus through most of the 1970s and was about US\$250 million in 1981 (4.3% of GDP). Gross international reserves at the end of 1981 stood at US\$3.2 billion, equivalent to 20 months of imports.

x. Crude oil production peaked in Trinidad and Tobago in 1977-78 at an annual level of 84 million barrels; since then production has declined at about 6% per year. Several factors will influence the trend in the coming decade, including the performance of secondary production and the progress of the present oil exploration program. The median scenario of the Ministry of Energy and Mines suggests a decline of 6% per year through 1984 and an 8% decline thereafter. A factor which will affect the exportable surplus is the growth of domestic demand which, in turn, depends critically on the pricing policy of the Government. Motor gasoline, gas oil, and kerosene, which account for three-fourths of internal demand, are heavily subsidized, prices being about 50% of the international price.^{1/} In recent years internal demand has been increasing at about 6% per annum and a continuation of this trend would mean that the exportable surplus of crude and products would fall to 38 million barrels by 1990 as compared to 63 million in 1981, implying a decline in nominal earnings from this key export. If domestic consumption reflected international prices, the exportable surplus could be some 4% higher, returning an extra \$100 million to the economy.

xi. For the past decade, agriculture has been in a decline in Trinidad; in 1981 real output was only 73% of the level achieved in 1973. In sugar the combination of continuously escalating costs, plant disease, an aging plant, and a weak world market have caused a drop of almost 50%, while in other export crops labor shortages and neglect have led to a one-third fall in output. In domestic products there has been a virtual stagnation.

xii. In response to these problems, the Government has adopted a number of measures but has no consistent overall plan. First, there have been replanting and rehabilitation programs, particularly for tree crops. Second, input subsidies designed to increase output have been introduced; however, in many cases, this subsidy has been carried through to the consumer through price controls. Third, import controls have been imposed on foods and agricultural inputs in order to increase domestic production incentives. Finally, there are price controls at strategic points in the marketing chain which try simultaneously to balance consumer equity and producer incentives. In addition, a White Paper in 1978 set forth an administrative structure for the sector so as best to implement sectoral policy; however, the recommendations were never fully carried out.

xiii. In terms of production response, the most important of these measures is the subsidy program. This includes subsidies paid by the Ministry of Agriculture, Lands and Food Production for land preparation, fertilizer, and milk production as well as the subsidies paid by the Ministry of Industry, Commerce, and Consumer Affairs for livestock and poultry feed. As a result, the country is virtually self-sufficient in poultry and pork and can potentially be so for milk. Production of vegetables has been maintained through the use of import controls. While

^{1/} The 1983 budget raised retail prices to World Wholesales Market levels.

livestock will be able to expand into increasingly abandoned sugar lands, only the most fertile of such lands are suitable for vegetable production; such land is located in the north of Trinidad and is being overrun by the urban sprawl of Port-of-Spain.

xiv. As a result of low and declining yields of sugarcane and sucrose content, a steadily rising proportion of fixed costs, and high wages and fringe benefits, the sugar industry in Trinidad is dying. In 1982 it is estimated that the cost of producing a pound of sugar at Caroni will be 81 cents (U.S.). Since revenues do not cover even variable costs, the Government has had to subsidize the industry both to export as well as to sell in the domestic market. It is estimated that in 1982 the sugar subsidy was over TT\$120 million. It is not likely that technical and managerial improvements can make the industry viable over the long term; it should be phased out. There is, however, no concensus as to how this is to be accomplished. Current thinking is to reduce production to a level of estimated future domestic consumption (about 70,000 tons), however, this would not markedly decrease the annual subsidy required to keep the industry going. This course of action can only be supported on a transitional basis so as to avoid the social costs of a sudden reduction in the labor force (the industry directly employs some 20,000 people) and the transfer of the land to other uses.

xv. It is likely that future production and exports of traditional tree crops will continue to fall gradually as the stands grow older and the yields decline. Various institutional and economic factors make it unlikely that an effective replanting program can be mounted. Production of domestic food crops will increase in line with local demand, but will not produce a surplus for import substitution; poultry and eggs will maintain self-sufficiency as will hogs and milk. The production of cereals is not likely to develop to any significant extent until numerous technical production problems are tested and solved, hence imports of these products will have to continue. Finally, there are good prospects for the expansion of pasture for milk and beef production, but here again there are unsolved technical problems.

xvi. The situation in agriculture has been well known and apparent in Trinidad and Tobago for some time. Most of the possible actions have been suggested already, some of them several decades ago. In general, such proposed actions, except for a lack of attention to incentives to individual producers, are sensible and lack simply the concensus to carry them out. The Mission thus has little in the way of new suggestions, but does recommend the following:

- (a) Scarce resources should not be used to try and revive the traditional tree export crops;
- (b) a decision on the phase out of the sugar industry needs to be taken immediately;

- (c) new export possibilities in agriculture should be left to the private sector;
- (d) a mechanized pilot project for the production of feedstuffs, including rootcrops, should be established in order to test the feasibility of import substitution;
- (e) a system of realistic and current guaranteed producer prices should be substituted gradually for the existing system of price controls and subsidies for domestic food crops and livestock products; and
- (f) improved marketing facilities and a more active role for the Central Marketing Agency are required to meet the current needs of the market and to produce surpluses for export.

xvii. The one valuable natural resource that Trinidad and Tobago has in abundance is natural gas. In terms of potential, this should be a key motivating force in the economy in the post-petroleum era; however, the substantial capital costs associated with its development will sharply limit the real returns to the Government and the country. The first deposits of gas were found about 40 years ago and a fertilizer complex was set up in the 1950s to exploit them. It is currently estimated that likely recoverable reserves of natural gas, located mainly in areas offshore, are some 18 trillion cubic feet, enough for about 40 years of consumption at present rates. Having decided that natural gas-based industries were to play a key role in the development of the country, the Government, during the past decade, has been instrumental in the establishment of several heavy industries, including ammonia, iron and steel, methanol and urea, and is currently contemplating MBTE, aluminum, and LNG. All these industries are located, or will be, at the Point Lisas industrial estate, where the original fertilizer complex is located. The Estate is supplied by a pipeline from the offshore fields to the east of Trinidad, soon to be supplemented by an additional pipeline from the southeast. Should the LNG plant be built, two additional pipelines, one of which would gather gas from the fields off Tobago to the north, would have to be built. The natural gas also fuels all the electricity generation in the country.

xviii. The Government's natural gas pricing policy is set forth in a 1981 White Paper. While purchases are made from the supplying companies at prices depending on their costs, sales are priced according to the type of consumer. Electricity generation, as a vehicle for subsidizing consumers, pays only 30 cents (U.S.) per MBTU; iron and steel pays about 60 cents, methanol and urea about 84 cents, the maximum being roughly \$1.25. Considering that the opportunity cost (i.e. the price at which gas could be sold to an LNG plant) is about \$1.70, the Government needs to examine several issues connected with pricing. First, all prices, no matter to whom, ought to cover the costs of recovery and transmission. Second, given the subsidy extended to T&TEC via the gas price, the Commission should be

allowed to recover its own costs and not pass on an additional subsidy to the consumer. Third, in attracting new industries to the country, care should be taken to ensure that subsidies are not permanent, but only extended during the "infant industry" phase of the project. In addition, the Government should be aware that inexpensive gas can make possible the choice of inappropriate technology. Finally, recognition should be taken of the fact that significant subsidies extended on a permanent basis will not be compatible with a need to maximize revenues from natural gas and conserve this resource.

xix. The FERTRIN ammonia plant, now coming on stream, is a joint venture of the Government of Trinidad and Tobago and AMOCO. The final capital cost of this 2,000 ton per day plant is estimated to be about \$250 million, an overrun of some 30% being due not only to general inflation, but also to inexperienced management of the construction. Technically, the project is well conceived, but an overly optimistic projection of selling prices of the product (primarily into the Caribbean market) may mean that it will be several years until the project, even with subsidized gas, is able to show a profit. Adjacent to the FERTRIN plant the Government, through its energy project holding company, NEC, is erecting a 1620 TPD Urea Plant. It is currently estimated that the final cost at completion in 1983 will be \$188 million, about 20% above original estimates, here again due principally to lack of adequate supervision during construction. Although the project is technically sound, there are three potential areas of weakness. First, there has been no recruitment and training even though the plant is less than a year from start-up. Serious problems could develop during 1983 from a lack of adequate staff. Second, the product sales agreement needs to be critically examined so as to ensure that the urea can be sold on a regular basis, and finally, the company needs to obtain a technical assistance and technological exchange agreement with the urea process licensor so as to ensure that the plant is technically able to compete in years to come.

xx. A 1200 TPD methanol plant is now being erected for the NEC at Point Lisas. Due to be completed in March 1984, at a cost of \$180 million, it is likely to face significant marketing difficulties. Although NEC has 7-10 year agreements for up to two-thirds of the plant output, significant amounts of methanol will have to be sold on the open market. Given the nature of the sales contracts and the probable destination of most of the product to North America and Western Europe, NEC entered into negotiations for the purchase of two ships designed to carry methanol. While such an acquisition is appropriate for a methanol plant of the size and market of Trinidad's, final agreements to have them built need to be made immediately in order to have them ready for the plant next year. In addition, the Government should explore the possibilities of back-haul agreements and freight rationalization swaps with Western Europe in order to minimize the costs of shipping in what is likely to be a difficult market. As is the case with the urea project, immediate action is needed to ensure that sufficient, properly trained staff will be available when the plant begins

operations and, in addition, contracts need to be made for the maintenance of technology. Finally, as an integral part of the methanol operation, the Government needs to look carefully at the potential for a plant to produce MBTE, although given the potentially high cost of obtaining butane, it might be preferable to invest in an MBTE plant outside of the country as a means of securing an assured market for methanol.

xxi. A project for the collection, liquefaction and export of natural gas has been contemplated for a number of years in Trinidad. Present reserves are more than ample to sustain a plant of economic size (input of 250 million cubic feet per year) and this is certainly an obvious use for the country's ample reserves. The capital cost of such a project is, however, very high, and thus the net returns to the Government are relatively low, and are extremely sensitive to the price at which the LNG can be sold. At present, the world markets for LNG are fairly volatile and thus there is a wide difference between the price which Trinidad and Tobago feels would be needed for the gas and the price at which customers are willing to contract for, and without such an agreement the project cannot go ahead. A proposal for a joint venture with two US companies has been made, but involves not only the LNG plant, but also bulk carriers and the construction of a terminal in the US. In view of the current and likely state of the market, it would be more to the advantage of the Government to contract for the shipping and to deliver to existing terminals on the US East Coast.

xxii. The TRINTOC refinery was designed to refine the traditional 24° onshore Trinidadian crude, primarily into residual fuel oils. It cannot efficiently refine the newer and lighter (32°) marine crude and has in recent years been experiencing significant operating losses. A feasibility study has recently been completed for the conversion and upgrading of the plant and a halving of the fuel oil output at a cost of \$430 million. However, the moderate scale of refining (75,000 bpd) and the age of some of the facilities mitigates against such a high investment. It is therefore recommended that before proceeding, the Government study carefully a rationalization involving the TRINTOC refinery as well as the TEXACO refinery, with a view particularly to interconnection.

xxiii. At present the sole production of cement in the country is an old, inefficient, wet process plant at Point Lisas. A request in 1976 by the owner to close the facilities and erect a new plant resulted in the nationalization of the company, the continued operation of the old plant, and a government-to-government agreement for an additional 300,000 TPY wet process plant currently being erected at Point Lisas reflecting the very high demand for cement in Trinidad during the boom years of the 70s. The existing facilities are for technical reasons being operated at 60% of capacity, with productivities (electricity, fuel, and labor) that are less than half of what should be possible. Management and technical skills are lacking and the labor force is substantially in excess of what is needed. In spite of subsidized fuel inputs (gas of 75 cents US per MBTU), the cost

of production is almost twice that of similar facilities in Europe or North Africa. Compounding the problem, the retail price of cement in Trinidad and Tobago (considered an essential consumer commodity), has been fixed at about half the cost of imported cement, equivalent to one-third the cost of the locally produced product. This subsidy, which largely benefits the Trinidadian middle class building houses, and which cost the Government TT\$120 million (almost 1% of GDP) in 1981, combined with chronic shortages of cement has given rise to a black market and has had deleterious effects on attempts to improve the operations of the cement plant.^{2/} The new cement plant, besides having a per unit cost higher than necessary due to the use of the old "wet process" technology, is also likely to have capital costs upon completion some 25% higher than similar plants elsewhere in the world. Thorough supervision of the establishment of the plant as well as the initial staffing and operation is urgently required. As in many of the NEC ventures, it is essential that technical assistance agreements be sought for the operation of the plant over the long run.

xxiv. The centerpiece of Trinidad and Tobago's natural gas based industrialization policy is the Iron and Steel Complex (ISCOTT) located at Point Lisas. Now coming into operation, the complex was first envisioned in 1958 and was initiated with a joint venture agreement in 1975. The following year, the Government, concerned with the relatively low rate of return of the project and the exclusion of the North American market by the foreign partners, decided to make the venture 100% locally owned. Although a further market study indicated a weak and difficult market, the Government approved the project in 1977 at a cost of US\$320 million. A subsequent decision to add a second direct reduction iron (DRI) unit added \$84 million, and the completed cost is expected to be some \$507 million, an overrun of 26%. The final concept of the project comprises two DRI units, melting and casting facilities, a rolling mill, three gas powered full capacity. While there may be no problem selling billets, Trinidad faces formidable problems in the marketing of DRI. The original design called for 500,000 TPY of DRI to be supplemented by 100,000 TPY of imported scrap. Concerns about the availability of this scrap on world markets led to the decision to install the second DRI unit, leading to the process imbalance.

xxv. The project implementation appears not to have been well defined or coordinated. Not only was supervision weak, but inadequate financial planning has caused the company to have to resort to heavy short-term borrowing. Lack of sufficient trained manpower may severely affect the operation of the plant; an agreement with an operating company for the early period is strongly recommended. The company is also likely to face significant marketing difficulties and should consider agreements with established interests or even equity participation in industries that use the product. Finally, it is essential that the Government undertake a financial restructuring of the company, particularly with a view to increasing the amount of equity capital and reducing the short-term debt.

^{2/} The subsidy on cement was eliminated in the 1983 budget.

xxvi. An aluminum plant, using Jamaican or Guyanese alumina, has been discussed in the Caribbean for some time. Although it seems as though a plant of 150,000-180,000 TPY would be appropriate, using electricity generated from natural gas, and although there have been extensive studies, both technical and economic, demonstrating the general viability of the plant, no agreement to go ahead was ever made. Currently, the poor market outlook for aluminum mitigates against such an investment, the cost of which is currently estimated to be about \$1 billion.

xxvii. Although the manufacturing sector grew fairly rapidly during the 1970s, it only accounts for 10% of GDP and is below the level of industrialization achieved by other countries of comparable per capita income. Moreover, under prevailing industrial policy, the sector offers little prospect for future strong performance. Manufacturing in Trinidad and Tobago has the typical characteristics of an industry shielded from import competition over a long period of time. Assembly of imported parts, frequently in CKD form, and mixing and bottling operations dominate, accounting for over two-thirds of value added. These activities have small shares of value added in sales, operate with weak linkages to the domestic economy and offer little opportunity for learning by doing for the country's increasingly well educated workers, technicians, and managers. Product quality of the industry is generally well below that of comparable imports and prices, as a result of the "negative list" (quantitative restrictions and/or prohibitions), are substantially above world market levels. The structure of the country's manufacturing sector is monopolistic and has contributed to the inflationary pressures of the past decade in spite of Government price controls. Finally, the dominance of the oil sector in the economy has left the manufacturing sector with a cost the size of the local market mitigates against further expansion or increase in efficiency. Only by becoming outward looking will industry develop. Second, the long-term support provided to industry both in terms of direct resources as well as in compensatory subsidies to consumers in order to pursue income distribution goals, could be better used in other sectors of the economy. The continued direction of this assistance to the sector constitutes a serious misallocation of increasingly scarce resources. Finally, as the country's petroleum resources decline, it is prudent to develop other sectors which would provide employment, foreign exchange, and fiscal revenues. Manufacturing could, with suitable restructuring, eventually fill this role if action is taken in the near future.

xxviii. Although it is generally recognized that such a course of action should be taken, little has been done in recent years. Specific suggestions and infrequent changes are generally in the direction of more control and more protection. The mission recommends a policy package for changing the direction of industrial development in Trinidad and Tobago. For export promotion, it is recommended that the current system of export allowance (on the income tax) be abolished and replaced with cash subsidies for all non-traditional exports. In addition, there should be an export credit system for both pre and post shipment financing. The export insurance

system should be strengthened by raising the guarantee limit to at least TT\$20 million. A double tax deduction should be introduced for the promotional expenditures of new exporters, and the institutions that deal with them should be strengthened. The IDC should administer the new export compensation and financing system, incorporating the Export Promotion division of the Ministry of Industry, the Credit Insurance Company of the IDC and the International Marketing Company.

xxix. The "negative list," import licensing and import duty concessions should be abolished in preannounced stages over a period of five years. The Government should eliminate price controls in line with this trade liberalization. Other fiscal measures to be considered should include an investment cash subsidy, an increase in the depreciation allowance, the introduction of a general sales tax (or VAT), an excise tax on luxuries and the elimination of consumer subsidies. Finally, instead of intervening directly in industry, the Government should guide development through price signals. Government institutions supervising light industry should sell their participations to the private sector and should focus future "rescue efforts" on the redeployment of labor rather than the continuation of an unviable enterprise.

xxx. Tourism in Trinidad, in contrast to most countries in the Caribbean, is not a major earner of foreign exchange for the economy. The Government has a very clear policy which limits and directs the growth and nature of tourism in the country. Tourism now earns some TT\$300 million from about 150,000 stayover visitors. The proposed physical development plan for tourism through the 1980's emphasizes the upgrading of hotels, the development of beach areas and the accomodation of cruise visitors. Consideration needs to be given to somewhat greater incentives for the statistical base for its operations, there is an urgent need to proceed with the upgrading of Crown Point and Piarco Airports. As Tobago is a particularly good tourist location, and as BWIA currently provides a large subsidy to TTAS, the Government might wish to explore ways of having this access and its associated cost shared by foreign carriers.

xxxii. Using a very broad definition of the labor force, the unemployment rate in Trinidad has in recent years been about ten percent. While the boom of the 1970's created the conditions under which the labor force, expanding at 1.6% per annum, could be absorbed and the unemployment rate could steadily decline, the future course of the economy may not allow such an expansion of employment. In addition to the rapid expansion of employment, the relative scarcity of skills, which still persists and the high wages paid in the oil fields, even for unskilled labor, have meant a rapid increase in real income paid to labor. This is unlikely to persist into the future and the prospect is thus for only slowly growing employment and virtually stagnant real wages.

xxxiii. More than 70% of the labor force is unionized and there is reason for concern about the current trends in industrial relations, one measure of which is the 60% increase in the past five years in unresolved disputes requiring arbitration by the Industrial Court. Several factors seem to be

responsible for the trend in industrial relations, a) despite the need for a continuous dialogue among labor, management, and Government, there is not adequate provision for communication channels, b) the Government is only beginning to make a serious attempt to explain the evolving downturn of the economy to organized labor, and c) the machinery for mediation and conciliation in labor disputes is inefficient and outmoded. While there has been an increasing trend towards arbitration as a substitute for strikes, the Industrial Court has neither power nor expertise to judge the economic issues which come before it, particularly when they involve decisions about wage, monetary, and fiscal policy, and therefore is not the appropriate body for making decisions which affect the nation's economic well-being.

xxxiii. The increase in money wages for the economy as a whole has substantially exceeded increases in labor productivity. The annual percent increase in weekly wages registered an average of 24.2% over the 1977-81 period, implying an increase in real wages of 5% per year. In contrast, productivity in sugar, oil refining and chemicals declined at annual averages of 10, 4.3 and 2.1 percent while for all the rest of the economy the increase was a meager 2.9%. This trend has exacerbated Trinidad's declining international competitiveness.

xxxiv. As an outgrowth of efforts in the 1950's to improve social conditions and to provide employment opportunities for the poor, the Special Works Program (DEWD) was instituted. Employing about 10,000 people at any one time, and involving some 40-60 thousand people per year, the program currently costs in excess of TT\$100 million per year. While this program has resulted in the construction of a certain amount of minor infrastructure, the effective wages per hour (about TT\$20) and the low level of supervision has meant that sectors where wages are not high, particularly agriculture, have been seriously affected. Thus not only have the unemployed been periodically occupied at wages far in excess of their productivity, but labor has been drawn away from other sectors of the economy. The program has been negatively affected by inadequate management and by inefficient organization of the projects. Project selection has been ad hoc and haphazard and there has been an inadequate supply of complimentary technical skills, resulting in generally low quality of output. While, in terms of targeting the poor in Trinidad and Tobago, the DEWD program is more efficient than most parts of the welfare system, great care must be exercised first to ensure that the outputs are useful and of high quality, and second to minimize the deleterious effects on other sectors. Ways of involving the program in directly productive enterprises, particularly agricultural, should be explored, one possibility being the use of wage subsidies on a selective basis.

xxxv. While there is a body of unemployed in the country, there is also a continuing shortage of skills of roughly the same magnitude. As a matter of top priority, the ongoing efforts to improve the quality and relevance of education and training need to be reinforced. Among the actions that might be considered are: a) financial incentives to students enrolling in

technical fields where shortages exist, b) education and skills programs should include basic aspects of career development such as personal relations and punctuality to prepare the student better for the workplace, c) follow-ups of graduates from skills training programs should be conducted to identify deficiencies, d) instructional programs should be periodically reevaluated, e) manpower and training needs surveys should be conducted on an annual basis, and f) near-graduates should be involved in in-plant training programs. This latter might also include special incentives to employers to cover the costs of transition to the industrial workplace.

xxxvi. As Trinidad and Tobago approaches a difficult economic period, it is essential that all segments of the economy, particularly labor, be fully aware of the problems and of the need for a national consensus on economic policy. Central to this policy will have to be productivity, an incomes policy, and a progressive tightening and improvement of the focus of the welfare system.

xxxvii. A simple model of the economy, based on current and foreseeable trends shows that the most immediate problem facing policy makers is the fiscal situation. The overall deficit of the Government was 19% of GDP in 1982 and could be as high as 24% in 1983. A consideration of sources of capital and sustainable debt burdens indicates that the economy cannot, over the long run, support fiscal deficits greater than 5% of GDP. In rough outline, a series of policy measures will be necessary in order to keep the economy under control. While they imply a sharp drop from the average 8% real annual increase in per capita consumption that characterized the 1970's, a proper and coherent program will allow a modest increase in real consumption even while the difficult process of structural adjustment is proceeding. While an increase in indirect taxation (reduction of import duty exemption and increase in consumption taxes), while maintaining direct taxation at its current share of GDP, appears appropriate, the largest improvement in the fiscal situation has to come from a drastic reduction in subsidies, not only by more accurate targeting, which would include elimination of broad commodity subsidies, but also by requiring full economic cost pricing as well as enhanced efficiency from state corporations such as T&TEC, WASA, NPMC, and NTSC. In addition, wage increases in the public sector will have to be kept at or even below the rate of increase of nominal GDP. The key to the improvement of the foreign trade sector is the implementation of the export oriented strategy for the industrial sector discussed above. In addition, restraint will have to be exercised on imports, keeping their elasticity with respect to GDP to less than unity, while at the same time reducing and eliminating most of the excessive protection that local industry now receives from imports.

xxxviii. The projections (even though they are fairly crude) highlight the types of policies that will be necessary if the economy of Trinidad and Tobago is to make a successful transition to a structure that does not depend on petroleum as its single source of growth and output. A key consideration is the expansion of non-petroleum exports. Policies conducive to this goal include improving the efficiency of domestic industry, abolition of the "negative list" and possible adjustment to the

effective exchange rate facing Trinidadian manufacturers. Equally important are policies to moderate the rapid increase in real per capita consumption. As the economy has moved from the rapid 8% per annum of the past decade to a situation of relative stagnation, consumption expectations should be directed towards average rates that are fairly modest, with the possibility that in some years there may be no growth at all. To this end increases in the collection of taxes on imports, the increases of tax collections on goods and services, and the elimination of a major part of consumer subsidies, particularly where such subsidies appear as transfers from the central Government budget to the state enterprises, are measures that need to be taken. Finally, the exercise of restraint on wage increases in the public sector, and hopefully on the rest of the economy as well, will not only serve to restrain consumption, but in addition will have a significant impact, in conjunction with the fiscal measures already mentioned, on the viability of the Government budget.

Creditworthiness

xxxix. Trinidad and Tobago has always been a very creditworthy borrower. Its past performance has been characterized by sound, conservative management. Ratios of external debt service to exports have always been considerably below 10% while the ratio of debt outstanding to GDP, now at the end of the petroleum boom, stands at 15%. The recent fall in export earnings and thus in revenues to the Government has presented the country with a fiscal problem of significant proportions as the momentum of oil generated expenditure both on subsidies as well as capital investment has still to run its course. The mission's projections outline the magnitude of the problem and indicate that unless significant corrective action is taken, the fiscal situation could quickly spill over into the balance of payments causing within a few years an external debt burden of unmanageable proportions. Such action should include the elimination of subsidies, both direct and those extended through state corporation deficits, and the winding down of the investment program, with the completion of both, heavy industry and infrastructure projects. The subsidy program arose from the desire to alleviate poverty, this it has done, but its chief beneficiaries are the middle class; better targetting could eliminate this fiscal burden. The heavy industry program was designed to provide a non-petroleum source of export earnings and this it will do, but what is currently in place needs to be properly digested and profitably producing before additional expenditures are made. Immediate fiscal action is also needed to improve the revenue base, specifically in the area of indirect taxation.

xl. Provided a fiscal package of this nature, capable of keeping the overall deficit (excluding debt amortization) within 5% of GDP, is put in place, and provided that the Government of Trinidad and Tobago maintains its past record of prudent financial policies, the country should be able to avoid serious balance of payments problems, and should be able also to keep the debt service ratio between 10 and 15%, and should remain creditworthy for all types of borrowing.

I. RECENT ECONOMIC DEVELOPMENTS AND ISSUES

Economic Trends and Structural Changes, 1970-80

Macroeconomic Developments

1. The oil price hike in 1974 had a dramatic effect on economic performance in the 1970's--the economy grew faster, fiscal and monetary performance strengthened and although large gains were seen in consumption, there was an even higher increase in investment. Real GDP in Trinidad and Tobago rose at an average annual rate of nearly 8% in the latter half of the decade, compared to only 3% in the first half. Although revenues from petroleum fueled much of the economic growth, the sector was not a source of increased production. Real value added in petroleum exploration and production peaked in 1974, but thereafter declined at a trend rate of 3%. The contribution of refining to real GDP has declined since the beginning of the decade except for a brief resurgence in 1976. Thus the petroleum sector's (excluding natural gas and petrochemical products) share in real GDP (1970 prices) fell from nearly 20% in 1970 to 10% by 1980. In contrast, in nominal terms the petroleum sector currently accounts for about 40% of GDP.

2. The main sources of real growth for the Trinidad and Tobago economy during the decade were construction, manufacturing and services. Value added in construction increased at an average annual rate of 11% during the decade, reflecting primarily the Government's expanded investment and the boom in residential construction. The manufacturing sector expanded rapidly after 1973, growing at an average annual rate of nearly 9%, led by an increase in the production of assembly type industries and other goods for domestic consumption. The two service sectors of finance, insurance and real estate, and transport, storage and communications grew at annual average rates in excess of 10% during the latter half of the decade. Real value added in electricity and water increased by over 60% between 1975 and 1980. In contrast to the growth shown in most of the non-petroleum sectors, agricultural value added stagnated in the early part of the decade and then declined every year after 1976.

3. Since the mid-1970s the country's medium-term development strategy has emphasized the promotion of capital-intensive, energy-based industry, utilizing the country's natural gas resources and diversifying its economic base. However, because most of these investments, primarily in petrochemicals, cement, and iron and steel, are just now coming on stream, there has been no significant change in economic structure. In 1980 the petrochemical sector accounted for barely over 1% of real GDP. The significant development in economic structure has been the decline in the share of the productive sectors in the economy (petroleum production and refining, manufacturing and agriculture) from 37% of GDP in 1970 to 25% in 1980. On the other hand, the share of construction and services (excluding government) has expanded from 55% at the beginning of the decade to 68% by 1980.

4. The level of real consumption in Trinidad and Tobago more than doubled during the 1970's from the average of \$1.3 billion (1970 TT\$) during 1970-73. Consumption increased at an annual average rate of 8.6%,

outstripping growth in GDP. Since 1975 consumption expenditures measured in constant terms frequently exceeded real GDP as the country consumed part of its terms of trade gain from higher oil prices.

5. Expenditures on fixed investment rose significantly in real terms during the second half of the decade (1974-1979) at a trend growth rate of 16% a year. Fixed investment increased every year after 1974 up to 1980 when it declined by 11%. Gross National Savings rose sharply after 1973 and since then has averaged about 35% of GNP. It exceeded investment expenditures every year after 1973 except for 1979.

Central Government Operations

6. The increase in the price of petroleum significantly improved the fiscal performance of Trinidad and Tobago during the decade. Prior to 1974 the current account registered either a deficit or a small surplus. Over the period 1974-79 the current account surplus averaged 18% of GDP. In 1980 the surplus reached TT\$3.8 billion, nearly a quarter of GDP. The overall balance on central government budgetary operations also strengthened significantly after 1973, showing a surplus every year but 1979, although it has fluctuated because of the lumpiness of capital outlays. The overall balance was again in surplus in 1980, reaching TT\$314 million or 1.8% of GDP.

Special Funds

7. After the jump in revenue from petroleum in 1974 the Government created Special Funds for Long-Term Development, presently numbering 47 to reserve and at the same time sterilize the surplus resources until the development program was drawn up and expanded. About 58% of the drawdowns from the Special Funds appear in the Consolidated Central Government budget as capital formation. Expenditures from the Long-Term Funds are also used to acquire the assets of companies and for net lending to public enterprises. Annual appropriations to the Long-Term Development Funds have tended to increase during the decade, rising from an average of slightly under TT\$500 million a year in the period 1974-76, to TT\$1.3 billion a year between 1977 and 1979, and to slightly over \$2 billion a year in 1980. In total, during the period 1974-80, TT\$7.5 billion was appropriated to the Special Funds, representing 55% of the Central Government's revenue from petroleum. Up until 1979 the annual expenditures from the Special Funds fell short of annual appropriations by a large margin. The surpluses were held as deposits in the Central Bank, earning interest which accrued to each respective Special Fund. In 1979 expenditure from the Special Funds was nearly equal to the appropriation plus the additional income, primarily interest earned on outstanding balances. In 1980, a surplus of TT\$252 million was registered. At the end of 1981 the outstanding balances in the Special Funds stood at approximately \$2.8 billion.

Current Expenditures

8. Current expenditures of the Central Government increased at a rapid rate throughout most of the decade. Between 1973 and 1976 the annual average increase was 40%. After a drop in current expenditures in 1977, growth again resumed at the lower average of 32% over the next three

years. Growth in the wages and salaries component of current expenditures has fluctuated depending on the timing of wage increases with an average annual increase of 23% between 1972 and 1980. In 1980 wages and salaries represented 40% of current expenditures, down from 50% in 1977. After averaging under TT\$50 million during the middle of the decade, interest payments rose to TT\$125 million in 1979 and 1980. However, they still account for only 5% of current expenditures. In 1980 subsidies and transfers accounted for 36% of current expenditures up sharply from the share of roughly a quarter for the previous 3 years. During that time transfers and subsidies more than tripled, rising from TT\$267 million in 1977 to TT\$943 million in 1980.

9. The largest component of this category is subsidies, 90% of which are for agricultural production, food and cement. These subsidy payments which are made by either the Ministry of Agriculture, Lands and Food Production or the Ministry of Industry and Consumer Affairs, have increased from TT\$5 million in 1973 to about TT\$55 million in 1976-77, and to nearly TT\$300 million in 1980. In 1980 the largest subsidy payments were for sugar (TT\$96 million), cement (TT\$59 million), poultry feed (TT\$34 million) and flour (TT\$33 million). As a share of current expenditures the subsidies increased from 5.4% of current expenditures in 1977 to 8.6% in 1979 before rising sharply to 12% in 1980.

Revenue

10. Central Government revenue growth has been dominated by changes in the tax receipts from the petroleum sector. Petroleum sector revenue rose sharply from TT\$122 million in 1973 to TT\$4.1 billion in 1980, increasing every year but 1978. Total revenue nearly tripled in 1974 rising from TT\$490 million to TT\$1.4 billion because of higher production, higher price and changes in the tax system to increase the Government's take per barrel of crude. During the period 1974-1977 revenues grew at an average annual rate of 28%. In 1978 revenues stagnated, but then doubled from TT\$3.1 billion to TT\$6.4 billion over the next two years. As a share of GDP, total revenues jumped from under 20% at the beginning of the decade to average 35% between 1974 and 1979. In 1980 the share rose to 41%. Receipts from the petroleum sector accounted for 61% of total revenues in 1981, only marginally less than the peak of 69% in 1974-75.

11. Non-petroleum tax revenue dropped to 8% of GDP in 1974; during 1978-1980 the share stood at slightly over 11%. Between 1974 and 1980 non-petroleum tax revenues grew at an average rate of 30% in spite of several measures taken by the Government during the period to reduce taxes including higher tax allowances, rebates and lower purchase taxes. Income taxes on companies and individuals and levies on international trade (almost exclusively import duties) all increased at an average annual rate of 30% or slightly more between 1974 and 1980, while taxes on goods and services rose by only 16% a year. Non-tax revenue, primarily the interest which the Government earns on its surplus deposits and the Central Bank's earnings on foreign exchange reserves, rose at an average annual rate of 47% between 1974 and 1980. It accounted for an average of 9% of total Central Government revenue during that period.

Capital Expenditures

12. Capital expenditures expanded even more during the decade than current expenditures, the former growing at an average annual rate of 46% between 1972 and 1980. During the period 1977-1980 capital spending represented about half of total spending, up from about 20% in the earlier part of the decade. The structural change is equally striking, expressed as a share of GDP; the share of central government capital expenditures tripled from about 6% the first half of the decade to nearly 18% in 1980.

13. Capital expenditures in Trinidad and Tobago are made up of three distinct kinds of outlays: the acquisition of assets of companies by the Government, transfers and net lending to the rest of the public sector and capital formation by the central government. The acquisition of assets generally accounted for less than 15% of capital expenditures, but in three years during the decade this component exceeded a 30% share. The largest expenditures were to acquire the assets of the Trinidad and Tobago Oil Company (TRINTOC), the Iron and Steel Company of Trinidad and Tobago (ISCOTT) and the Water and Sewerage Authority (WASA). In 1979 and 1980 slightly over TT\$200 million was spent to acquire assets.

14. Transfers and net lending to the rest of the public sector increased its relative share in capital expenditures sharply after 1978 to reach 23% by 1980. Transfers and net lending to the public sector were equal to 8% of GDP in 1980 and totaled over TT\$1 billion. In general, these expenditures represent Central Government financing of the investment of other enterprises but some actually are used to cover operating losses, for example, the TT\$318 million lent to CARONI, the Government-owned sugar company, between 1977 and 1980. In addition, the sum of the operating deficits of the five public utilities (the Water and Sewerage Authority, the Electricity Commission, the Public Transport Service Corporation, the Port Authority, and the Telephone Company) has risen from TT\$158 million in 1977 to TT\$394 million in 1980, 2.5% of GDP. The losses of the utilities and the Central Government's transfers to them reflect the Government's policy since the mid-1970's of freezing the tariff structure of the major utilities and similar public service companies which it wholly owns.

15. Capital formation by the central government doubled in 1975 to TT\$189 million. After a slight drop in 1976 it grew at an average annual rate of 68% through the end of the decade. During 1978-1980 capital formation accounted for about a quarter of total capital spending compared to 15% in 1975. Central Government capital formation accounted for slightly over 8% of GDP in 1980 compared to an average of less than 3% during the period 1972-76.

16. Because the Government of Trinidad and Tobago does not prepare a public sector investment program, including total project cost and phasing, it is difficult to analyze what the distribution of capital spending has been. However, an estimate has been made on the basis of the outlays on major projects from the Special Funds for Long-Term Development during 1980-81, which totaled \$3.4 billion. The largest category of expenditures was for transportation, over TT\$1 billion, which accounted for roughly a

third of the total during the two year period. Outlays for road construction and rehabilitation amounted to TT\$575 million, 17% of the capital expenditures. Purchase of airplanes was the other large component in transportation. Expenditures on the energy-based or heavy industry projects also represented about 17% of capital outlays, with the iron and steel company accounting for the largest share during this period. Nearly 10% of capital spending was in the "other" category, primarily the construction of Government buildings. Roughly 9% of expenditures each went for both water and sewerage projects and housing. Other large projects included the flare gas project, expansion of electricity generation, transmission and distribution, and expansion of the telephone system.

17. Over the period, 1980-81 the Government expended TT\$646 million on directly productive projects in agriculture, fisheries and industry, about a fifth of the total. Economic infrastructure (energy, power, transportation and communications) accounted for TT\$1.6 billion, roughly half of total expenditures. Projects in health, water and sewerage, and education, which make up social infrastructure, totaled TT\$731 million, just over a fifth of capital outlays. The strong impetus which the Government is giving to the construction sector in the country is illustrated by the fact that nearly 50% of the capital expenditures from the Special Funds in 1980-81, roughly TT\$1.7 billion represents construction activities. This figure does not include the energy-based and heavy industry projects or the energy projects because although construction is a component, there are large expenditures on machinery and iron and steel manufactures.

Public Sector Investment

18. The present balances in the Special Funds for Long-Term Development insure that the Government will still account for a significant share of capital formation even as tax revenue from petroleum declines. Efficient management of these resources and coherent planning of expenditures will be critical. However, given the rapid increase in public investment, it is not surprising that difficulties have arisen in the management of these expenditures. As a result, significant cost overruns and delays have become common, even in the Government's important projects to establish energy-based or heavy industry.

19. The deficiencies in the management and implementation of the public sector investment program begin at the stage of project preparation in the ministries. As a result of the lack in recent years of a constraint on financial resources, projects are not ranked by the ministries in their proposals. Serious estimates are not made of project costs and benefits nor are projections made on the likely phasing of expenditures and physical works. No breakdown is made in the project costs between capital and recurrent expenditures. Adequate descriptions of the project are not given.

20. The approval process for projects does not appear to be well-defined. A number of projects which have not been approved by Cabinet are being implemented, while, at the same time, some projects which were approved as long as five years ago are still to be carried out. The Finance Advisory Committee, which should provide the technical analysis and

evaluation necessary for a Cabinet decision on a project, does not receive sufficient information or enough time to carry out its functions properly. After project implementation has begun, both the disbursements and physical progress need to be monitored carefully; however, this is not normally the case. Where allocations came from the Special Funds, there is little or no control. The Ministry of Finance and Planning does not receive enough sufficient, timely information to be able to monitor effectively project implementation. In addition, since not enough data is given to the Ministry of Finance and Planning at the time of project formulation, it is difficult for the ministry staff to interpret what information they do receive. Because the Project Analysis Unit, which has responsibility for projects which are internally funded, has been separated from the office which disburses the budget allocations, it has no leverage over the ministries in requesting information on projects. While information and monitoring is somewhat better for projects which receive some external financing, overall project management is generally weak. Even in some of the large energy intensive projects, there is evidence of a lack of forward planning for administration, personnel requirements and training programs after commissioning. Government-to-government projects have posed a special problem for evaluation and monitoring. Often, adequate analysis of alternative technologies or organizations has not been carried out. Frequently, final cost estimates were not given, making it impossible to budget or monitor the project.

21. The net effect of these deficiencies is that it is impossible to ascertain what is happening in the public sector investment program on a project-by-project basis or to forecast expenditures for on-going projects. The actual level and distribution of public capital expenditures are not known until after the fact. This means that the Government cannot determine if the program of capital expenditures is supporting its sectoral priorities and general economic policy objectives.

22. The Government has recognized these problems and already has taken some preliminary measures to improve management of the public sector investment program. The priorities now are, first, to prepare an inventory of large (over TT\$50 million total cost) projects, complete with phasing estimates. A high level commitment must be given to this task so that Ministry of Finance and Planning officials can obtain the information needed from the various ministries and public sector enterprises. Second, there should be a Ministry of Finance and Planning representative on the task force for each new project. This is probably the easiest way to insure proper monitoring of projects. Once a proper inventory has been compiled, work should begin on setting up formats and procedures for project evaluation and monitoring by the Ministry of Finance. The formulation of a well-articulated public sector investment program and development of methods to evaluate and monitor it are critical. Proper management of public sector capital expenditures will be increasingly important as the Government's financial resources become scarcer.

Balance of Payments

23. The balance of payments of Trinidad and Tobago is dominated by exports of petroleum and the main factor behind the changes in the balance of payments position has been oil price trends. The value of exports

stagnated during the early part of the decade, but then increased at an annual average rate of 35% between 1973 and 1980. Exports accounted for about a quarter of GDP at the beginning of the decade, then jumped to 45% in 1974. In 1980 they accounted for nearly 40% of GDP. Receipts from crude and refined petroleum products rose at an average annual rate of 38% during the decade while non-petroleum export value increased at an average annual rate of 11%. As a result, Trinidad and Tobago's exports became less diversified during the decade; petroleum's share in total export value rose from an average of 69% in 1970-74, to 82% in 1975-79 and to barely under 90% in 1980-81. The volume of exports of crude petroleum and refined products increased at a trend growth rate of 7.6% between 1970 and 1978. Exports peaked in the latter year at just under 80 million barrels. Since then export volume has declined, dropping to about 66 million barrels by 1980.

24. Trends in the export of petrochemicals (primarily manufactured fertilizers, ammonium compounds and tar oils) generally have reflected the gradual installation of new capacity as some of Trinidad and Tobago's energy-based industrial projects have come on stream. In 1978 receipts from petrochemical exports increased by 36% when Tringen, an ammonia plant jointly owned by the Government and W.R. Grace's subsidiary in Trinidad, Federation Chemicals, began operations. Receipts continued to expand by 33% in the period 1978-1980 as Tringen reached full capacity. By 1980 the value of petrochemicals equalled about \$100 million, accounting for 4% of total export receipts.

25. After a period of stagnation between 1970-73, agricultural exports, including food and beverages, peaked in 1975 when the price of sugar was at a record high. Sugar remains the most important agricultural export of Trinidad and Tobago. Since then the value of agricultural exports has declined at a trend rate of 7% a year, reflecting the general deterioration in the production of Trinidad's traditional export crops. In 1980, receipts from agricultural exports accounted for 3% of the total value of exports.

26. Manufactured exports went through three distinct phases in the decade of the 1970's. After expanding at an annual average growth rate of over 20% between 1970 and 1975, the value of manufactured exports dropped by 25% in 1976 and stagnated for the following two years. The drop is at least partially explained by the imposition of import restrictions by several Caricom countries, a major market for Trinidad's manufactures. In 1979 exports of manufactures increased in value by 70%, followed by a 50% rise in 1980. The main reason for the increase was the growth in chemicals such as industrial gases, paints, pharmaceuticals, cosmetics and household chemicals. In 1980, the category of miscellaneous chemicals accounted for about 40% of the value of manufactured exports. Other products showing increased export value in the latter half of the decade were paper, textiles and miscellaneous exports classified chiefly by material. On the other hand, export receipts from clothing and footwear declined after 1975.

27. Import payments in the 1970's rose every year except for 1973, expanding at a trend growth rate of 19% in current prices and 14% in constant terms. Their share in GDP, however, dropped after the 1973 oil price hike raised the nominal value of GDP, to average 13% for the rest of

the decade. Growth of consumer goods imports was 16% a year in current terms, but only half that much in constant terms. The most important item in the consumer goods category is food. Until 1977 the increase in the nominal value of food imports resulted primarily from higher prices. However, during the period 1977-1980 the volume of food imports rose at an average annual rate of 14%. The volume of other consumer goods, on the other hand, increased at an annual average of nearly 30% between 1976 and 1980. Imports of durables jumped in 1975, primarily because of motor vehicles, both C.K.D. and assembled, and tended to increase in value during the rest of the decade.

28. Import payments for raw and intermediate goods rose at an average annual rate of 22% a year in current prices, and at an annual trend rate of 13% a year in constant terms. Reflecting the construction boom in the economy, imports of construction materials expanded by an average annual rate of over 40% a year between 1975 and 1980. The value of steel imports tripled in 1975; and in general averaged about \$90 million a year thereafter. The share of raw and intermediate goods in total imports peaked at 47% during 1974-75 but during the rest of the decade was stable at about 40%.

29. The value of capital goods imports rose by a trend rate of 21% a year in constant terms. Their share in total imports fluctuated because of the lumpiness of the Government's large energy-based investments. Capital goods accounted for between 19% and 32% of total import value between 1970 and 1978 before rising to 37% in 1979-80. Metal manufactures is the most important product in the capital goods category.

30. Although the balance on the non-factor services accounts fluctuates, Trinidad ran a significant surplus because of the payments for oil processing, the steady increase in tourism receipts since 1973 and proceeds from transportation services. The widening in the surplus on transportation since 1978 reflects mainly higher receipts from the sale of bunkers and stores to foreign ships. Inflows from interest income, primarily the interest on the reserves of the Central Bank which are held abroad, rose from \$19 million in 1975 to \$162 million in 1980. Interest payments have remained at a relatively low level, although they did rise significantly in 1979 and 1980 to \$60 million and \$70 million, respectively, compared to an average of \$20 million in 1974-1978. Other investment income, primarily the profit remittances of oil companies rose to \$283 million in 1974, then dropped to somewhat lower levels over the next four years, before rising to \$354 million in 1979 and \$506 million in 1980. Transfer payments have risen from \$17 million in 1974 to \$66 million in 1980. Although official aid to states in the Caricom region has risen in recent years, private transfers account for about two-thirds of total transfers.

31. Trinidad and Tobago's current account position in the balance of payments closely reflected oil price developments. The current account ran a deficit in the first four years of the decade but moved into a surplus averaging slightly under \$300 million in 1974-75, about 13% of GDP. The surplus shrunk after 1975 until a small deficit was recorded in 1979. The increase in oil prices in late 1979 resulted in a current account surplus of \$335 million in 1980, 5% of GDP.

32. The largest component of private capital flows is direct investment, a large part of which is reinvestment of profits by oil companies. Although private investment inflows have fluctuated, they have tended to increase through the decade. Since 1978 private foreign investment has increased steadily from \$127 million to \$203 million in 1980. However, foreign capital has become a less important component of gross domestic investment. In the first half of the decade foreign direct investment accounted for nearly a third of gross domestic investment while in the second half of the decade the share averaged only 13%.

33. Official borrowing was very small up until 1977. In that year official drawings equalled \$157 million, more than the sum of drawdowns in the previous six years. Although Trinidad and Tobago ran a substantial current account surplus that year, the Government undertook the borrowing to establish the country as a borrower in the international capital markets and to increase reserves in preparation for future financing needs for the energy-based projects. Official drawings dropped to \$112 million in 1978 and to about half that amount the following year before rising sharply to \$232 million in 1980. Because of their strong oil-based current account performance and generally positive capital inflows, Trinidad and Tobago has added to its stock of international reserves every year since 1974, on average about \$380 million annually. At the end of 1980, net international reserves totaled US\$2.6 billion, equivalent to 16 months of imports. Debt service has been relatively low during the decade, representing less than 3% of exports of goods and non-factor services every year except 1980 when it reached 6%.

Economic Performance in 1981

34. Preliminary estimates indicate that growth in real GDP slowed to 4.3% in 1981. The main reason for the slowdown was a decline in oil production of 11%, compared to an average annual decrease of 3.8% in 1978-80. Throughput in Trinidad refineries, which process substantial amounts of Middle Eastern crude for the US market dropped by nearly 20% in 1981 with the slump in US imports of residual fuel. Natural gas production declined slightly from the 1980 level, primarily because of conservation measures. Although the nonpetroleum sector expanded by slightly over 7%, this growth was also lower than the annual average of 8.6% recorded during the previous 3-year period and was expenditure-led as output of both the agriculture and manufacturing sectors fell. In the case of agriculture, 1981 was the fifth consecutive year of decline, whereas for manufacturing the fall was in sharp contrast to an average annual expansion of 7% between 1978 and 1980. The only sources of growth in the economy were construction, transport and other services, particularly finance, insurance and real estate. In spite of the slowdown in economic growth in 1981, consumption expanded by 6.7%, a result of high levels of employment, of wage increases that continue to outstrip productivity and of consumer subsidies.

35. After two successive years of acceleration, inflation, as measured by the consumer price index, fell to 14.3% in 1981. The main reasons for the decline were a slowdown in price increases for imports because of the general moderation in international inflation and the effects of a more restrictive monetary policy which the Central Bank began to implement in late 1979.

36. Exports of crude and petroleum products accounted for about 84% of total merchandise exports in 1981, although the volume of crude exports declined further in 1981 to 44 million barrels. The value of petroleum exports dropped marginally in 1981 to US\$2.2 billion. Exports of the major agricultural products (sugar, coffee, cocoa, citrus) which have declined in value every year since 1977 except 1979 (when the price of sugar was high) fell by 4% because of lower receipts from sugar and coffee. Exports of manufactured goods (excluding petrochemicals) increased in value by 23%, to US\$137 million. However, nearly all the rise was accounted for by miscellaneous chemicals, while other products stagnated. There was an increase in exports of manufactured metal corresponding to the opening of ISCOTT, the iron and steel company. Exports from the petroleum-based industries (primarily fertilizers and ammonium compounds) dropped by 9% in 1981 because of an industrial dispute at a major chemical plant. Overall domestic exports (excluding re-exports) declined by 1% in 1981 after growing at an average annual rate of 32% between 1977 and 1980. The value of imports in current prices increased at an annual average rate of nearly 27% between 1977 and 1980, but declined marginally in 1981. The main reasons for the decrease were a slight slowdown in the growth of consumption expenditures, the fall in manufacturing production and the completion of two large industrial projects.

37. The surplus on nonfactor services declined in 1981 after its doubling in 1980 from its 1978-79 value of about US\$120 million. Sales of stores and bunkers to foreign ships declined somewhat because of lower petroleum exports. Tourist receipts were down because of the economic recession in Trinidad's major markets and travel expenses by Trinidadians were up. A marginal decline in investment income is estimated for 1981 primarily because of the lower volume of petroleum exports and stagnation in prices. Outflows of transfer payments rose by 33% primarily because of an increase in private transfers, reflecting the increased remittances of foreign workers. The current account surplus declined marginally in 1981 to US\$303 million, 4.3% of GDP.

38. On the capital account, preliminary figures show a rebound in private investment inflows in 1981, chiefly because of an increase in direct investment from US\$203 million in 1980 to US\$283 million in 1981. The net inflow of official capital has declined since 1977; the preliminary estimate for 1981 is a net outflow because of an increase in net lending. In 1980 US\$600 million was added to international reserves and the gain was only marginally less in 1981. At the end of 1981, the value of gross official international reserves was US\$3.2 billion, equivalent to 20 months of imports.

Economic Development Issues

Role of Hydrocarbons and Prospects for the Sector

39. Crude oil production peaked in Trinidad and Tobago in 1977-78 at an annual level of about 84 million barrels. Since then production has declined at an annual rate of about 6% a year; the 1981 level of crude oil production was 69 million barrels. The Government of Trinidad and Tobago recognizes that the decline in both production and revenue from petroleum is likely to continue and that economic growth and financial resources will

have to come from other sources. Several factors will influence the exact trend of future petroleum production including the performance of secondary recovery projects both in progress and planned, the speed and number of installations of new production platforms and possible new discoveries in the present oil exploration program. The Government recently increased the tax concession for petroleum exploration in order to promote more activity by the oil companies. The median scenario prepared by the Ministry of Energy and Mines projects an annual average decline in petroleum production of 5% between 1981 and 1984, stagnation at about 61 million barrels during 1985-87 and then a continuation of the drop at an annual rate of 8% after 1987.

40. A factor which affects the exportable surplus of crude oil is the future growth of domestic demand, which is dependent on the pricing policy of the Government. At the present time, motor gasoline, gas oil, and kerosene are heavily subsidized. The cost of the gasoline subsidy alone to the Government in terms of income tax revenue foregone has nearly quadrupled from TT\$44 million in 1977 to TT\$167 million in 1981 with particularly sharp rises in the last two years.^{1/} These products account for 76% of the internal demand for petroleum products. The annual average increase in internal demand for petroleum products between 1971 and 1981 was about 6%; a similar growth can be expected in the 1980s if domestic pricing policies are not changed. On the other hand, if prices of the subsidized products gradually were raised to their opportunity cost by 1984, then the growth in internal demand could be less. The impact of this change is clear. Under the median scenario described above the exportable surplus of crude petroleum would decline to 52.6 million barrels in 1987 if pricing policy does not change; if prices are raised, the exportable surplus in 1987 would be marginally higher at 53.3 million, compared to the export level of 1981 of 63 million barrels. By 1990 the exportable surplus under the former scenario would be 38 million barrels; under the latter it would be 4% higher, bringing in an additional US\$100 million in export receipts. However, even with domestic conservation, nominal earnings from petroleum will, in 1990, be only US\$2.7 billion compared to about US\$3 billion in 1981. For an economy that has depended on petroleum as its engine of growth, substantial structural change will be necessary in order to avoid stagnation in the 1980s. While a significant start has been made with the establishment of energy-based industries, significant changes are required in the incentives in agriculture and nonpetroleum industry, in the nature and forms of the subsidy system and in the area of wages and productivity if the economy is to survive the difficult period ahead.

Sources of Growth

41. There is wide recognition in the Government that the major challenge facing the economy is the adjustment to the likelihood of lower revenue from the petroleum sector because of both continued declines in

^{1/} The cost of the subsidy on gasoline is shared by the oil companies and the Government. The companies are permitted to count the full cost of the subsidy as a production cost. Since the combined corporate tax rate is 50%, it effectively results in foregone revenue by the Government in an amount equal to half the subsidy. The remaining half is borne by the companies.

production and softer prices for oil in international markets. A drop in petroleum revenue will have a significant impact on the fiscal and external accounts and correspondingly, on government policy in these two areas. The implications of the drop in petroleum revenue and the effects of different policy options are examined in the final chapter of the report. The drop in petroleum revenue also will have a fundamental effect on economic growth in Trinidad and Tobago. Although the real value added in petroleum production and refining had not increased since 1976, petroleum revenue has fueled much of the economic growth which the economy has enjoyed since 1974, through increased consumer spending, higher public investment, particularly in the area of construction, and oil related services.

42. This pattern of growth is not a secure base for future economic expansion because government expenditures have been the main force behind the growth of the non-oil economy. In the last five years, public sector projects have accounted for as much as four-fifths of construction activity. However, government expenditures are unlikely to be able to increase at the same pace through the 1980s, given the projected decline in petroleum revenue and the completion of most of the large investment projects. In addition, the construction sector continues to be beset with problems of insufficient supply of domestic inputs and skilled labor; both will constrain its future growth. In order for economic growth to continue in the future, so as to avoid a significant drop in living standards within the country, the sources of expansion must be broadened, particularly in the goods-producing and private sectors. The slowdown in economic growth in 1981 is one indication that the previous pattern of growth is no longer sufficient. At least in the near term, the Government must examine the potential for growth in output and exports in the traditional productive sectors of agriculture and light manufacturing. In addition, since 1974 the Government has developed several large non-traditional industrial projects some of which are completed and others of which are under construction. These are energy-intensive enterprises and include petrochemicals, an iron and steel plant and a cement factory. Two other projects which may be considered are an aluminum smelter and a liquified natural gas facility. This sector is also a potential source of increased output, exports and revenue for the Government.

43. If the Government is to promote economic activity in the two traditional productive sectors of agriculture and manufacturing, the incentive structure which presently exists in both areas becomes critical. The budgetary effects of the Government's subsidies and price controls, which were intended to insure that the benefits of higher oil prices reached all segments of the population, already has been pointed out. However, these programs have also had a fundamental impact on the incentives for production in both the agricultural and manufacturing sectors. The present orientation of the economy is one which encourages consumption, not production.

44. The amount of consumer subsidies in the economy has more than tripled between 1978 and 1981. Considering only the most important--food and cement subsidies administered by the Ministry of Industry and Commerce, the petroleum subsidy (measured as income tax foregone) and Central Government transfers to cover the operating losses of the public utilities--the amount rose from TT\$264 million in 1978, 3% of GDP, to more

than TT\$860 million in 1981, slightly over 5% of GDP. In recent years this consumption boom has been financed by the windfall gains from the sale of petroleum. With Trinidad's petroleum output on the decline and with a very soft world market, the economy cannot afford to continue on the same path. Structural adjustments, which will be difficult for all parts of the Trinidad and Tobago economy, must be undertaken in the near future.

45. The chapters on agriculture and manufacturing not only look at recent trends in the sector, but also examine the incentive structure and recommend some policies to promote growth and in some cases, at least to lower the drain on the Government's financial resources. The chapter on heavy industry evaluates the Government's major energy-intensive projects both completed and under construction and makes some preliminary estimates on production, exports and potential profitability. The final chapter makes some projections for the economy assuming a gradual decline in petroleum revenue and based on different policy actions.

II. AGRICULTURE

A. Recent Trends

46. The contribution of agriculture to GDP in real terms was flat from the mid-1960s to 1971. In 1972 a peak was reached of \$107.5 million in 1970 prices (Table 1). The drought of 1973 and the immediate ensuing years severely affected output, which did not recover until 1975-76. Thereafter, however, a significant deterioration occurred totaling 22% from 1976 to 1981, an average negative annual rate of almost 5%. The decline was concentrated in sugar, which fell from a nearly 50% share of agricultural GDP in 1970-74 to only 36% by 1981. The value added of non-sugar export crops also declined at a trend rate of 2% during 1976-81.

47. The agricultural sector has lost labor both in absolute and relative terms over the past decade. The number of agricultural workers declined from 79,000 in 1969 to 45,000 by the end of the decade; and the corresponding share of the total labor force fell from 22% to 10%.

B. Current Agricultural Policies

48. Recent measures taken in response to the deterioration of the agricultural sector have been directed to several objectives, not all compatible.

- (a) Replanting and rehabilitation programs have been adopted, particularly in the traditional export tree crops, with the goal of raising output.
- (b) Input subsidies, designed to provide incentives to increase agricultural output, also have been introduced. However, in some cases, the subsidy has been passed forward to the consumer through price controls.
- (c) Imports of foods and agricultural inputs are controlled in order to create and maintain domestic production incentives.
- (d) There are price controls at strategic points in the marketing chain for basic foodstuffs to insure that market imperfections will not inhibit the passing on of subsidies to consumers.

Table 1

Contribution of the Agricultural Sector to GDP

(In millions of TT dollars at 1970 prices)

	<u>Total</u>	<u>Sugar</u>	<u>Non-Sugar Exports</u>	<u>Domestic Products</u>
1970 - 74 avr.	99.9	48.5	10.6	40.8
1975 - 79 avr.	<u>94.9</u>	<u>41.6</u>	<u>9.6</u>	<u>43.7</u>
1970	99.0	52.2	12.9	34.9
1971	96.4	47.6	10.8	38.0
1972	107.5	53.1	11.9	42.5
1973	97.9	44.7	8.6	44.6
1974	98.5	45.8	8.7	44.0
1975	100.6	41.8	12.3	46.5
1976	101.5	51.9	9.0	40.6
1977	94.9	41.3	8.4	45.2
1978	89.9	36.6	9.4	43.9
1979	87.7	36.5	8.8	42.4
1980	81.1	32.9	7.9	40.3
1981	79.0	28.2	8.5	42.3

Source: Central Statistical Office

White Paper

49. The Government analyzed the fundamental issues in the agricultural sector in a White Paper published in December 1978. The objectives of agricultural policy as stated in the document were to reduce the share of imports in food consumption; to raise productivity and incomes in agriculture; to increase output of traditional export crops; to develop nontraditional export products; and to establish a system which would ensure fair prices for producers and reasonable prices for consumers. The implementation strategy outlined by the White Paper was a rationalization and extension of land in production, including the provision of basic infrastructure and institutional support (extension, credit and marketing), export promotion, a dynamic agroindustrial program, coordination of research with development activity, and an upgrading of education and training levels.

50. The White Paper proposed to coordinate the functions of the Ministry of Agriculture, Lands and Food Production (MALFP) and the Agricultural Development Bank (ADB) and recommended the creation of a new institution, the Food and Agriculture Corporation (FAC). As outlined in the White Paper, MALFP was to be responsible for policy formulation and coordination, in addition to its traditional functions. The ADB would provide financing for the sector, while the FAC would implement agricultural policy. The work of the three agencies was to be coordinated by a committee consisting of representatives of farmer organizations and other relevant groups, in addition to the three participating agencies. The White Paper also recommended that institutional support for agriculture be decentralized through a network of Regional Agricultural Complexes.

51. However, the important components of the institutional framework recommended in the White Paper have not been put in place. The actual role of the FAC, for example, is quite different from the intent of the White Paper. FAC has not been established as a statutory body but as a private limited liability company under the Ministry of State Enterprises and clearly is groping for a role to play. Given the limited number of nine officers which its board has approved (only three have been appointed) this role will be restricted. Currently the FAC operates as a promotional body for specific projects and as a resource agency to provide advice to existing organizations. These are important functions and the FAC may make significant contributions to the agricultural promotion and development effort, but it does not at this point occupy the focal position outlined in the White Paper.

C. Agricultural Incentives

52. The incentive system for agriculture in Trinidad and Tobago is complex. Included are subsidies on agricultural inputs and production, price controls and supports and import restrictions. The three main institutions which implement the policies are the Ministry of Agriculture, Lands and Food Production (MALFP), the Ministry of Industry, Commerce and Consumer Affairs (MICCA) and the Central Marketing Agency (CMA).

53. The expenditures on subsidies for agricultural inputs and production administered by MALFP during the period 1976-81 are given in Table 2. The main thrust of the subsidies is to promote production through incentives to producers. The bulk of the subsidies has been concentrated in land preparation (28% of the total for the period 1976-81). An increase in the subsidy per gallon paid for milk accounts for the larger share of milk production subsidies in 1981 compared to previous years. MICCA payments for subsidies are given in Table 3 and include input subsidies on feed. Payments for these subsidies much exceed those administered by MALFP and increased dramatically between 1978 and 1980. (Note: In the 1983 budget subsidies for basic food items and poultry and livestock feed were reduced significantly.)

Table 2. Trinidad and Tobago - Payments on Subsidies Administered by the Ministry of Agriculture, Lands and Food Production

(In millions of TT dollars)

	1976	1977	1978	1979	1980	1981
Land Preparation	0.62	0.75	1.39	2.00	2.73	2.46
Soil Conservation	0.01	0.01	0.01	0.03	0.03	0.02
Pasture Establishment	0.04	0.04	0.03	0.04	0.03	0.02
Orchard Establishment	0.07	0.05	0.07	0.05	0.06	0.05
Coffee Rehabilitation	0.33	0.20	0.24	0.20	0.16	0.15
Water Control	0.04	0.08	0.13	0.24	0.35	0.33
Livestock Housing	0.07	0.04	0.07	0.07	0.08	0.07
Fertilizer <u>a/</u>	0.82	2.02	0.21	0.59	1.64	1.02
Spraying Equipment & Chemicals <u>b/</u>	0.49	0.12	0.20	0.69	0.94	0.95
Equipment (machinery)	-	-	1.16	1.71	0.83	0.93
Milk	0.52	0.50	0.51	0.55	0.48	5.34
Fishing Boats	-	-	-	<u>0.15</u>	<u>0.35</u>	-
Total	3.01	3.81	4.02	6.32	7.68	11.34

a/ Includes lime.

b/ Spraying equipment, chemicals, froghopper control, aerolate leafspot control, cocoa blackpod control.

Source: Submission to Task Force on Subsidies.

Table 3: Payments on Food Subsidies Administered by the Ministry of Industry, Commerce and Consumer Affairs

(In millions of TT dollars)

	1976	1977	1978	1979	1980	1981
Rice	18.2	7.1	10.3	11.9	19.4	18.5
Flour (Bakers)	0.7	1.1	1.3	1.3	1.0	0.9
Other Flour	19.5	9.9	8.1	15.2	32.4	31.7
Cooking Oil	-	2.0	2.4	2.7	3.6	3.7
Copra	1.0	1.5	2.3	1.7	4.4	7.2
Poultry Meat	1.4	5.8	6.5	6.4	5.4	7.4
CMA Poultry Imports	-	-	-	1.6	-	-
Onions	0.4	-	-	-	-	-
Poultry Feed	9.0	13.9	16.2	23.4	34.0	38.1
Hatching Eggs:						
Imported	0.7	1.2	3.4	4.0	9.7	10.1
Local	-	-	-	-	0.3	0.2
Livestock Feed	-	-	8.1	14.7	21.8	32.7
Local Breeder Farm	-	-	0.1	0.6	1.0	2.1
Butter	-	-	-	0.3	-	-
Sugar:						
Imported	-	-	2.4	2.4	17.1	26.4
Local	-	-	-	55.0	79.1	78.9
Total	50.9	42.5	61.1	131.2	229.1	257.9
Share of GDP (%)	0.8	0.5	0.7	1.1	1.5	1.5

Source: Submission to Task Force on Subsidies.

54. Under MICCA's statutory authority to control imports, almost all locally produced foods have been placed on a "Negative List" (NL) and thus require an import license. In practice, such imports are banned, except when there is a shortage, when licensing is relaxed. In addition, all import license applications are referred to MALFP before any action is taken. The Central Marketing Agency can import domestically produced products under MALFP direction when shortages arise.

55. Price control policy is closely related to the subsidy program. Its thrust is to ensure that subsidies are passed down to the consumer level, recognizing that the small size of the market and its imperfections might otherwise prevent this from happening. There are price controls on most basic foods at both the wholesale and retail levels, including some essential imported foods on which there are no subsidies.

56. The current maximum price list covers cereals and cereal products, oils and fats, dairy products, sugar, poultry and some meat products, potatoes, peas, beans and tea. The most important commodities which do not have price controls include locally produced and imported chilled beef, pork, eggs and fluid milk. Exotic or luxury items, such as chocolates and imported bakery products are also uncontrolled.

Agricultural Price Supports and the CMA

57. The Central Marketing Agency (CMA) which operates under the general direction of MALFP is required to purchase all produce offered to it from a list of 22 domestically produced food commodities. The commodities included are green vegetables, pulses (peas and beans), root crops, plantains, pineapple and paddy. The guaranteed prices are authorized by Cabinet on the recommendation of MALFP, which determines these prices on the basis of cost of production estimates. Some estimates use the subsidized production or input costs, while others do not take the subsidy into account. A return to the producer, currently 15% on the investment cost, is added on. The important point, however, is that these guaranteed prices have not been revised since June 1979 and thus are below current market prices. In effect, the guaranteed price scheme is only a bail-out mechanism in the case of a glut. The CMA has the power to trade outside the guaranteed prices but does not do so.

Appraisal of the Price Control-Subsidy-Guaranteed Price System

58. Total MALFP subsidies in 1981, was \$11.3 million, compared to \$257.9 million in MICCA subsidies. MICCA subsidies, which directly benefit the consumer, equalled \$167.5 million, 65% of total MICCA subsidies. As poultry prices are controlled from the producer to the retail level and the price to the producer is calculated on the basis of his costs, which include feed costs net of the subsidy, that subsidy of \$34.0 million is passed on to the consumer indirectly. In addition, small amounts of other MALFP subsidies are passed on to the consumer and some remaining MICCA subsidies aid agroindustry, not the farmer. Thus, the maximum incentive expenditure directed to agricultural output is less than a quarter of the total subsidy bill, not a significantly large amount for the sector.

59. About \$45.7 million of the remaining producer subsidies goes to livestock production. This has been sufficient to increase output so that the country is nearly self-sufficient in pork, poultry meat and table eggs. The residual of no more than \$20.0 million is the maximum subsidy to the crop sector of agriculture. When the almost total ineffectiveness of the guaranteed price system is also considered, it is clear that public policy is not giving an effective stimulus to the crop sector.

60. A final problem with subsidies and price controls is the delays in making adjustments within an inflationary situation. This has already been pointed out for CMA guaranteed prices, but it is also true in other cases. MICCA, for instance, often does not change its controlled prices on its own initiative but waits until complaints are sufficiently strong to force some adjustment. Delay in adjusting the price has discouraged production in some cases. The production of hogs has not kept pace with consumption; in 1978 output fell to 79.5% of consumption compared to 96.2% in 1977. In the case of milk, the percentage of consumption met by local production was 5.3% in 1978 as compared to 10.6% in 1975. In both these cases there has been a considerable delay in upward adjustments in prices. The net effect is another benefit for the consumer because the deficiency is made up by cheaper imports.

Credit

61. Most credit to agriculture is provided by the Agricultural Development Bank (ADB) at subsidized rates, 3% for small farmers and 6.5% for other borrowers. The total amount of loans approved has increased rapidly over the past seven years, though there was a reduction in 1981 to \$75 million from \$85 million in 1980. In 1982 it is expected that \$100 million will be approved and \$75 million disbursed. ADB is the source for 95% of the loans to the agricultural sector; other sources--commercial banks and cooperatives--are of minor importance. Included in this volume of credit is lending to agroindustry, including timber extraction, sawmilling and fisheries.

62. ADB management believes that the supply of credit is adequate for current production. However, there is widespread criticism of delays and difficulties in getting ADB loans, which may indicate that some credit requirements remain unsatisfied. The bank has a significant problem with arrears, which total about 20% of outstanding loans.

D. Outlook for Traditional Export Crops

63. Trinidadian agriculture was founded on production for export of tropical crops, primarily sugarcane, followed later by tree crops: cocoa and coconuts (copra), and finally coffee, citrus and bananas. This system worked well up to the end of the second decade of the current century when indentured labor ended, halting the supply of cheap workers. Thereafter, a series of events gradually undermined the technical and economic bases of the traditional sugar and tree crop industries.

- (a) The discovery of petroleum and natural gas in the 1920s and their growing exploitation thereafter provided an alternative to export agriculture and helped gradually to found an industrial-urban base for the main island. This proved to be an irresistible attraction to the rural population and the labor force because of relatively high wage scales and social amenities, particularly in the postwar era. A high-wage, scarce labor situation has gradually appeared in the rural sector.
- (b) Diseases and pests began to affect the traditional export crops, resulting in reduced yields and higher costs. Despite continued efforts to find adequate control measures and several rehabilitation programs, these problems have not been overcome successfully.
- (c) New sources of supply on international markets have generally been lower in cost than in Trinidad and more amenable to technological and organizational improvement. The effect has been a downtrend in world prices in real terms with which Trinidad has had increasing difficulty competing. The result has been a gradual but inexorable decline in the volume of exports of these commodities.

Sugar

64. As a result of low and declining yields of sugarcane (now 23 tons per acre) and sucrose content, a rising proportion of fixed costs (from 48% in 1975 to 61% in 1982), high wages and fringe benefits (which grew as a share of total costs from 44% in 1975 to 57% in 1982), company costs of production have increased rapidly in recent years. In 1975 total costs per ton of raw sugar were TT\$653, excluding finance charges. For 1982 the estimate is TT\$4,353. This compares with current revenues of TT\$914 per ton on exports (mainly to the UK) and TT\$450 per ton on domestically consumed sugar. Since revenues do not cover variable costs, the Government has had to subsidize the industry at ever higher levels. One subsidy is paid on sugar sold in the domestic market (currently fixed at .24TT/lb. for washed greys) and another is paid to cover the loss on sugar exports. Beginning in 1977 the sugar subsidy was TT\$25.5 million; in 1982 it is estimated at TT\$121.1 million. In addition, since 1976, Caroni has recorded losses even after receipt of the price subsidy. Up through June 1980 the Government contributed nearly TT\$120 million to help cover the company's losses.

65. As is the case in most of the West Indies, it seems evident that no amount of technical and managerial improvement can not make the industry viable over the long run. Although there is a consensus within the Government that Trinidad gradually should get out of sugar, no decision has been made yet on the disposition of the industry. Current thinking is to reduce operations to the level of an estimated future domestic consumption of 70,000 tons (current domestic disposal is about 56,000 tons). Under this scenario, the two companies would cease cane cultivation and buy all cane from independent producers, whose costs are lower. The two smaller mills would be shut down and the two larger ones (total capacity 138,000 tons of sugar) would be kept in operation. However, the main reasons for

continuing operations at a reduced level--to preserve technical skills and produce molasses for the distillery--seem weak. It is highly unlikely that the industry will long continue and molasses could be imported from Guyana. Given the high level of fixed costs, currently an average of about 60% for all mills, production costs per ton will be high with the two mills operating at only 50% capacity. Moreover, all the sugar would now be sold at low domestic retail prices. Rough cost/revenue calculations show that unless the domestic price of sugar were raised above the current free market price of TT\$500/ton, an annual subsidy of between TT\$140-190 million would still be required for the lower production level.

66. A reduction in operations to 70,000 tons could be supported, as the first phase in eventual elimination of the industry, on the grounds that a gradual reduction in the labor force would avoid some of the large social costs of unemployment and that the transfer of land released from cane production into other uses will take time. This is particularly so because there is no obvious alternative use for the redundant land, apart from pasture, which would yield sharply reduced returns per acre. The outcome as to how and when to reduce operations, however, will likely turn on the extent to which subsidies can be reduced.

Tree Crops

67. A substantial amount of money has gone into replanting and rehabilitation programs and research for tree crops over an extensive period, particularly for cocoa, in an attempt to halt the long-term deterioration in their output. These programs have not achieved their objectives.

Cocoa

68. Cocoa reached its peak production of 30,000 tons in 1921; in 1975 output, measured by deliveries to principle exporters, was 5,240 tons and in 1981, 3,145 tons. In 1930 the area under the crop was estimated at 100,000 ha and the average yield 275 kg/ha; the current estimates vary from 30,000 to 40,000 ha and the yield is under 100 kg/ha. The Witches Broom disease appeared in 1928 and cocoa wilt in the late 1950s and early 1960s. Because of a labor shortage, many estates have been abandoned. The Cocoa Rehabilitation Scheme ceased operations in 1968; in 1979 a National Rehabilitation Programme was adopted.

69. The area under copra reached a peak in 1940 when 23,000 ha were cultivated. After 1960, output declined as a result of red ring and cedros wilt diseases, lower yields and rising costs of production. At present there are about 12,000 ha under coconut cultivation of which about 8,000 ha are controlled by the major growers. Copra production was 11,800 tons in 1973, but dropped to 4,417 tons by 1980. This fall was not entirely due to lower yields and abandonment because the demand for green coconuts, as a beverage, has grown sharply. A considerable volume of nuts is being diverted to this more lucrative market. The decline in copra production is likely to continue in spite of a subsidy of 60.5 TT cents per pound.

70. As a result of these factors Trinidad is no longer self-sufficient in oil and fats. Copra has long ceased to be an export and domestically produced coconut oil is now being mixed with ever increasing quantities of imported vegetable oil. In addition, edible cooking oil is imported in finished form.

71. The rise in coffee production coincided with the decline of cocoa after 1930. The robusta variety was grown mixed with cocoa because it was used to replace dead cocoa trees. When this method of production proved harmful to cocoa and was expensive to pick, pure stands were introduced. Production reached a maximum level of 76,500 bags (4,590 tons) in 1968, but output has since declined to the 1981 level of 2,433 tons. Exports also have dropped sharply. In 1970-71 a Coffee Rehabilitation Plan introduced a package of recommended practices. The program was unsuccessful; only 4% of growers knew about it and under 10% adopted the recommended measures completely.

72. Oranges, grapefruit and limes were established during the past 50 years. In 1959-60 about 40,000 tons of grapefruit and 20,000 tons of oranges were picked. By 1970 production had declined to about 13,000 tons for each crop. The latest estimates, which consist of deliveries to principal packers, show a decline from 8,780 tons for grapefruit and 6,236 tons for oranges in 1976 to 4,049 and 2,616 tons respectively in 1980, an overall reduction of 30% in 1981. Most orange juice sold in Trinidad uses frozen concentrate imported from Belize. Exports of whole fruit have dwindled to relatively small quantities. Lime production is small compared with grapefruit and oranges but has followed a similar trend. It is essentially an export crop. Today the citrus industry is plagued by viruses and nematode attacks which have lowered yields. A complete replanting would be necessary followed by a waiting period of several years before the trees mature.

73. In view of the decline in output over a long period it is difficult to be optimistic about any of these tree crops. The trees are old and low in yield. High costs and uncertain returns inhibit vigorous replanting, given the waiting period entailed. The absence of an ample supply of labor for harvesting and high wages means that often a large percentage of fruit remains on the trees. The failure of the several attempts at rehabilitation bodes ill for future efforts.

74. Periodically, suggestions appear that new crops and products may have a potential for the export market--condiments, mangoes, jams and jellies, pineapple, avocado, winter vegetables, etc. The difficulty is that other tropical areas around the Caribbean, which do not possess, to the same degree, Trinidad's disadvantages of poor soils and high wage rates are also potential producers and exporters. There are no obvious candidates which present opportunities for the immediate future.

E. Outlook for Domestic Agriculture

75. Historically, most agricultural infrastructure was oriented towards the traditional tree crops and sugar. Appropriate marketing and financing systems were established for these export crops. This, however, was not the case for the food crops required to sustain the relatively

large rural and small urban population. Both technology and economics favored the import rather than the production of food. The value of food imports more than quadrupled during the 1970s from US\$52 million in 1970 to US\$203 million in 1980, an annual trend growth of 16%. Local food production largely was restricted to small-scale, gardening-type agriculture based on tropical, starchy root crops and green vegetables. Most were consumed locally where produced: the organized food marketing and financial system centered on the internal distribution of imported food.

76. The 1978 White Paper on Agriculture presented targets for increased production. The broad policy was to raise output by the amount of expected increases in domestic consumption between 1978 and 1990 with two exceptions. It was not believed that the necessary increase in output could be achieved for cereals and dairy products due to technical constraints and the lack of the necessary resource inputs, particularly land.

Cereals and Grains

77. Wheat cannot be grown in Trinidad and corn and soybeans are questionable as there has been no proper testing, except for seed purposes, where costs were uneconomically high. Production of corn and soybeans would have to be mechanized, which requires the utilization of relatively flat land. The only potentially available land is that which is now under sugarcane in the north, but which is far more likely to become housing developments in suburban Port-of-Spain. In view of the lack of experience with grain crops and the difficulties with mechanization, the attainment of even the very low targets for these crops is questionable.

78. Paddy is grown in a few areas with suitable water supplies, but production is low. Most rice is imported; MICCA imports bulk rice, subsidizes it and sells to distributors below cost, thus subsidizing both the Guyanese rice farmers and the Trinidadian consumer. Packaged rice may be imported under license but, as in the case of bulk rice, is subject to price controls. The only current plan for expanded paddy production is a pilot project to be conducted by Caroni in the Caroni-Guayamare Rivers' area. Here 1,800 acres is believed suitable but will require pumps to take off excess water in the wet season. Drainage and irrigation is expensive and is economic only for high value crops where water control equipment can be used intensively. Any rice produced is likely to cost more than imports and will require subsidization. A second crop is almost mandatory but there is insufficient water in the rivers which can be pumped onto the land in the dry season. Vegetables are a high value alternative to paddy in the dry season but the resulting increased level of output is believed to be sufficient to flood these markets. Cereals production, such as feed corn, would be costly on irrigated land. Paddy production in a two-crop regime or in combination with some alternative crop is thus questionable.

Roots and Starches

79. These crops such as dasheen, eddoes, tannia, sweet potatoes, and yams, are suitable for local conditions and traditionally have been pro-

duced for direct consumption. Because the methods of production are labor intensive, current market prices are high, particularly compared with CMA guaranteed prices. Even the new recommended guaranteed prices for 1982 are far below the average annual farm prices for 1980. Although the new CMA guaranteed prices include a 20% return on investment to the farmer, labor seems to have been costed too low and in any instance agricultural labor is scarce. Thus, even the relatively high market prices will not be sufficient to produce the quantities needed to satisfy local demand. Thus there could be a need for mechanization, using small and light equipment.

Vegetables

80. A wide variety of vegetables are grown in Trinidad, supplying about 75% of domestic requirements. Production is generally small-scale and labor-intensive. Apart from the cost and scarcity of labor, the big problems are water control (flooding in the rainy season and lack of clean water for irrigation in the dry season), larceny and inadequate quality control. However, the control of disease and pests is improving with the use of hand spraying equipment and some irrigation is being introduced. Better water control measures and light mechanization in field operations could be introduced if the scale of farm operations and capitalization were increased. The problem of adequate harvest labor will likely remain a constraint.

81. It is estimated that the area under cultivation of domestic food crops would have to be raised significantly in order to meet the targets for higher local production. In spite of possible tenure and acquisition problems, there is potentially enough land available from redundant sugar land, run-down and partially abandoned tree crop estates and swamps, the latter would require drainage. Nevertheless, it would be difficult to expand production. A large portion of the land is not suitable for cultivation; there are management and technical problems associated with cereals and soybean production; mechanization of farm operations poses difficulties; the current farm labor shortage is likely to persist; and water control remains a problem.

Poultry and Livestock Products

Poultry

82. Most of the poultry industry in Trinidad is vertically integrated with contract farmers producing live chickens under supply and marketing agreements with processors. Processors, in turn, are linked both to feed manufacturers and large retail broiler outlets. In 1964 about 80% of the birds were sold live; in 1979 the 7 major processing plants handled 50% of the broilers.

83. Producers receive a subsidy on birds delivered to the processing plants of 7.5 TT cents per lb. The processing plant, in turn, is subsidized to the extent of 13.94 TT cents per lb., both subsidies being paid by MICCA. The industry also receives some MALFP subsidies, MICCA feed subsidies, low rates of interest on ADB loans, and duty remissions on breeder flocks and hatching eggs.

84. In exchange for these benefits, the industry operates under price controls at each stage of operations, which are set by MICCA in conjunction with MALFP. This system seems to have been profitable for the industry in view of the high rates of growth in output from 7.5 million pounds in 1961, when imports amounted to 10 million pounds, to 22.8 million in 1965 (imports totaled 1 million pounds) and to about 70 million pounds in 1978. Per capita consumption has also risen sharply from 15.1 pounds in 1972 to 24.3 million in 1976. The contract-processing sector, for which regular output data is available, shows an increase in output from 5,903 tons in 1975 to 16,353 in 1981. The country is now practically self-sufficient in production. However, given the high degree of subsidization of the industry, the increased production carries with it a high cost. The subsidy on poultry, including meat, feed and hatching eggs, has risen steadily from TT\$11 million in 1976 to TT\$56 million in 1981.

Livestock

85. Pigs are raised largely by independent farmers; 20% to 30% of the pork supply is provided by the State Lands Department Project (SLDP), but this source is believed to be declining as a percentage of total output. There are a few large private producers with integrated operations including marketing. There is no system of standard grading on the basis of outturn and quality. There are four processing plants; the largest, the Government-owned Trinidad and Tobago Meat Processors Ltd., has a capacity of 40 to 50 hogs per day. It is currently being examined by FAC to institute improvements.

86. CMA influences the market by purchasing at a guaranteed price on the basis of cost of production, except when there is scarcity, and by buying SLDP animals. The guaranteed price is currently TT\$4.97 per kg live-weight (TT\$2.25 per pound), up from TT\$1.27 per pound in 1981. This price includes a 20% risk and contingency factor and a 20% return to management. Considering the risks involved in pig raising, the profit is largely restricted to the 20% return on management. The main difficulty with the guaranteed price is the slowness of adjustment to increased costs. Apart from the CMA guaranteed floor price, there are no price controls on hogs or pork, wholesale or retail. The industry benefits from feed and MALFP input subsidies.

87. Total pork availability has remained fairly steady at about 2,900 tons. It is difficult to measure accurately local production because official statistics do not include meat processed in private abattoirs. However, imports have tended to increase, particularly in 1980, which together with the constant level of pork availability, implies a decline in local production. The recent increase in the CMA guaranteed price should bring production up to at least 1976-79 output levels which would satisfy about 90% of total consumption in the absence of a dramatic increase in demand. Self-sufficiency is not expected because of the demand for special imported products.

88. The beef cattle industry in Trinidad is very limited; less than a third of the estimated cattle population of 31,000 head is raised primarily for beef. Given the value of the land and its scarcity, the cost of grass-fed cattle is too high to compete with beef from Australia and New Zealand.

Accordingly, the marketing structure of the industry is not well organized. The method of purchase and sale is similar to that for hogs and thus does not encourage quality improvement. The demand for high grade beef, which is essentially special cuts, is met by imports.

89. There are no price supports or controls on beef cattle. Subsidies are available for pasture improvement, etc., but these are used largely by the dairy industry. Moreover, as practically no feed supplements are given to beef cattle, the subsidies have little or no effect. The main stimulus to output will likely come from male dairy calves, should milk production expand. There was a significant increase in local production of beef and veal in 1979 and 1980. Accordingly, the share of beef and veal in the total supply of red meat increased from 34% in 1976-77 to 48% in 1979-80. There is increasing interest in water buffalo in Trinidad as a meat animal. The island probably has the largest number of these animals in the Caribbean area. The water buffalo is more resistant or immune to the tropical diseases which plague temperate zone cattle, does well on pasture and outgains cattle in putting on weight.

90. A substantial increase in beef output is unlikely in view of the land constraint, unless no better alternative than pasture can be found for redundant sugar land. The proposal to cut and stall-feed sugarcane for beef raising is not promising, unless costs of producing sugarcane can be lowered substantially and mechanical harvesting problems can be overcome. For the foreseeable future it is unlikely that the proportion of total beef and veal consumption locally produced will rise above the 25% level.

91. Trinidad Food Products Ltd. (Nestle) purchases the bulk of the milk marketed. A few other firms produce pasteurized fresh milk on a small scale. Nestle started operations in 1962, largely on the basis of converting imported milk powder into sweetened condensed milk. At that time local production was extremely small. The firm then moved into fluid milk production using imported powder mixed with locally produced milk. Capacity was expanded in the 1970s to handle the rapidly expanding output of SLDP milk; a peak was reached in 1972 of 10.3 million liters of which SLDP contributed 69%. The drought of 1973 adversely affected production for a considerable time. By 1980 production had declined to 5.5 million liters of which SLDP production represented 60%. Production from all sources has thus declined, but SLDP output by more than the rest. This continued decline was largely due to slowness in adjusting farm milk prices. The milk price has now been raised from TT\$3.00 to TT\$5.95 per imperial gallon which includes a subsidy of TT\$2.67 per gallon. This should be ample to encourage an increase in production, at least for the time being. There is plenty of scope for increased production. The industry in 1978 was 95% dependent upon imported milk on a converted fluid milk basis.

F. Conclusions and Policy Recommendations

92. The negative annual rate of growth of 5% in agriculture's real contribution to GDP is a matter of serious concern. The pull of the strong non-agricultural sectors on the agricultural labor force and potential managerial and capital resources plus capital deterioration, particularly in tree crops, have all adversely affected output. The injections of public sector resources, particularly subsidies, have not stemmed the

decline because most subsidies have gone to the livestock sector; promotion of crop production largely has been neglected. CMA guaranteed price supports usually have been ineffective because they are far below average market prices. Finally, agricultural incentives, including price controls, price supports and subsidies, have not been adjusted in a timely fashion to reflect domestic inflation. Outstanding examples are hogs and milk; in spite of declines in production, stemming back two years or more, prices have been raised only in the current year.

93. It is likely that future production and exports of traditional tree crops will continue to fall gradually, assuming a general decline in the age and yield of current stands with no effective replanting. In the case of sugar, the outlook depends on what decision the Government makes concerning the industry, but it is likely that production and exports will decrease.

94. In the case of food crops for domestic consumption, output expansion should keep pace with increases in demand. Under the present system, however, it is unlikely that surpluses to substitute for imports will be produced. First, costs of production are high for the labor-intensive crops and, second, there is no effective marketing or processing system. A third factor is the need for irrigation to increase output in the dry season. Irrigation, however, is expensive and will call for higher prices and credit availability.

95. The stimulative effects of government policies largely have been effective in the livestock products and poultry sector. However, the programs which produced a rapid expansion in the 1960s and early 1970s now appear to have been blunted, as stagnation and even decline has occurred in some sub-sectors. In addition, the subsidies to support this sector are becoming more costly, amounting to nearly TT\$100 million in 1981. A relatively small increase in hogs could bring back a situation close to self-sufficiency but there is a large gap to be filled through increased production in milk due to the low level of output compared with the level of consumption. Increases in milk production, like expanded beef production, are dependent upon the availability of pasture land. Although pasture must compete with other land uses, the technical difficulties of using redundant sugar land for alternative activities could make its use for grazing a viable alternative. The problems for maize and soybean are mechanization of field operations, given the very heavy rainfall in the growing season; water supply; and effective control over tropical diseases and pests. Since there has been no testing of large-scale mechanization of these crops in Trinidad, it would be foolhardy to embark upon an extensive program to expand these crops at the present time. The conclusion is that for the immediate future the feed import bill will increase. There have been suggestions that local products, such as root crops, may be used to substitute for imported maize. This is feasible from an animal nutritional standpoint. The problem is that these root crops will have to be produced cheaply on a large scale. Again it is necessary to mechanize, but adequate testing has not been carried out. The best chance of success is an emphasis on milk and beef production through the expansion of the area under pasture. The potential for import substitution is extensive, but technical problems also exist because an adequate supply of feed nutrients could be required in the dry season, if full exploitation of wet season

pasture is to occur. Proposals have been made to use a combination of pasture in the wet season and mechanical cutting and stall feeding of sugarcane in the dry season. The immediate question is whether sugarcane can be grown cheaply enough to be utilized for feed.

96. In summary, given the present institutional setup in the public sector, the immediate outlook for agriculture would appear as follows:

- (a) Production for export--sugar and tree crops--will decline, precipitously, if the decision is made to get out of export sugar.
- (b) Production of domestic food crops--vegetables, root crops, bananas and plantains--will increase in line with local demand but will not make significant inroads into imports.
- (c) Production of poultry and eggs will increase at a rate which will maintain self-sufficiency. Hogs and milk should increase to make up the losses suffered in the last few years.
- (d) The production of cereals--rice, wheat, maize--and soybeans is not likely to develop to any significant extent until technical production problems are tested and resolved. Hence imports of rice, wheat, wheat products and feed will continue.
- (e) Prospects are better for an increase in milk and beef production through pasture expansion. There is substantial scope here but, again, there are unresolved technical production problems.

Recommendations for Policy

97. The situation outlined above has been apparent to public authorities, informed private associations and individuals for some time. Evidence of this is found in the White Paper on Agriculture and recent publications of private and public sector groups. However, few new ideas are being suggested to improve the situation in the agricultural sector. In addition, it would be impossible for the public sector to carry out many of the recommendations given the lack of human and financial resources. Finally, little thought is being given to providing incentives for individual producers to expand output.

98. The mission makes the following recommendations:

- (a) Scarce resources should not be used to revive the traditional export crops. In particular, a decision on the gradual elimination of sugar production needs to be made promptly. Any new export possibilities should be left for the private sector to develop.
- (b) A mechanized pilot project for the production of feedstuffs, including rootcrops, should be established in order to test the feasibility of import substitution.

- (c) A system of realistic guaranteed producer prices gradually should substitute for the current system of subsidies and price controls for domestic food crops and livestock products. Improved and more extensive marketing facilities and perhaps a more active role for the CMA would be required to meet the goal of not only providing for current market requirements, but also to produce surpluses to substitute for imports.

III. HEAVY INDUSTRY

A. Energy-Based Industries

Natural Gas Resources and Industrial Strategy

99. The first large dry gas deposit was discovered in the 1940s in south-western Trinidad. Gas production in significant quantities began in the late 1950s, serving the Federation Chemical (Fedchem) fertilizer complex, followed by use in a large scale gas-fired power generating plant. Trinidad's substantial reserves were first identified with an offshore discovery to the southeast of Trinidad in the late 1960s; other major fields have been found since off the southeastern, eastern and northern coasts of the country. Trinidad's proven reserves of gas now amount to 10.5 trillion CF; the likely recoverable reserves are estimated to be about 18 trillion CF, after adding discounted reserves classified as probable and possible. The Government of Trinidad and Tobago (GOTT) has determined that natural gas-based industries will have a key role in the national development program. During the 1970s GOTT accepted various proposals to develop energy-based projects as joint ventures, with foreign interests providing the necessary technology and operational and marketing support. Two ammonia facilities are operational (Tringen and Fertrin), an iron and steel project is partially operational (ISCOTT), and a methanol plant and a urea plant are under construction. Several additional projects are still in the planning stage, including the export of liquefied natural gas (LNG), methanol/methyl tertiary butyl ether (MTBE), and an aluminum smelter. These facilities are, or are planned to be, located at the Point Lisas Industrial Estate (PLIE), where Fedchem, a wholly owned subsidiary of W.R. Grace, produces ammonia and urea from natural gas.

100. The production of oil associated and dry unassociated gas has increased from 330 million CFD in 1970 to 530 million CFD (including about 100 million CFD used in oil and gas field production) in 1980. The present level of consumption is estimated to be about 350 million CFD, including fuel used in refining, power generation, cement, miscellaneous small activities, the fertilizer sector and ISCOTT, the latter not yet operating at full capacity. The remaining production is vented as surplus without use. In 1981 the Government began to construct compression facilities in areas where gas was being flared in sufficiently large quantities in order to bring the gas ashore. As a result of the flare gas project, the amount of gas production vented without use dropped by nearly 20% in the first half of 1982 compared to the same period in the previous year. A shortage of gas developed in early 1982, when demand increased because of the coming on stream of both Fertrin and ISCOTT. Although the flare gas project had been planned to add some supply, AMOCO had taken some wells out of service for maintenance while lowering the production of associated gas from their fields. In addition, a new, relatively small pipeline (accounting for 5 million CFD) had to be shut down because of the appearance of extraneous material in the gas.

101. Consumption is projected to increase to around 500 million CFD by 1986, including full capacity requirements for the Fertrin, ISCOTT, methanol and urea facilities. In preparation, the existing gas supply from eastern offshore fields (about 250 million CFD of dry and oil-associated

gas), transmitted by a single 24-inch pipeline to shore and then across country to the western coast, is now being boosted by recovered flare-gas collected at two recently installed platforms, increasing in volume by about 100 million CFD. In addition, a 30-inch pipeline gas transmission project to bring 300 million CFD of dry gas to shore from a southeastern field should be completed by mid-1983. The capacity of the two lines should be sufficient for the needs of existing and presently planned facilities which consume gas. An export LNG project would, however, require two new 30-inch pipeline systems to gather gas from untapped fields to the north and to the southeast of Trinidad for transmission to liquefaction facilities at PLIE.

102. Since 1979 the National Energy Corporation (NEC) has been responsible for the development of energy-based projects, including those planned and under construction. NEC, through the National Gas Company (NGC) also has sole responsibility for the purchase, sale, transmission and distribution of natural gas. In general, the energy-based companies are established organizations able to operate independently and NEC only coordinates and monitors. It is not yet decided if the urea and methanol projects now under construction will operate as separate companies or remain as divisions within NEC.

103. A differential pricing policy for natural gas is set out in the Government's 1981 White Paper on Natural Gas. Purchases are to be made from producers based on giving them a reasonable rate of return. Thus the price for natural gas would vary depending on the operating and economic environment of each producer. In addition, gas is sold to enterprises at different prices depending on the activity, with the objective of promoting small industry, giving a competitive advantage to exports of energy-based industries, and encouraging the use of natural gas instead of fuel oil. Although it is difficult to determine the opportunity cost of natural gas, it is probably US\$1.70/mcf (1982 prices) based on the estimated price the country could now sell export LNG for at the wellhead. New petro-chemical industries presently pay US\$0.83 per mcf, TEXACO is charged US\$1.47 per mcf and prime commercial users such as Fedchem pay US\$1.26 per mcf. The cost of gas supplied to the Trinidad and Tobago Electricity Commission (TTEC) averages about US\$0.30/mcf, reflecting the Government's stated principle that electricity usage is the most tangible direct way in which the population at large can benefit from the country's natural gas resources.

104. The policy of differential pricing raises issues which should be examined by the Government. One, although the Government may wish to sell natural gas for less than the opportunity cost, the price should cover the total costs of recovery and transmission. Two, given the heavy subsidy of TTEC's fuel costs, electricity rates can be raised to allow the Commission to cover its cost and generate an adequate return on investment while still giving the consumer power comparatively cheaply. Three, very low gas prices should be reserved for use as a temporary incentive to attract new capital to the country. Four, the Government already has recognized the problems which can arise with this pricing policy, including the waste of electricity and the choice of technologies which are not energy efficient. Five, the pricing policy will make it more difficult for the Government to maximize its revenues from natural gas and conserve the resource.

Existing Petrochemical Projects

TRINIDAD NITROGEN (TRINGEN) COMPANY, LIMITED

105. Tringen is a joint venture between GOTT (51%) and W.R. Grace & Company (49%), which produces liquified ammonia for export from a 1,200 TPD unit situated within the 200 acre fertilizer complex at Point Lisas owned and operated by Federation Chemicals (Fedchem) Ltd., a wholly owned subsidiary of Grace. In terms of indirect costs and shared facilities, Tringen bears about 30% of the total for the complex. The Company has its own 15-year contract, similar to that of Fertrin, with the National Gas Company for supply of natural gas at a basic price of US\$0.83 per million BTU.

106. In recent years Tringen has operated close to capacity, although a severe curtailment of the natural gas supply to the plant in early 1982 caused a sharp drop in production. The Company sells its production under an Ammonia Supply Contract to Grace (Aruba Chemical Industries), a take-or-pay arrangement, at a base price of US\$88/ton subject to retroactive adjustment early in the following contract calendar year according to variations in the cost of the several operating expense components, including natural gas. In addition, if the average price at which Grace sells to US customers is above or below a corridor price range of US\$100 to \$140/ton, the corresponding excess or deficit is shared equally between Tringen and Grace. Since Grace has a 49% interest in Tringen, the split in the surplus or deficit compared to the established price range is about 75% Grace and 25% Government of Trinidad and Tobago. The base price is equivalent to the costs of production plus a profit element of 18% DCF return on investment. For 1981, the adjusted base was about US\$98/ton which increased to about US\$117/ton after adjusting for the actual value of ammonia sales by Grace in the USA.

107. Tringen is a well-conceived joint venture, combining the availability of low priced natural gas and a developed site strategically located to major product market areas, with the technical operating and marketing strengths of Grace/Fedchem. From the financial information available, it appears that there were operating losses during the period of production build-up to full capacity because of the depressed market prices for ammonia and heavy debt service. A small profit was recorded in 1981. The projections for both Tringen's cost of production and ammonia prices indicate that the profitability of the company will improve taking into account its share of sales revenues in excess of US\$140/ton.

FERTILIZERS OF TRINIDAD AND TOBAGO (FERTRIN)

108. The project developed from a 1974 proposal by AMOCO to do a feasibility study for a fertilizer complex based on natural gas, producing ammonia and urea. Production of urea subsequently was dropped from the project. Fertrin was incorporated October 1977 (51% GOTT/49% AMOCO). A Technical Advisory Group under a nine member Board of Directors and a Project Execution Team (using Trinidad and Tobago nationals to the maximum extent possible) was established to supervise the engineering, procurement and construction activity of the contractors for the liquified ammonia plant (2 x 1,000 TPD units) and auxiliary facilities. AMOCO Technical

Trinidad (ATAC) supplied key expatriate personnel and about 12 Trinidad and Tobago engineers were sent to AMOCO's Houston office to work with the prime contractor. The permanent staffing is 268 (Management 7, Administrative Support 63, Operations 110, Maintenance and Materials Control 73, Technical Support 15).

109. Work in the field commenced March 1979; completion of construction was expected by mid-1981 at a total capital cost of US\$250 million. The 01 unit began commercial production in October 1981 and has since demonstrated sustained output somewhat above rated capacity. The 02 unit was completed in December but start-up was delayed owing to gas shortages and the unit, apart from a short period of production in March 1982, will remain idle until gas becomes available. The final installed plant costs are estimated to have overrun the budget by about US\$72 million (nearly 30%). The major increase was due to higher than estimated costs in the field (direct labor, supervision, equipment rentals and tools), heavy rains and labor difficulties. In addition, the Government felt that the performance of the international contractor was poor. Financing of the project was arranged as follows:

Table 4. FERTRIN Financing

	Eximbank Related		Non-Eximbank Related		Total	Financing Share
	Commercial Banks	Eximbank Direct	Commercial Banks	Pan-Canadian		
(In millions of US dollars)						
Long-term Debt	51.1	51.1	105.5	28.7	236.4	73.3
Equity					85.9	27.7
Total					322.3	100%

110. The supply of natural gas primarily will come from the AMOCO Trinidad Oil Company fields, estimated to hold 3 TCF proven by 1978. The proposed prices specified in the agreement between FERTRIN and NEC are:

	1980	1982	1984	1986	1988	1990
US\$/mBTU	0.825	0.884	0.948	1.017	1.092	1.132

111. A five-year product marketing agreement has been signed with AMOCO International Sales Company (AISC). Sales contracts negotiated by AISC will be signed by the buyers and FERTRIN, who will establish guideline prices and terms; any sales arrangements outside the guidelines must receive FERTRIN's prior approval. AISC will receive a 3% commission on the FOB Trinidad sales value. AISC will provide FERTRIN with marketing intelligence including short and long term forecasts and will train Trinidad and Tobago nationals to assume marketing responsibilities.

112. Initial market surveys in 17 countries and with 55 consumers identified buyers interested in short term (1 year) to long term (3-10 years) contracts amounting to over double the plant capacity. The expected sales distribution pattern by 1984 is UK 75,000 tons; N. Europe 100,000; and Gulf Coast 270,000; or a total of 635,000 tons. A sales contract for 200,000 TPY (for five years and renewable) already has been signed. The price scenario used for the economic forecasts was based on a weighted average FOB price of \$133/ton at start-up in 1981, thereafter escalating at 6% p.a. Subsequent updates, however, have reflected the 1979/80 world energy-price increases and the rapid rise in US natural gas prices, without taking into account the depressed market for ammonia. The latest update forecasts a 1981 FOB price of \$170/ton, escalating at 25% per annum to 1985 and 7.3% thereafter.

113. The venture seems to have been reasonably well designed to maximize the use of low-cost gas feedstock. The partner, who had operations elsewhere in the country, had the experience necessary to execute the project and manage operations. In addition, AMOCO was capable of distributing and marketing the product. Adequate provisions also have been made to train Trinidad and Tobago nationals and to provide technical assistance. Design and construction of the facility were delayed only slightly and the completed plant should meet rated capacity performance, (assuming the O2 unit runs as well as the identical O1 unit when sufficient gas is available). However, the 29% capital cost overrun and high level of debt has lowered the return expected from the project, particularly at this time of depressed market activity. Costs might have been kept in check if the experienced general contractor had been held to a fixed-price basis for construction supervision (without direct hire and training of labor) and if the construction activity had been subcontracted in lump-sum packages. Construction costs were also affected adversely by congestion and competition for labor due to the concurrent building activity at ISCOTT's iron and steel facility.

114. The partners appear to be confident in the arrangements made for selling the product. The critical issue is the present low prices. The latest prices forecast for the project seem far too high. It is more likely that the 1978 projection of about \$140/ton FOB will prevail in 1982, after which prices will firm up in line with earlier energy cost increases, at an average rate of increase of about 12% p.a. to 1990. Using those price projections and the operating expenses forecast by FERTRIN, the venture could record operating losses in the early years.

UREA PROJECT

115. In the 1970s, the Government of Trinidad and Tobago (GOTT) received joint venture proposals for the production of urea; Amoco's was the first evaluated but was deferred. The present urea project stems from a 1978 proposal by Agrico Chemical Company to use the output of one Fertrin ammonia unit to produce 1,620 TPD of granular urea on an adjacent plot within the Fertrin site. Agrico offered marketing services and assistance in commissioning and operating the plant. Their offer of 5% equity interest was abandoned on GOTT's refusal to guarantee a positive net return on equity regardless of operating profits. In the absence of a partner, GOTT decided in mid-1979 to pursue through NEC a urea project of the same

scope under its full ownership, with the assistance of Agrico for marketing the product and for providing technical assistance to develop the project to the point of an investment decision.

116. By September 1980, the following well-based selections had been made: Snamprogetti technology for producing urea melt, Nederlandse Stikstoff Mattschappij (NSM) for urea granulation technology, and Snamprogetti as general contractor on a lump sum basis for basic design, detailed engineering, procurement and supply of equipment CIF Trinidad, construction supervision and commissioning services. The initial schedule for project execution assumed the award of contract for the general contractor on January 1, 1981, followed by a 27-month execution period to mechanical completion April 1, 1983, and commencement of commercial operation July 1, 1983. However, project execution has been delayed; mechanical completion is currently scheduled for November 1983, but this will be difficult to meet. The project cost initially was estimated at US\$156 million. Because of a 20% cost overrun, compared to the initial budget, the final cost will be about US\$188 million.

117. Although the arrangements for operating the urea plant have not been finalized, the current plans are for feedstock ammonia to be transferred to the project as a direct commercial sale by Fertrin on a market price basis. Fertrin also has offered to provide an operations and maintenance organization to operate and maintain venture facilities with GOTT/NEC supplying a small monitoring staff. The O & M and management staff would be Fertrin employees integrated with Fertrin's own staff. The arrangement would also cover product handling and ship loading through common use of the pier for ammonia, urea and methanol shipments, vessels being scheduled by the marketing agency for the project. The staff for the urea project initially will be new hires taken on and trained by Fertrin, but paid by the urea venture. Their subsequent employment would be charged to the urea company at cost plus benefits, plus a management fee. A Service Agreement staff (from superintendents to operatives) totaling 83 is envisaged.

118. Principal outline terms of the proposed Sales/Distributorship Agreement (SDA) between the NEC and Agrico Overseas Company (AOCSA) and Agrico Chemical Company (ACC) are:

- (i) AOCSA has exclusive sales and distribution rights for total plant production less a limited quantity (up to 100,000 tons) that the urea company wishes to dispose of as local or government-to-government sales.
- (ii) The initial SDA life is 10 years, commencing when shipment reaches a 5,000 ton level, and is annually renewable by mutual consent.
- (iii) AOCSA pays a penalty if their failure in selling results in a curtailment of production due to high inventory levels.
- (iv) Sales basis is FOB Pt. Lisas and AOCSA is paid a 5% marketing fee.
- (v) The urea company has the right to approve terms and conditions for each AOCSA negotiated sale.

- (vi) AOCSA will provide details of market conditions and of relevant sales monthly.

119. An expected typical sales pattern (in thousand tons) is: USA/Canada 150; Brazil/Argentina/Uruguay 215; Central America 60; Ecuador/Peru/Chile 50; Caribbean 40; Suriname/Guyana/Fr. Guyana 15; giving a total of 530,000 tons (about rated capacity). AOCSA/ACC claim a well-established market base and sales development efforts in the Western Hemisphere. FOB prices forecasted are \$190/ton in S. America and \$173/ton in the USA for 1983. Unless prices sharply recover, these estimates are high compared with current delivered prices of about \$170/ton.

120. The design and execution of the facility appear to be satisfactory. The plant is integrated into the Fertrin complex. The process is used widely and the experienced general contractor was also the licensor. NEC's interests in the activity of the contractor are being handled and monitored by a Projects control team comprised of about 22 NEC staff, split into Accounting, Construction and Technical Divisions, each of about equal size. These are Trinidad and Tobago nationals with refinery/chemical industry experience; some have been through the engineering phase at the contractor's home office. A cost overrun appears to be developing in the construction activity, however, and NEC might consider bringing in specialized consultants to identify and rectify the problem as well as to monitor more closely Snamprogetti's construction management.

121. The O & M service arrangement between Fertrin and the urea company is logical given the close ties between the project and the Fertrin complex. On the other hand, the venture has to pay the costs of training new staff and it might be more beneficial for the project to have staff trained and assisted in initial operations by the general contractor, which is more experienced in urea operations and technology than Fertrin. In addition, Fertrin would benefit from a larger staff. In any event, it is essential for NEC to establish a recruitment and training program very soon.

122. NEC should also re-examine the proposed sales agreement with AGRICO, first to ascertain if a binding commitment still exists, and second, to insure that the terms offer adequate financial security for the urea company. Specific issues on the latter are AGRICO's status as an exclusive agent for sales and penalties on AGRICO for insufficient offtake. In addition, under the terms of the sales agreement, the company should be able to determine from the information provided by AOCSA that its sales benefit from placement at accounts yielding the highest price and that regional sales values achieved are not less than the average obtained by AOCSA from sales of urea from its other sources.

123. No arrangement seems to have been made between the licensor and NEC for on-going technical assistance following testing of the plant against the performance guarantees. NEC and the operator (Fertrin/AMOCO) do not have the technical expertise or experience to cope with any problems which may arise in the technology as applied in the plant. It is recommended that NEC investigate contracting with Snamprogetti for on-going technical assistance and technology exchange. This would give the urea

company and NEC rights to acquire future developments by Snamprogetti or other licensees in its technology. The licensor would also provide experienced manpower to visit the site to study and rectify problems and give home office engineering assistance.

METHANOL PROJECT

124. The Government selected Togo Engineering Company (TEC), using ICI technology, as general contractor for the methanol project. The estimated total investment for the 1,200 TPD methanol facility, assuming a 38 month period of execution and start-up in March 1984, was US\$159 million. In the early stages of execution this estimate was increased to a budget figure of about US\$170 million, due mainly to higher preoperating and start-up cost allowances. As general contractor for execution of the project with turn-key responsibility, TEC were engaged on a lump-sum basis for basic and detailed design procurement and supply of equipment CIF Trinidad, construction supervision and commissioning services. Erection and civil works are subcontracted on a reimbursable basis. Execution is proceeding satisfactorily and close to schedule with mechanical completion due in March 1984. The expected cost to complete is currently about US\$180 million. As with urea, NEC has a project team of 22 in the field to supervise and monitor the work of the general contractor.

125. Market forecasts, prepared by Chem Systems, to 1990 from a 1979 base, indicated an 8.7% annual growth rate in global demand for methanol and a deficit in supplies of about 2.8 million tons in 1990. Recent World Bank estimates for the same period are somewhat more conservative, with methanol demand growing at an average annual rate of 7.4%. However, Chem Systems overestimates the future increases in methanol supply, as compared to Bank estimates. Thus, both forecasts predict the emergence of a global supply deficit for methanol of nearly 3 million tons at the end of the 1980s. In either case the market scenario which the project is likely to face when coming on stream in 1984 is general oversupply, but with regional opportunities for export sales (e.g. USA, South America and Japan), and demand for additional capacity in the late 1980s.

126. To prepare for project entry into the methanol market, in 1980 NEC completed suitable base-load sales agreements for 7-10 years, accounting for 54-65% of the plant output, with Tenneco, URBK and Mitsui. Because of contracts to sell about half the production on a US and N.W. European CIF basis, plus about one third on the open market (probably to the same areas and to South American countries), NEC commissioned Marine Services Hamburg to carry out a feasibility study on the options for shipping methanol, which was completed in early 1981. The recommendation was for ownership of two medium sized, purpose-built methanol carriers. Based on subsequent evaluation of design and bids from ship builders, negotiations recently were completed with two companies (Japanese and Korean) on definitive terms for the supply of two 14,000 DWT ships. GOTT has chosen a shipyard and would have to authorize a commitment for construction of the ships by mid-1982 in order for the vessels to be available when the methanol plant comes on stream. Unless vessels of suitable design (for handling high purity methanol without cleaning delays) can be obtained more economically on long-term charter, ownership of purpose-built carriers is appropriate for the project in view of its large

long-term sales commitments and the likelihood of generally constant voyages. In order to minimize costs, the shipping organization should be able to find opportunities for trans-Atlantic back-haul cargoes and for freight rationalization deals (swapping).

127. NEC's economic projections for the project (32% DCF after tax rate of return on investment) were based on the lowest of two methanol pricing scenarios forecast by Chem Systems, which predicted current prices at US\$266,388 and 599 per ton for the US Gulf Coast in 1981, 1985 and 1990, respectively, now too optimistic. In 1981, a lower return of 25% was calculated on the basis of reduced methanol prices of US\$230, 315 and 420 per ton for the same years. These forecasts are more realistic, consistent with a current 1982 price of about US\$240 per ton, and they fall within the range of prices projected for 1985 and 1990 in recent World Bank estimates.

128. For exports to the USA, the economic projections correctly include methanol duties of 18% ad valorem after the present duty-free situation under the GSP of the 1974 Trade Act expires in 1984. No special treatment is known to become available to Trinidad although the preferences program could be extended by the U.S. Congress. Also, presently duties are not levied on direct fuel applications. However, the value or volume of the proposed CIF sales to the USA might exceed ceiling limits imposed to safeguard U.S. industry and thereby be subject to duty. Duties are not taken into account for exports sales, CIF to the EEC, but it is not clear whether the waiver of the 14.2% ad valorem duty under the LOME Convention would include Trinidad. For both markets, the NEC should determine the extent of the tariff preferences, how long they are likely to continue and if imports would become subject to ceiling limitations.

129. The proposed organization to operate the project is an estimated 171 staff in the three main divisions of production (70), administration (70) and maintenance (29). Some of these positions can be filled with experienced technical and financial NEC staff from the small project execution team and the headquarters office, but the majority will have to be recruited and given specific and generally high level training. TEC earlier had proposed a limited training program at several overseas sites for seven management and foreman level production personnel, four maintenance staff and one chemist, equivalent to a total of 23 man-months. At present, however, it seems that the emphasis is on plant construction work. There is a risk that organizational and manning requirements for project start-up and operations may not be prepared adequately in the time remaining. It is essential for NEC, with the assistance of TEC to: (i) develop a comprehensive operational staffing plan, with job descriptions and skill requirements; (ii) identify key personnel and survey the availability of manpower; (iii) prepare training programs tailored to the job and skill level of recruits; and (iv) institute a staff recruitment plan of action. NEC might also explore a contractual arrangement for TEC to develop detailed training programs and schedules for an adequate number of key project staff at the recommended overseas locations and to provide on-site facilities to train lower level personnel by those trained overseas.

130. NEC does not have a contract with the licensor, ICI, for the provision of on-going technical assistance and technology exchange during

the commercial operation of the plant. Such an arrangement would be advisable since the technology is new to the country and the operation would benefit from access to the latest developments in the ICI process and their technical assistance in solving any process difficulties which arise. This would be particularly appropriate if the authorities are interested in installing further methanol production capacity in Trinidad and Tobago. In addition, the organization for the present project which is being developed does not appear to include a plant technical service group which will be required for process improvement and problem-shooting activities.

PROPOSED PETROCHEMICAL PROJECTS

METHANOL/METHYL TERTIARY BUTYL ETHER (MTBE) PROJECT

131. A proposal for the integrated production of methanol and MTBE in Trinidad has been made recently to the NEC by Davy McKee (DM), an international engineering and construction contractor experienced in both technologies. The situation is fluid at present and NEC has not given the proposal serious consideration as yet. It is proposed that the project be undertaken by Trinidad and Tobago Petrochemicals Ltd. (TTP), a joint venture company to be formed with a majority holding by GOTT and private Trinidadian investors and equity participation by DM and other foreign interests, principally oil companies. Earlier planning for a second and larger (2,000 TPD) methanol project in Trinidad between GOTT and DM had identified a leveling off in demand for traditional uses and probable overproduction in the mid-1980s until new outlets in fuel could provide substantial growth markets for methanol. Attention therefore turned to arrangements to integrate facilities into the project for producing the gasoline additive and octane improver MTBE, and its secured offtake, as a captive large-volume, high value outlet for methanol produced in Trinidad.

132. GOTT has agreed that TTP should be set up to develop the project and that DM, as partner and prime contractor, should do the necessary studies. Depending on the outcome of a feasibility study, a 2,000 TPD methanol plant initially could be established at either Point Lisas or Point Fortin (TRINTOC). The other alternative, considered economically attractive, is obtaining the 500 TPD methanol feedstock from the existing plant. Both options would produce 12,000 BPD (475,000 TPY) of MTBE. C₄ hydrocarbon requirements for MTBE production in Trinidad would have to be mostly imported as local production by TRINTOC and Texaco is insufficient. The raw material reliably available in large volume is normal butane, which is forecast to be in surplus on world markets and subject to price reduction from present levels. The project is therefore assumed to import normal butane (380,000 TPY) as co-feedstock.

133. In addition to its TTP equity participation, DM is prepared to enter into arrangements with GOTT and TTP for: (i) fixed price engineering services, license and supply of equipment and reimbursable site services, shipping and insurance; (ii) training and assistance with precommissioning activities and plant operations; (iii) setting up long-term British ECGD credits and Eurodollar loan financing for the project, a debt/equity ratio of 75/25 being suggested; (iv) locating non-Trinidadian (up to 49%

including DM) equity sources; (v) purchasing all butane requirements for supply on a long-term commitment at known pricing; and (vi) assuming product offtake responsibility for a major part (up to 60%) of the MTBE produced over a specified period at a fixed price against a reference indicator.

134. DM forecasts that world-wide demand for MTBE, selling at gasoline value plus 25%, will increase from 40,000 BPD at present to about 350,000 BPD by 1986 and to an excess of 500,000 BPD by 1990; spurred on by pressures to reduce or remove lead compounds from gasoline. They foresee a gap of at least 250,000 BPD in the mid-1980s between demand for MTBE and other octane improvers and supply. This growth in demand for MTBE is consistent with a recent World Bank review of emerging energy and chemical applications for methanol, which projects that methanol requirements for MTBE production could amount to 3 million TPY by 1990, equivalent to about 200,000 BPD of MTBE.

135. Economic projections by DM for the production of 12,000 BPD MTBE in Trinidad using methanol from the existing plant at Pt. Lisas and associated with a new 2,000 TPD methanol plant indicate DCF after tax rates of return on total investment of 27% and 26.1%, respectively. These are based on 1981 prices of US\$52.5/BBL (\$452/T) for MTBE, \$28/BBL (\$305/T) for butane and \$148/T for methanol. The prices assumed for the butane feedstock and the product MTBE are reasonable and, for the latter, consistent with the premium which can be expected over gasoline value.

136. Although a more definitive study of project costs and profitability based on accurate raw material and product pricing is required, the marketing and economic prospects for methanol conversion to MTBE appear good. Trinidad and Tobago, with an abundant supply of cheap natural gas (assumed to be valued at US\$1.50/million BTU in 1980 terms in the study, consistent with or higher than prices used in other projects underway in the country) could become a leading market force in the supply of methanol and its application in fuels. World Bank studies on methanol indicate that its conversion to MTBE is economically attractive and that the range of methanol values which can be considered for this use, depending on circumstances of plant size, capital cost and type of C₄ hydrocarbon feedstock, will generally be higher than the normal market price range for methanol.

137. However, the project would require a large quantity of butane (380,000 imports TPY) from producers in the Gulf of Mexico, the USA, the North Sea region or North Africa/Middle East. The capital and handling costs for liquified hydrocarbon gas under pressure plus shipping, reloading and storage in Trinidad would be expensive. In addition, this material would be re-exported as MTBE to market areas which may be near the C₄ sources, thereby incurring double handling charges, weakening the economic strength of the project which rests on the production of methanol from cheap natural gas.

138. The alternative of taking 500 TPD methanol from the existing 1,200 TPD plant would commit almost all of the production to captive use and take-or-pay, long-term contract sales. It is therefore appropriate for GOTT to consider the alternative of adding methanol production capacity

of 2,000 TPD, a scale towards the top end of a range now becoming the norm and giving maximum economic returns. Under this project, long-term sales contracts for the remaining production of 1,500 TPD would need to be secured. Because of this requirement and the high costs of imported butane, discussed above, it would appear economically attractive for GOTT, through TTP, to construct and/or take equity participation in MTBE manufacturing plants outside of Trinidad, contractually tied to Trinidadian export methanol. Such facilities should be located to minimize the transport cost of C₄s and to be relatively near major gasoline markets. In this context and in seeking non-Trinidadian equity participation in TTP, potential partners having access to C₄s and gasoline markets (e.g. petroleum refiners) would merit prime consideration. Such partner(s) might also take a major responsibility in the execution and operation of the foreign-based MTBE component(s) of the overall project. GOTT might also wish to consider, for equity partnership in TTP, companies already producing methanol using the same technology which require additional supplies but cannot economically expand capacity. Such a company could provide an offtake commitment for the new Trinidad plant and/or marketing services and probably, in addition, technical and operational support for the unit. Furthermore, as GOTT originally intended to implement the state-owned 1,200 TPD methanol project (being built) as a joint venture with Borden, which withdrew, it could be expedient for that project to be taken over by TTP. Its organization, operation and marketing, for which present arrangements appear inadequate apart from the sales contracted, could then be integrated with the new plant under consideration for this project. Again, operation and marketing support for the two methanol plants could be provided by equity participant(s) in TTP.

THE PROJECT TO GATHER, LIQUEFY AND EXPORT NATURAL GAS

139. The LNG project is being developed by a partnership (T&T-LNG) between GOTT/NEC (51%) and the prospective US purchasers of the product, Tenneco Inc. (24.5%) and Peoples Gas (24.5%). Work has continued on the technical feasibility study for the project since 1978 under the direction of three Project Management Teams for Technical, Financial and Legal matters, each partner having a representative on each team. Sufficient information has now been developed to begin the first stage of implementation prior to a decision on actual execution of the project, which is to file for US regulatory hearings to seek approval for LNG imports into the USA. Meanwhile the partners are negotiating marketing and pricing arrangements. From commencement of filing, the estimated schedule is 15 months to approval for US imports, followed by three months to finalize the financing package and obtain release of the project. Project construction will then require 36 months to first supply of gas to the liquefaction plant and a six-month commissioning period to the first LNG shipment. This amounts to a five-year period from filing for approval to first shipment, implying mid-1987 as the earliest date for commercial operation.

140. In addition to the gas reserves required to sustain a 20-year supply for other existing and planned energy-based industries and for local consumption (about 6 trillion CF), another 5 trillion CF of reserves will be needed by the LNG project to satisfy its gas requirements over a similar time-frame. The country's present proven reserves of gas amount to 10.5

trillion CF, and the likely recoverable reserves are estimated to be about 18 trillion CF, after adding suitably weighted portions of identified reserves classified as probable and possible. A major component of the project will be two new 30-inch pipeline systems to gather gas from presently untapped fields to the north and southeast of Trinidad for transmission to the liquefaction facilities at Pt. Lisas. The field producers will be responsible for installation of platforms, drilling and gas production, with the National Gas Company taking title at the platform.

141. For the liquefaction plant, a 30-year lease will be taken at the southern end of the Pt. Lisas Industrial Estate for 170 acres of dry land and 16 acres of what is presently mangrove swamp. In addition, considerable acreage of reclaimed land will be made available from dredging for the marine berthing facility to be constructed. The plant site will be developed for an ultimate 6-train liquefaction plant. Design of the liquefaction component of the present project allows for a 3-train LNG unit with a total gas intake of 720 million CFD, which corresponds to 650 million CFD delivered to the buyer's pipeline system in the USA, after allowances for fuel gas make-up and boil-off gas at the plant and fueled gas during loading and marine transportation. Air Products and Chemicals, Inc. and Technip have been contracted to prepare basic designs and capital cost estimates at this stage prior to a commitment on execution of the project. Storage planned at the plant consists of two 800,000 bbl cryogenic tanks, each of sufficient capacity to fully load one LNG tanker. Total employment at the plant site is expected to be about 300 personnel, including expatriates initially. The LNG company will establish staff training and development programs for T&T nationals.

142. Included within the project scope are ships for cryogenic transportation of the LNG and also a receiving terminal in the USA or Canada for LNG storage and a regasification plant for delivery of gas to the main existing transmission systems. Shipping is planned to be carried out in three dedicated vessels. Three sites are under consideration for the receiving terminal, at Pascagoula or Corpus Christi in the USA or at St. Johns, New Brunswick, Canada, servicing either Tenneco or Peoples Gas pipeline systems. However, subsequent to design of the LNG project scope, an excess supply of both shipping and terminal facilities has developed. Consideration should therefore be given to leasing instead of construction of new facilities in the project. In addition, it may prove advantageous to GOTT to consider delivery at Cove Point or Boston in the USA, terminals which are closer to the main centers of North American demand.

143. Information made available on the economics of the project was of varying quality for the capital cost estimates and calculated on the basis of 1979 prices. Financial projections were not based on gas costs at the production platforms, since these have not been developed, nor on forecast sales prices at the point of delivery since the project partners have not agreed on a contract. Instead, throughput tariffs or revenue requirements have been developed for each project component including a rate of return on equity of around 20%. However, there have been problems in reaching agreement with the overseas partners on this approach. Until the pricing issue is resolved, it is difficult to judge how competitive the price of LNG from Trinidad will be and thus the economic viability of the project.

144. The project is still in the relatively early stages of preparation although several important design studies have been completed. Since the planned schedule for physical execution appears to have slipped by about 18 months, the economics of the project should be updated based on a re-evaluation of project scope, the potential LNG sales value at the point of delivery agreed to with the partners and the alternative gas feedstock value. World Bank studies on LNG operations indicate that, compared to other large volume gas consuming operations such as methanol and ammonia/urea, gas utilization for export of LNG would show a favorable return on investment. The evaluation of the Trinidadian project, however, will depend on several important decisions still to be made on project design and pricing.

B. TRINTOC Refinery Upgrading Project and Refinery Rationalization

145. Current throughput capacity of the TRINTOC refinery is limited, by the availability of heavy 24° indigenous crude oil, to 57,500 BPD. This feedstock and the design of plant facilities, which is not flexible enough to process the lighter 32° Trinidadian East Coast marine crude produced by Amoco, results in these product yields:

<u>LPG</u>	<u>Gasoline</u>	<u>Jet Fuel</u>	<u>Diesel/Gas Oil</u>	<u>Fuel Oil</u>	<u>Bitumen</u>
0.5%	9.3%	10.7%	10.5%	66.7%	1.7%

Operating losses were estimated to be US\$360 thousand in 1980, US\$47.5 million in 1981, and US\$96.8 million in 1982 through 1984; a further loss of US\$225 million over the period 1985/89 is projected in the absence of refinery upgrading. The TRINTOC refinery conversion project was developed to permit production of a more readily marketable range of finished products and thereby to make the operations more profitable.

146. In 1976 TRINTOC commissioned Chem Systems to conduct a petroleum products market survey while Lummus carried out preliminary economic studies for various refinery configurations. In 1977 a full feasibility study on refinery upgrading was carried out by Bechtel, which indicated a 15.2% IRR on an estimated capital investment of US\$362 million + 25%. The next stage involved international tendering from eight companies for a more definite design of process, utilities and offsite facilities to provide an investment estimate of + 10% accuracy. This work was completed by mid-1980 and a feasibility study presented five alternative conversion configurations (from 57,500 to 100,000 BPD throughput). Two alternatives were selected for further development in order to arrive at a final design; GOTT approval for expenditure for the project was sought early in 1982.

147. The upgraded refinery (employing 200 additional staff) would have a processing capacity of 75,000 BPD, including flexibility to process 17,500 BPD of light East Coast marine crude, and the following product yield pattern at 76% plant utilization, based on refining 57,500 BPD of indigenous heavy crude oils:

<u>LPG</u>	<u>Gasoline</u>	<u>Jet Fuel</u>	<u>Diesel/Gas Oil (48/52 Cetaine, 0.2%)</u>	<u>Fuel Oil</u>	<u>Bitumen</u>
2.2%	19.5%	25.8%	14.5%	39.5%	3.5%

The required capital investment for the project is estimated at US\$430 million.

The financial projections for the refinery conversion are:

	<u>Before Tax</u>	<u>After Tax</u>
For Upgraded Refinery, IRR	18.4	14.2
For Incremental Upgrading Investment, IRR	31.9	27.1

Project Implentation

148. The upgrading project for the TRINTOC refinery, appears at first to be the logical course to pursue in order to place the operation on a sound commercial footing in the light of present and future market demands for refined petroleum products. There is a risk, however, that the upgraded facilities would come on stream at a time when light products are becoming less profitable because of weak demand and plentiful supply owing to the worldwide trend for "whitening" the crude barrel. The project financial rates of return may be overly optimistic, being based on 1981 product values escalated generally at 10% per year to start up in 1985 and throughout the 15 year project life. Nevertheless, over the long term the heavy dependence of the TRINTOC refinery on fuel oil sales must be reversed to improve financial performance.

149. Because many TRINTOC facilities are old and the processing configuration is very simple, extensive refinery conversions and new plant are necessary to change the yield pattern in order to be able to export more profitable distillates. Before deciding to proceed with the scheme, there should be a full investigation of any surplus refining capacity existing in other facilities within the country. In this regard the authorities recognize that the project should be considered in the context of overall rationalization of the petroleum refining industry in Trinidad, including possible integration with developments required within the Texaco refinery at Pointe-a-Pierre. The decision on the TRINTOC project will therefore depend on the outcome of a refineries' rationalization study.

150. A Committee appointed in April 1982 to study the rationalization of the domestic refining industry has drawn up a slate of options for further study:

CASE A: Current installations at the TRINTOC and Texaco refineries, operating under five modes:

- (i) continuance of TRINTOC in its present disadvantaged position;

- (ii) interlinking of the refineries to employ Texaco's available residues to upgrade capacity using TRINTOC's atmospheric fuel oil as feedstock to produce low sulfur fuel oil or diesel fuel;
- (iii) interlinking to desulfurize TRINTOC's atmospheric gas oil;
- (iv) interlinking for aromatics extraction from TRINTOC's surplus platformate; and
- (v) interlinking, for atmospheric distillation of TRINTOC's crude, using Texaco's excess capacity, and returning the distillates to TRINTOC.

CASE B: The TRINTOC Refinery Upgrading Scheme, the major investment discussed above.

CASE C: Partial modifications at both refineries, requiring moderate investments for each refinery and their interlinking. The aim would be to:

- (i) increase TRINTOC's reliability of crude distillation by revamping the present unit or installing a new unit; and,
- (ii) improve Texaco operations by: (a) visbreaker refurbishing; (b) heavy distillate hydrocracking; (c) gas oil desulfurization; (d) installing a hydrogen plant for hydroprocessing; and (e) providing additional required offsites.

151. Apart from the project to upgrade the TRINTOC refinery, the other options identified for rationalization of the domestic refining industry have not been analyzed fully. The Committee's view is that an appropriate in-depth study requires multi-disciplinary teamwork for a period of at least one year. Because of the uncertainties surrounding the future crude oil supply situation, both domestic and worldwide, the changing pattern of demand for refined petroleum products and the relative values which will prevail in the market, flexibility in refinery feedstocks and products should be emphasized in reaching any decision on rationalizing Trinidad's refining industry. Due to the proximity of the two refineries and the wide variation between the unit operations employed, the GOTT should seriously consider undertaking in-depth studies. The aim should be integrated operations between the refineries along the lines of the options identified by the Committee. These studies should be done prior to any decision on upgrading the TRINTOC refinery alone. On the basis of preliminary observations there appear to be two main options in this respect. First, the use of available, unutilized capacity for TRINTOC crude distillation and fuel oil conversion (VDU, FCC, etc.) at the Texaco refinery, requires investigation. Second, should there be adequate capacity at Texaco for processing TRINTOC crude but a limitation on conversion capacity, which appears might be the case, in order to maintain the same earning power, TRINTOC should determine the viability of installing conversion facilities alone at their refinery, based on the fuel oil returned from Texaco.

C. TRINIDAD CEMENT LIMITED

152. Trinidad Cement Limited (TCL) was established in 1954 as a wholly owned subsidiary of Rugby Portland Cement Company of the United Kingdom. Prior to 1976, the company not only supplied all the cement requirements of Trinidad and Tobago (T&T), but also exported a large part of production, especially in the early 1970s as shown in the following table:

Table 5. Production, Consumption, Exports, and Imports of Cement in T&T

	('000 tons per year)					
	<u>1965</u>	<u>1970</u>	<u>1975</u>	<u>1977</u>	<u>1979</u>	<u>1981</u>
Production	193	266	257	215	214	180
Consumption	184	129	184	287	329	380
Net Exports/(Imports)	9	137	73	(72)	(115)	(200)
Exports/(Imports) as share of prod. (%)	5	52	28	(33)	(54)	(167)

Sources: Central Bank of T&T, quarterly reports; CEMBUREAU, The European Cement Association; and Information from TCL.

The five-fold increase of petroleum prices in 1973-74 as well as the continued growth in domestic petroleum production brought a significant expansion of the public sector and social infrastructure programs of T&T, which increased demand for cement in the post-1973 period. As a result of this trend, the Government decided in 1976 that T&T should no longer export cement, rather it would expand production to meet the growing local consumption. As the existing plant was in poor condition incurring high maintenance and production costs and, in line with the Government's policy, the parent company of TCL presented to the T&T Government a scheme for closing the existing plant and installing a new plant with a capacity of 300,000 tons per year (tpy). The Government, in line with its objectives to exercise national control of large industries, took over TCL in 1976 and decided to repair the existing plant as well as to build a new plant.

153. The plant, located at Point Lisas, has two kilns and employs the old, energy intensive, "wet process" technology. The major raw materials, clay and limestone, are supplied by the company quarries situated about 6 miles away from the plant. In the initial years of operations, these raw materials were supplied to the plant in dry condition through a direct material handling system with subsequent preparation of slurry at the plant. However, owing to changes in the physical conditions of the raw materials (clay and limestone are embedded together with about 18% moisture), the slurry is now prepared at quarries and pumped to the plant for further processing. The mission is not aware of any efforts to identify new deposits of raw materials.

Technological advances, now standard in the cement industry, have not been incorporated in the plant by the staged repair and modernization programs so far undertaken by the company. The production lines are being continued in an inefficient manner with only marginal improvements. It appears that process control has been accorded a low priority. Problems of plant maintenance and lack of technical personnel are continuously decreasing the operational efficiency of the plant. The principal fuel used by the plant is natural gas supplied by a direct line from the eastern coast of Trinidad. As a result of government policy to exploit abundant reserves of natural gas for industrial purposes, the supply of gas to the plant is functioning satisfactorily. However, recently the reliable supply of electric power has been a problem.

154. To appreciate the plant technical performance, four major factors are considered, namely, capacity utilization, fuel consumption, electricity consumption and labor productivity, as shown in the following table:

Table 6. Technical Performance of TCL in comparison with an efficient Cement Plant

	<u>Capacity</u> (^{'000} tpy)	<u>Capacity</u> <u>Utilizat.</u> (%)	<u>Fuel</u> <u>Consumpt.</u> (kcal/kg)	<u>Elect.</u> <u>Consumpt.</u> (kwh/kg)	<u>Labor</u> <u>Productivity</u> (tons/worker)
Trinidad Cement Limited	300	60	2240	80	400
Standard Cement Plant <u>a/</u>	600	85	800-850	115	1600

a/ Efficient dry process based cement plant.

The low capacity utilization is due to the poor state of maintenance and repair of the plant and lack of qualified people to maintain and operate the plant efficiently. Since the takeover of the plant by the Government, the core of qualified people have left the company. Intensive training for technicians and operators is essential for the operation of the plant. The poor condition of the plant and inefficient operations are also expressed in the low capacity utilization, high consumption of fuel and the large labor force. In spite of this latter factor, it is surprising that an average overtime work of about 23% was required by the labor to bring out a plant utilization of 60%.

155. The financial performance of the plant, compared with cement industry performance in other countries, is reflected in the following table:

Table 7. Production Costs of TCLA compared with other cement plants^{a/}
(US\$/ton)

	T&T Plant b/	European Plant	N.African Plant	L.American Plant
Materials and consumables	21.9	6.8	10.2	7.8
Labor	33.9	3.0	5.6	7.4
Energy including elec- tricity	10.0 (gas)	17.8 (coal)	11.7 (gas)	14.0 (oil)
Adm., sales & overheads	8.0	2.8	3.1	4.5
Depreciation	7.1	13.1	11.5	n.a.
Interest charges	2.1	12.2	3.7	n.a.
Total costs	<u>83.0</u>	<u>55.7</u>	<u>45.8</u>	<u>n.a.</u>

a/ Data for TCL and Latin America are 1982, others 1981.

b/ Based on TCL data from January to March 1982 (60% capacity utilization).

Although a precise comparison of different cement plants is not possible due to variations in the size of plants, fuel used and technology employed, nevertheless the above comparison shows the high cost of TCL in major cost elements, especially materials and labor. Although the actual consumption of energy per kg of clinker produced is almost twice that of a standard rational plant, the low energy cost is due to the low energy price to the plant of US\$0.76 per million BTU.

156. Given the present situation, it is recommended that a detailed assessment of the plant be undertaken to identify weaknesses in technical, financial and managerial aspects in order to determine the plant's viability, with the option of either modernizing and upgrading or phasing out the plant.

157. Under the stimulus of petroleum exports, expansion of public investments and growth of the construction sector (especially housing) and, as a result of government policy to keep the cost of construction low, the apparent cement consumption in T&T has risen from 184,000 tons in 1975 to 380,000 tons in 1981, representing an average growth of 13% per annum. According to the information supplied by TCL, demand in 1982 is expected to grow by over 18% per annum, reflecting a total demand of over 450,000 tons.

158. TCL sells cement of its own production as well as imports, as it is the sole authority designated by the Government to import and sell cement. About 250,000 tons of cement are distributed by TCL in bulk trucks. The remainder, bagged cement, is supplied to distributors or to clients directly through private carriers which are obliged by the Government to charge an average standard rate of US\$0.46 per bag and US\$1.05 per bag for delivery in a distance of within or outside 50 km from Pt. Lisas. These transportation charges, being lower than those prevailing in the market, are a constraint to the timely availability of private carriers and to the efficient delivery of cement.

159. Cement is considered by the Government as an essential basic commodity. Therefore, the ex-factory and delivery prices are set by the Price Commission. The following table shows the composition of prices as approved by the Government and the cost of local and imported cement.

Table 8. Cost and Price Structure of Cement in T&T

(1982 US\$/ton)

	<u>Bagged cement</u>	<u>Bulk cement</u>
Ex-factory price	48.75	49.30
Transport charges	10.70	8.75
Wholesale price	<u>59.45</u>	<u>58.05</u>
Distributor margin	4.90	
Retail price	<u>64.35</u>	
Cost of locally produced cement <u>a/</u>	94.90	94.90
Landed price of imported cement	94.80	77.90
Cost of imported cement <u>b/</u>	132.50	108.50

a/ Includes company's cost for transportation and delivery. Separate cost analysis for bagged and bulk cement was not available.

b/ Includes charges for insurance, brokerage, port and unloading, demurrage, packing and delivery.

The local prices are high compared with similar consumer prices in Western Europe and Northern America. But they are still much lower than the cost of domestic production or of imports. The difference is provided to TCL as subsidy by the Ministry of Industry. The total subsidy provided by the Government has increased from TT\$8.8 million in 1977 to TT\$53.4 million in 1981. The policy of low prices in the period of cement shortages has led to an active black market. Further, such a policy does not provide incentive to the company to improve the plant efficiency (both operating and managerial) and the operating cost or to generate profits for new investments. While the distributional objectives of this policy are understandable, the beneficiaries have not been the poor and the fiscal costs can no longer be borne by the Government. Therefore a review of the current pricing policy is recommended. (Note: The cement subsidy was eliminated in the 1983 budget.)

160. The high demand for cement in the early 1970s necessitated on the part of the Government actions to expand the local production capacity in cement. A technical cooperation agreement signed in 1977 by the Government with Austria to speed up the industrial development of T&T provided an opportunity for the Government to undertake an investment in the cement sector. It signed an agreement with the Austrian firm, Alpine Voest, to set up in Trinidad a cement plant with a capacity of 300,000 tpy. According to the agreement, Voest Alpine assumed the responsibility for two major contracts, plant equipment and civil construction, as well as for the engineering and installation of the plant. A year after signing the agreement, the Government handed the project over to TCL for implementation

on behalf of the Government. The mission was informed that no study was prepared for the project. TCL believes that after the completion of the project, the Government will ask TCL to operate the plant.

161. The plant is being installed on the premises of TCL. Due to the very weak project preparation (technical and financial) and project management organization, there has been a delay of about one year in the completion of the project. Major delays have been due to implementation problems in civil works and to lack of financing arrangements. Further, the project management realized during the implementation that certain investments such as dock expansion and the improvement of raw materials transport from the quarries, necessary to cope with the increased requirements of the existing and new plant, were not initially planned. The project is expected to be commissioned in late 1982.

162. The new plant employs the old "wet process" technology, as in the current operations. The selection of technology may have been due to the physical condition of raw materials in the quarries and the expected training problems for a new technology. However, it does not appear that other process alternatives such as the semi-wet process were considered for the project. Compared to the present operations, the new plant is expected to demonstrate a better efficiency in productivity and energy consumption (1530 against 2240 kcal/kg) but it would still not be as productive and efficient as plants based on the modern technology of "dry process" such as the Arawak project in Barbados. ^{2/}

163. Based on partial information received from the project management^{3/}, the project's investment cost would be around TT\$170 million (US\$71 million). This would correspond to about US\$236 per ton of capacity. Though the capital costs include certain infrastructure facilities, nevertheless, the investment cost would be higher than for a similar plant (about US\$190/ton) in other countries such as Turkey, India and Tunisia. Sufficient information was not available from the project management regarding the financing plan. It was reported that the project is being installed by TCL on behalf of the Government and payments are made by the Project Financing Unit of the Ministry of Finance. Such arrangements,

^{2/} This project is a joint venture of the Governments of T&T and Barbados.

^{3/} Additional detailed information requested by the mission was not made available.

in addition to those for project implementation, are certainly not conducive to an efficient organization. The plant is now ready for commissioning, however, to build up the production efficiency for an optimal utilization of the installed capacity, the mission feels that further to the study of current operations, specialized consultants in cement and management should review the training needs, and the operational and management arrangements of the new plant. A management and technical assistance agreement could further provide the operational services needed for the plant.

D. IRON AND STEEL COMPANY OF TRINIDAD & TOBAGO LTD.

164. In early 1970, the Government of Trinidad & Tobago formulated a new industrialization strategy. Its goal was to replace economic dependence on sugar and other agricultural exports with the development of industrial projects which would exploit the abundant supply of energy in the form of natural gas and natural gas-generated electric power. Relying on this concept, the Industrial Development Corporation, established in 1958 to promote and stimulate industrial development in Trinidad & Tobago, initiated a feasibility study of an iron and steel complex in T&T in late 1973.

165. Based on the initial interest from foreign steel manufacturers, the GOTT entered, in July 1975, into a partnership with three foreign firms^{4/} and incorporated the Iron & Steel Company of Trinidad & Tobago (ISCOTT) with the following shareholding: GOTT - 67%, Hoesch-Estel - 16.5%, Kawasaki - 11.5% and Mitsui - 5%. The early concept of the project envisaged a 1.2 million tons per year (mtpy) of billet production with marketing arrangements of 0.6 mtpy for Kawasaki/Mitsui, 0.5 mtpy for Hoesch-Estel and 0.1 mtpy for local conversion into rebars.^{5/} In 1976, the GOTT informed the foreign partners that it could not associate with them in the development of the project due to the low rate of return based on the low prices (US\$130-150 per ton) offered by the foreign partners, their demands for various incentives, the exclusion of North America in the marketing concept of the project, and disagreements over the results of

^{4/} These were Hoesch-Estel of Germany/Holland, Kawasaki Steel Corporation of Japan and Mitsui & Co. of Japan.

^{5/} "Rebars" are steel reinforcing bars used in the construction industry.

several feasibility studies. Consequently, the GOTT took over the shares of the foreign partners.

166. With the assistance of three consulting companies^{6/}, ISCOTT undertook a series of studies in order to formulate a revised project concept based on the maximization of local value added. Some of the studies had been initiated when the foreign partners were still involved in the project. During the process of project preparation, ISCOTT conducted a market study with the intention of deciding on the product-mix and its own marketing arrangements for the project. This study proposed wire rods as the major product for the project with the principal market opportunity in the US and secondary markets in Canada and the Caribbean Islands. It projected an increasing demand for wire rods in the future, but emphasized that ISCOTT must be able to beat vigorous competition on price (15-25% below the domestic US prices during the initial years of market penetration) and match the quality and delivery period of products. Finally, it recommended that ISCOTT establish a solid distribution network and an aggressive marketing policy to export 300,000 tpy of wire rods, the planned production level at full capacity utilization. The study cautioned that ISCOTT would have formidable sale problems in acquiring this market (equivalent to a 14% share of the combined US, Canadian and Caribbean import markets, making it the fifth leading exporter to the US after Japan, France, West Germany and UK).

167. In spite of the poor steel market prospects at that time, the Board of ISCOTT submitted the project to the Government, which approved it in April 1977. The project was estimated to cost US\$320 million (including US\$16 million as working capital) and be completed by the end of 1979.^{7/} It was assumed that 40% of this cost would be financed by equity from GOTT and the rest by long-term debt in the form of export credit financing. However, no firm financing plan was drawn up.

168. During the implementation of the project, ISCOTT received, on its request, approval to expand the project with an additional direct reduction (DR) unit at a cost estimate of US\$84 million. It was not possible to obtain any information on the cost-benefit analysis of this additional investment. At present, the total cost of the completed project is now expected to be US\$507 million. This corresponds to a cost of US\$920/ton of finished products capacity. The capital cost estimate of a greenfield project in the Middle East with an integrated concept for producing 750,000 tpy of finished products from in-house produced direct reduced iron (DRI) in about US\$ 800/ton (1982 prices). The unit capital cost of large integrated plants (1 million tons annual capacity), especially of conventional steel plants is high. However, one also should keep in mind that scrap-based rod mills are build in the US presently for US\$250/ton capacity.

^{6/} Korf Industries of USA for process engineering and plant layout, Hatch Associates of Canada for project engineering, and First Boston Corporation of USA for financial evaluation.

^{7/} The mission could not obtain the project study for review.

169. The final concept of the project comprises two Midrex DR units, melting and casting facilities, a rolling mill, and infrastructure and auxiliary facilities to produce 550,000 tpy of wire rods, situated in the industrial estate at Point Lisas. Power is supplied to the complex from three power generating plants (operated on gas) tied into the national grid, one being a 600 MW plant at Point Lisas. Shipping facilities, accommodating two 30,000 ton oceangoing ships, consist of a dock of about 1200 ft. length served by two 600 tons/hour cranes with a 20 ton lifting capacity. Imported ore is moved to the storage yard on a system of conveyors which is also utilized to move direct reduced iron (DRI) for shipment.

170. The plant is an extremely modern facility using the latest technical equipment with many design features. The Midrex DR units have a total capacity of about 1.0 mtpy, both using a five metre diameter shaft furnace utilizing natural gas. The units are supported by pellet storage, pellet screening station, day storage bins, reformer unit, heat recovery unit to help reduce fuel consumption, metallized fines briquetting, and storage and transportation facilities. The melt shop consists of two 90-ton each ultra high power electric furnaces with an annual capacity of 750,000 tpy powered by 65-MVA transformers and equipped with fume extraction facilities to control pollution. The furnaces have several features to improve productivity such as split shell designed to reduce furnace reline time, balanced phases to extend refractory life, and an overhead feed system to deliver alloys and fluxes directly through the furnace along with the DRI without interruption. The molten metal is fed to casting machines through ladles operated by two 200-ton hot metal cranes. All steel is continuously cast by two 4-strand Concast billet casters which can produce billets with a maximum size of 150 mm square. Billets are reheated in a walking beam type furnace equipped with the latest design recuperators. It has a rated capacity of 150 tons/hour. The rod mill consists of a 2-strand configuration utilizing 13 stands of roughing, intermediate, and finishing blocks and has a production capacity of 550,000 tpy. It is equipped with many technical features, including a Stelmor retarded cooling system to produce wire rods with correct metallurgical properties.

171. The final project, as presently installed, has a technical imbalance with the production of DRI (1.0 mtpy) not balancing the melting capacity (750,000 tpy) and the melting output of the furnaces not balancing the wire rod production of 550,000 tpy. As a result of this imbalance, ISCOTT would have to sell surplus DRI and billets if the plant is operated at full capacity. The original plant design called for 500,000 mtpy of DRI to be supplemented by 100,000 mtpy of scrap, giving an 80% utilization of melting capacity. As Trinidad has only limited amounts of scrap, this input was to have been imported. ISCOTT management apparently feared possible problems in obtaining scrap and thus decided to install a second DRI unit. The cost benefit ratio of this decision appears to be high.

172. Since it does not appear that the project implementation organization was well defined, there was a lack of coordination among the different consulting and contracting companies. Presence of a joint venture or an operating partner from the steel industry might have assured

the technical assistance needed during the installation of the project. Further, it was unrealistic to plan the completion of such a project within a period of 2-1/2 years. The cumulative effect of these factors was a delay of one year and a cost overrun of about 30% in the mechanical completion of the project. Cost and delays might have been better kept in limits if the contractor originally hired by the Government had maintained its performance standards and if an experienced project control team had been engaged. Construction costs must also have been affected adversely by the extensive construction activities going on at that time in T&T. Because of lack of a good financing plan, ISCOTT has had to resort to heavy short term financing of the project.

173. The installed facilities are now almost in working condition. However, there is serious cause for concern with respect to the project economics. Problems are in three areas: (i) plant operations, (ii) market environment, and (iii) the financial situation.

- (i) On the operational side, the company lacks the assistance of an operating partner to ensure efficient operations. This is particularly so in the melt shop, where operator skills are crucial. The regular availability of an adequately trained, disciplined and motivated labor force is essential to the success of the operations. Although ISCOTT has obtained some operational assistance from Korf^{8/}, a lack of trained and experienced technicians and maintenance personnel has been a constraint in the start-up of the plant and the build-up of production. It is recommended that ISCOTT enter into an operational agreement with a steel company which is committed to providing its own operators and supervisors to correct possible deficiencies in the manning until permanent staff can be trained. The mission can only stress the importance to the success of the project of having the operating partner assume full responsibility for the training of the permanent work force and for the provision of skilled operators, maintenance men, and foremen until the permanent staff is ready to take over. This will also ensure the early buildup of production. Another factor hindering a good operational performance has been the supply of gas. Due to certain problems in the gas fields, there was severe reduction in gas supply in early 1982. Reliability of supply of gas and electricity is very important to plant operations.
- (ii) On the marketing side, ISCOTT is facing serious difficulties in the US which was expected to be the principal export market for its products. The wire rod demand in US did not develop as was projected with actual imports of only 850,000 tons in 1980 against a projection of 1.6 million tons. The depressed market has also led to a decline in the prices of steel products. This

^{8/} The mission learned that Korf staff were leaving due to ISCOTT conflict with Korf on marketing issues (dumping suit) in the United States.

is also reflected in the ISCOTT prices for 1982 (DRI - US\$100/ton; billets (US\$210/ton and wire rods US\$290/ton) which are on the low side of those prevailing in the international market. Further, the US steelmakers, in reaction to depressed local market conditions and inability to compete successfully with foreign imports, initiated actions in the US to restrict imports through various steps such as the trigger price mechanism (now abandoned), dumping suits and import restrictions. Finally, there is a restructuring process going on in the steel and steel consuming industries. Steelmakers have started vertical integration of their activities in order to ensure a market for their finished products and to avoid foreign competition. In this process, many wire rod user industries have been taken over by steelmakers. As a result of these developments, ISCOTT has not been able to secure an assured market in the US. Irrespective of the present steel situation in the world, including North America, the mission feels that ISCOTT would have enormous difficulties acquiring the wire rod market as initially planned. Other marketing channels have to be explored. These may include: long-term agreements for DRI and billets and the acquisition of a captive market through participation in the wire rods using industry.

- (iii) Financially, ISCOTT faces significant problems. The delay in completing the facility the cost overrun, the low build-up of production, the depressed market environment and low credit-worthiness of the company have seriously affected the economics of the project. The following table shows the production cost structure of ISCOTT compared with a similar plant in the Middle East:

Table 9. Comparative Cost Structure of Integrated Plants
Based on DRI
(%)

	ISCOTT (at 80% capacity utilization) a/	Middle East Plant (at full capacity utilization)
Raw materials & consumables	50.4	53.2
Utilities	8.2	12.3
Personnel (wages, salaries & benefits)	5.8	2.9
Technical Assistance & Management	0.5	3.3
Overheads	3.0	5.1
Interest charges	24.0	10.0
Depreciation & amortization	<u>8.1</u>	<u>13.2</u>
	<u>100.0</u>	<u>100.0</u>

a/ At full capacity utilization, the cost structure does not change significantly assuming the same debt/equity ratio of the project.

The large share of the interest charges is the result of an unsound financial management. Therefore, for the viability of the project, a financial restructuring of the plant is essential. ISCOTT management has presented to GOTT some financial restructuring models, including one recommending a decrease in the debt/equity ratio from 60/40 to 30/70. The mission feels that ISCOTT's viability may be considered in two phases: (i) short-term financial restructuring of the company keeping the same debt/equity ratio of 60/40, including the possibility of rescheduling loans. This would involve an infusion of about US\$50 million over two years; and (ii) a long-term review of the viability of the plant, considering the combined package of marketing, technical, operational, and financial aspects of the company. A very rough estimate^{9/} indicates that with full capacity utilization of the plant the total cost of production under a debt/equity ratio of 60/40 would be in 1982 terms US\$400-430/ton, including US\$115-125/ton for interest charges. With a lower debt/equity ratio of 30/70, it decreases to US\$320-350/ton, including US\$40-45/ton for interest charges. However, it appears doubtful that ISCOTT could (i) obtain a price which would cover the above cost of production and include a reasonable return on investment, and (ii) secure a market for its wire rods. A detailed review is essential to the future of the plant.

E. THE ALUMINUM SMELTER PROJECT

174. The project development of an aluminum smelter plant in Trinidad & Tobago started in 1970 when a proposal was presented by a consortium consisting of major international producers and users of aluminum. The Government of Trinidad & Tobago, in line with the development objectives of expanding its industrialization, diversifying its sources of income and adding to the value of its energy resources, decided to consider such a project. After three years of negotiations GOTT decided that it could no longer associate itself with the consortium in the development of the project.

175. In June 1974, the Governments of T&T, Guyana and Jamaica agreed to pursue the development of aluminum smelter facilities in T&T and Guyana based on alumina supplies from Guyana and Jamaica, hydro-carbon energy from T&T and hydro-power energy from Guyana. The Norwegian firm, Norconsult, prepared for the Governments a study of an aluminum reduction plant with three different alternatives of capacity -- 73,000; 146,000 and 219,000 tons per year (tpy), but recommended a large size plant from the economic point of view. With the intention of furthering the project, the three governments formed a joint venture group in July 1976 and selected Kaiser Engineers of the US to prepare a feasibility study for a 75,000 tpy plant. The study, completed in April 1977, revealed that the project was technically feasible but economically depended largely on the prices of alumina and energy. Also, a larger scale (recommended capacity 150,000

^{9/} Because of the lack of complete information, a detailed analysis was not possible. Therefore, the estimates should be regarded with caution.

tpy) was suggested because of its better economic viability. Kaiser was asked to carry out additional work for this alternative. The tripartite agreement, however, lapsed, due to the incompatibility of somewhat divergent interests of the three governments.

176. At that point, GOTT decided to develop further its own project with a capacity of 150,000 tpy. It issued new requests for proposals to the licensors of three leading aluminum producing companies, as a result of which it selected National Southwire Aluminum (NSA) as the prospective joint venture partner in the project. It asked NSA to refine the Kaiser study, especially in marketing and economic aspects. NSA completed its work in July 1978 but GOTT decided to do additional work on the viability of the project.

177. Further action on the project continued after the establishment of the National Energy Corporation (NEC) in 1979, which took over all development responsibilities for energy-based projects in planning and under execution. With the aim of certifying and updating the technical and technological parameters and cost elements of the project, NEC requested a West German consortium to present a turnkey proposal including engineering, supply of equipment and construction of plant. Since that time, there have been a number of further studies, but little of substance has been added to the proposal.

178. Since 1970, the authorities have considered this project primarily from an angle of the use of abundant energy in T&T and to a smaller extent from the market and technology aspects. But important criteria for the installation of aluminum projects, such as availability of major raw materials, availability of funds and absorption of technology, have not been properly explained. Therefore, for successful implementation and operation of the project, it is essential to seek possibilities of long-term arrangements for the availability of alumina, acquire long-term market arrangements for finished products, secure a sound financing plan, and make arrangements for training of personnel, including operational assistance from the supplier of technology.

179. Based on the projected supply/demand situation, it is indicated that aluminum prices are likely to rise in real terms during the next few years until price increases have attracted enough new capacity to restore an equilibrium situation. However, the prices projected by NEC are high compared to those projected by the Bank, as shown below:

Table 10. Estimated Trends in Aluminum Ingot Prices

(Current US cents/lb)

<u>Year</u>	<u>Projected Price in the Study</u>	<u>Projected Price by IBRD</u> a/
1985	118.6	102.9
1990	191.0	148.0
1995	267.9	208.8

a/ Biennial Review of Commodity Price Forecasts, May 1982.

180. During NEC discussions with NSA in late 1978 (para 3), NSA indicated its willingness to acquire marketing rights up to 49% of production, equivalent to its proposed equity participation in the project. However, in the process of further development of the project, the authorities in T&T started considering limiting the NSA marketing share to 30% hoping to market the rest of production through its own organization. Further, the authorities intend to use a part of production for local consumption in downstream projects. The proposed marketing plan is given below:

Table 11. Marketing Plan of the Aluminum Project in T&T

	(% of production)	
	<u>1985</u>	<u>1990</u>
National Southwire Aluminum	30	30
Long-term contracts	11	11
Medium-term contracts	19	-
Downstream industries	19	38
Spot Market	<u>21</u>	<u>21</u>
	<u>100</u>	<u>100</u>

The market plan foresees downstream projects, including a plant with a capacity of 28,000 tpy for production of aluminum sheets, foils and extrusion products in collaboration with National Steel and another plant with a capacity of 60,000 tpy of aluminum sheet and rod products in collaboration with General Electric. The mission could not obtain additional information on these projects as they were indicated to be in a very preliminary stage. But it is doubtful if these projects would come on stream on time as anticipated in the marketing plan of the project. Further, the viability of these projects has to be reviewed especially in the marketing aspects. Even the high share of 21% for spot market involves many risks. Therefore, it is recommended to review the marketing plan in favor of higher percentages for NSA and medium- and long-term contracts.

181. The project is expected to produce about 180,000 tpy of primary aluminum, primarily in the form of ingots. It is recommended that a more precise determination of the likely product mix should be established in the final review of the project. The technology of the project is basically the same as that used for many years by all the major international aluminum producers, including NSA. The main project components proposed to produce primary aluminum are: a carbon plant to produce anodes, a rectifying substation to supply direct current, three potlines of 120 cells each where the reduction process takes place, a cast house in which liquid aluminum is cast into selected aluminum products, and service and support facilities, including material handling equipment at docks, power station, fume control units and maintenance equipment.

182. Certain operational improvements appear possible in the project. The operating parameters--amperage, current efficiency and voltage levels--assumed in the project could be improved by 5-10%. These parameters

determine the productivity of each electrolytic cell. Electrical current levels up to 157,000 amperes and current efficiency of 88% are well within the reach of a modern, computer-controlled and reasonably well-managed plant. Further, improvements in unit consumption of petroleum coke, coal-tar pitch and aluminum fluoride are possible. Labor productivity of the plant (tons of aluminum production/job) is in line with that in other similar plants.

183. The total investment cost for the project is given as follows:

Table 12. Capital Cost Estimate of Aluminum Project in T&T

	<u>1981 US\$ Million</u>
Civil works, plant & equipment	469.8
Engineering, technology & project management	<u>96.3</u>
Total fixed assets	566.1
Preoperating and other expenses	<u>64.2</u>
Total base cost	630.3
Price contingencies	<u>107.5</u>
Total installed cost	737.8
Working capital	65.0
Interest during construction	<u>146.5</u>
Total financing required	<u><u>949.3</u></u>

Details of cost estimates were not available. However, it appears that physical contingencies may not have been included. Further, the working capital seems to be on the low side and interest during construction (15% of total financing) on the high side, the latter probably due to high debt proposed for the project. The average total capital cost estimate of US\$5300/ton of aluminum may be on the low side.

184. The proposed financing plan for the project is as follows:

Table 13. Financing Plan of Aluminum Project in T&T

(US\$ million)

Equity	245.6
Loans:	
Euro Credit	238.5
Export credits:	
Germany (kfw)	38.7
Germany (Hermes)	155.3
USA (EXIM)	67.3
Canada (EXIM)	175.8
Local Banks	<u>28.1</u>
Total Financing	<u><u>949.3</u></u>

The plan proposes a debt/equity ratio of 74/26 which is high for a plant of this nature. A ratio of 60/40 (if not 50/50) is highly recommended for the project. The plan does not include financial projections of the project to analyze the ability of the project to cover its debt service.

185. The current plan does not describe the implementation arrangements for the project. It mentions a period of 42 months from the initial earth moving for the completion of the project, which is appropriate but does not indicate the starting point of the schedule. The success of the project depends upon the project management and organization. So far, the project has gone through many preparation channels, involving aluminum-producing companies, consulting and financial organizations, but a clear and defined overall organization does not appear to exist. As a first step, an updating of the project study with the assistance of a selected technical and technological partner is necessary. For this purpose, NEC should set up a small nucleus of technical people with considerable experience who would later implement and operate the project. It should be assisted by technical people from the technology supplier with good experience in implementing and operating aluminum reduction projects. The whole group should be under a project manager from the technical licensor who shall report to the head of the project, the future president of the company. After the review and updating of the study, including a thorough economic analysis and the decision of GOTT to implement the project, the project group should carry out the management of implementation. The technical partner would be responsible for all the phases of the project--basic and detailed engineering, preparation of specifications, development of project costs and schedule, and construction supervision. With this arrangement, the local technical people would undoubtedly benefit from the transfer of know-how and experience. Further, in the execution phase of the project, services of local companies could be contracted to allow an optimal utilization of local resources and expertise. Finally, it should be emphasized that the preceding discussion focuses on the steps necessary before making any decision to build the facility. Whether the analysis will show this to be a viable project cannot at this moment be reliably ascertained.

IV. NON-PETROLEUM EXPORTS

186. This section focuses on prospects for growth in nonpetroleum exports, particularly light manufactures. Industrial policy, current trends in the manufacturing sector and the measures recommended to promote higher exports are discussed. A short analysis of prospects and requirements in the tourism sector follows.

A. Light Industry

187. In line with the overall economic performance of Trinidad and Tobago, manufacturing grew rapidly after the oil price increase of 1973. Behind a tight system of non-tariff protection, annual real growth of manufacturing output (excluding sugar and petroleum refining and petrochemicals) ranged between 5% in 1974 and 1978 and 15% in 1976. However, as growth of other economic sectors was also high, the share of manufacturing in GDP (in constant prices at factor cost) averaged only 10.5% during the period 1976-1980, before dropping to 9.5% in 1981. This level of industrialization is far below that achieved by other countries at a comparable level of per capita income. In addition to its disproportionately small size, Trinidad and Tobago's manufacturing sector is in weak condition and, under the prevailing industrial policy, offers little prospect for strong future performance. The real decline in manufacturing value added in 1981, in spite of continued overall economic growth, indicates the industry's serious structural problems.

188. Trinidad and Tobago's light manufacturing has the typical characteristics of an industry shielded from import competition over a long period of time. Assembly of imported parts, frequently in CKD^{10/} form, and mixing and bottling operations of the food processing industry dominate light manufacturing with about two thirds of total value added (at current prices). These activities have small shares of value added in sales, operate with weak linkages to the domestic economy and offer little opportunity for learning-by-doing for the country's increasingly well educated workers, technicians and managers. Product quality of the industry is generally well below comparable imports and prices of most domestically manufactured goods are substantially above world market levels. The structure of the country's manufacturing sector tends to be monopolistic and has contributed to the inflationary trend which has existed since 1973 in spite of government price controls.^{11/}

^{10/} CKD="completely knocked down." This refers to finished goods, typically automobiles that are disassembled into kit form before being shipped to countries like Trinidad and Tobago, which have restrictions on imports of finished goods.

^{11/} The industrial producer price index published by the Central Statistical Office reached 169.8 during the first quarter of 1982 (1975=100.0). Industries with some degree of domestic or import competition had generally below average price increases: food processing (145.5 in 1982), painting, publishing and paper converters (158.3), furniture (135.0). Highly monopolized industries facing strong demand, on the other hand, generally showed high increases of producers' prices: motor vehicle assembly (265.1), batteries, mufflers and tires (194.2), nonalcoholic beverages (264.4).

189. Several reasons exist for initiating a new policy to assist manufacturing in Trinidad and Tobago to leave its "infant" status after 25 years of special support and protection. First, import substitution is encountering rapidly increasing difficulties in a small national market. In most manufacturing sub-sectors with domestic production the share of imports in total supply is already low, while import substitution of only a small number of intermediate and capital goods would make economic sense for the limited market. Second, the long-term support provided to industrial development is costly to the country, both in terms of allocating resources for industry which could be used elsewhere (e.g., in agriculture) and in terms of compensatory subsidies given to consumers in order to pursue income distribution goals. Consumer subsidies, partly given in the form of sales tax reductions, increased rapidly up through 1981 and helped to compensate low and middle income consumers for the high prices of domestic manufactures. If industry were able to stand on its own, the net resource transfer could be terminated and consumer subsidies could be substantially reduced. Third, as the country's resources of hydrocarbons are nonrenewable it is prudent to develop other sectors which would provide the country with the required foreign exchange and government fiscal income. Manufacturing has so far been a net recipient of foreign exchange and has generated little tax revenues, but could help compensate in the long run for the expected decline of foreign exchange and tax revenues originating in the oil sector.

Current Industrial Policies and their Effects

190. The Government of Trinidad and Tobago has recognized the weaknesses of past industrial and trade policies and has emphasized in several policy documents the need to increase both manufactured exports and more efficient--less costly--import substitution. The Government has begun to focus attention on nontariff import restrictions. Since the CARICOM common external tariff leaves little room for adjustments according to national requirements, the Government has used non-tariff measures to protect industry and to regulate import volume. The most important non-tariff instrument is the "negative list" (NL) of import prohibitions which includes practically all products manufactured in the country.^{12/}

^{12/} Currently there exists no complete NL. A 1979 NL compiled by the Manufacturers Association included 411 items and categories of the Customs Tariff of which 320 were manufactured products. According to IDC officials, deletions and additions since 1979 may have left the total number of items on the NL unchanged. However, since the NL contains both highly specific products (e.g., "wire pot scourers") and wide categories (e.g., "dresses for women and girls") the number of items provides no proper indication of the broad protective coverage provided by the NL.

The extent of the protective effect of the NL can only be measured by domestic and foreign price differences which appear to be considerable. High product quality differences provide additional evidence of the NL's strong protective effect.^{13/} The protection system has also made it more difficult and costly for the Government to achieve income distribution targets, since profits seem to have increased due to monopoly positions created by import prohibitions.^{14/} However, in recent years the NL has received closer government attention than earlier. New products have been included in the NL only after presentation of detailed documentation by the applying manufacturer showing the need for protection. In some cases, the Industrial Development Corporation (IDC) has prepared studies as a basis for government NL decisions. Also, a committee was instituted to scrutinize the NL on a continuous basis in order to eliminate products which no longer required the high degree of protection afforded by the NL.

191. Import licensing has tended in recent years to relax somewhat the restrictive effects of the NL, but the lack of automaticity, the apparent absence of known procedures on how to obtain a license, and the uncertainty and delays related to procedures in granting licenses have reduced considerably the positive effect of increasing the total domestic supply of goods. While it is now reportedly possible to obtain an import license for virtually all products on the NL, import traders and consumers are unequally affected by licensing. Import traders tend to profit from a license, since this may provide them with a temporary monopoly position.^{15/} Con-

^{13/} Consumers are willing to pay two times the price for an imported car, both to shorten the waiting period for a domestically assembled car and to obtain a higher quality product.

^{14/} No detailed industrial profit data are available to confirm this hypothesis. However, the strong growth during the 1970s of the highly protected assembly industry, compared to the stagnation of the less protected garment industry, can only be explained by the extremely high profitability of the assembly industry.

^{15/} Applications for a license are made at IDC, which prepares the studies and documentation for the decision by the Minister of Industry and Commerce. The Controller of Customs in the Ministry of Finance may limit the actual use of the license.

sumers, on the other hand, cannot rely on a regular supply of imports, since the Minister of Industry and Commerce has absolute discretionary power to grant or deny a license without public justification.^{16/} Import traders are obviously benefiting from this situation through high profits, while the Government budget is losing revenue, as compared to an import control system based on higher tariffs.

192. Import duty exemptions for machinery, equipment and production inputs are granted within two different systems. A small number of industrial firms benefit from duty exemptions granted under the Fiscal Incentives Act.^{17/} Since categorization under this Act is complicated and the risk of rejection rather high, industrial enterprises prefer to obtain duty exemptions under the Third and Fourth Schedule annexed to the Customs Ordinance (import tariff schedule). The Third Schedule lists 76 "approved" industrial subsectors which may be granted import duty concessions; the Fourth Schedule contains 13 "approved" product groups which the assembly industry may import at reduced duty rates of 10% and 5%, respectively. IDC

^{16/} There are few complaints by importers and manufacturers on the Minister's use of discretionary power, since licenses are apparently issued on the basis of "objective" criteria. However, critics of the system have pointed to two major inconsistencies. First, in several cases the granting or rejection of a license was essentially determined by the domestic manufacturers of the product to be imported, since the inability to supply the product domestically in the required quantity and quality is the most important criterion. The inability to produce a good is in practice determined by the domestic manufacturer. Second, import traders and manufacturers of a product are frequently identical and the request for an import license is made by the manufacturer/importer comparing the relative profitability of imports and domestic production. For example, a car assembler interviewed by the mission expressed clearly his preference for importing the cars he manufactured. Nevertheless, in spite of these inconsistencies, the inadequacy of the studies prepared by IDC, and the length and uncertainty of the administrative processing of applications, the granting of import licenses appears to be rather fair and efficient, when compared with other countries requiring licencing for imports.

^{17/} IDC staff which prepare the documentation for granting the exemptions by the Minister of Industry estimate that only about 12 firms fall under the Fiscal Incentives Act. This Act is based on the Agreement on Harmonization of Fiscal Incentives to Industry among CARICOM countries.

staff estimates that about 600 firms, i.e. practically all industrial enterprises, except the very small ones^{18/}, benefit from free or reduced duty rates on imports of machinery and production inputs.

193. The import duty concessions under the Third and Fourth Customs Schedule are limited to a five-year period (corresponding to the authority of the Minister of Industry to grant import licences), but in practice they are "rolled-over", making them privileges without time limit. Also, although duty concessions are given only for products not manufactured in the country, would-be manufacturers of these products are discouraged, since they would have to initiate complicated procedures to cancel the duty privileges, before commencing profitable production. Thus, the widespread import duty concessions effectively help keep industry in its state of "infancy", while preventing the establishment of profitable intermediate and capital goods industries. Import duty concessions also have been extremely costly to the Government budget. Total import duty collections in 1981 were at TT\$464 million (which is less than 7% of total current budget revenues), compared to import duty concessions valued at over TT\$890 million (TT\$640 million for non-oil companies alone).^{19/} This is more than double the volume granted in 1980. The ratio of import duties collected to total imports is 9.9% (1981), one of the lowest in the South America and Caribbean Region.

Export Incentives

194. The high degree of subsidization of industrial activities directed toward the domestic market is not balanced by a corresponding support of export production. Accordingly, the manufactured export performance of Trinidad and Tobago has been poor. Currently, unmanufactured products valued at little over TT\$200 million are exported, about 2% of total exports. In addition, the vast majority of manufactured exports is to neighboring CARICOM countries, where Trinidad and Tobago's exporters have duty-free access. The basic reason for the low level of manufactured exports is the limited size of the domestic and Caricom market. In general, manufacturers with a safe and highly profitable domestic market do not want to enter risky export activities, if these do not promise returns significantly higher than those of domestic market sales. Manufacturers indicated to the mission that profits on exports are considerably lower than domestic market sales mainly for the following reasons:

^{18/} In 1979 the Central Statistical Office registered 525 manufacturing enterprises with 10 employees and over.

^{19/} Import duty concessions are estimated for January - June 1981 at TT\$445.7 million. The total volume of concessions granted in 1980 was TT\$424.8 million.

- (i) an unfavorable development of costs in Trinidad compared to those in trading partners during the 1970s;
- (ii) an export incentive scheme which is inadequate and practically inoperative; and
- (iii) inadequate export financing and insurance.

195. Earnings of exporters suffered during the 1970s, due to consistently higher price and wage increases in Trinidad and Tobago as compared to trading partners. Thus for example, the purchasing power parity of the TT dollar vis a vis US dollar fell by about 10% between 1972 and 1975 (when the current exchange rate was fixed) and by another 24% between 1975 and 1981.^{20/} This indicates that the country's manufacturers received on their 1981 exports roughly a quarter less constant 1975 TT dollars than they did in 1975, and over a third less than they did in 1972.

196. Fiscal incentives are inadequate to compensate export manufacturers for the effects of escalating relative costs and high import protection. The Corporate Tax Act and the Finance Act of 1976 provide for an export allowance in the form of a deduction from taxable profits. This incentive system proved to be inefficient and cumbersome. The allowance varies with the profitability of both domestic and export production; unprofitable export enterprises do not obtain benefits. The qualifying minimum share of exports in total production (10%) and the maximum limits of possible deductions from taxable profits (25% to 50%) require detailed government information on enterprise operation. As a consequence, only about four exporting firms have used the system since its initiation and the total amount of tax deductions has amounted to less than TT\$25,000. The export credit insurance system (EXICO), which insures export receivables against commercial and political risks at subsidized rates, is

^{20/} The increase of 10% between 1972 and 1975 takes the exchange rate adjustment of 1975 into account. These percentages were calculated on the basis of movements of consumer price indices and average annual exchange rates (Source: IMF, International Financial Statistics).

more successful than the fiscal incentives system. In 1981 the export volume insured was TT\$ 36 million.^{21/} The insurance system is particularly useful for exports to CARICOM countries facing high political risk, but it covers only about 7% of non-oil exports. There is considerable scope for a much broader export insurance and financing system. The institutional support to exports is ineffective. The Export Promotion Division in the Ministry of Industry and Commerce has two officers who prepare information on export markets and export procedures. A strengthening of these support efforts is expected after the Division joins the International Marketing Corporation (IMC). The IMC was created in 1980, but was not put into operation. (Note: Effective January 1, 1983, the Government took several measures to promote exports including liberalization of the conditions relating to use of the export allowance system, establishment of a generous tax deduction for promotional expenses and market development grants, and a widening of export financing facilities.)

Complementary Industrial Policies

197. The Government has instituted several additional policies with the main intention to balance the negative effects of the protection policies. The most important component of these complementary policies is price control. Price controls on domestically manufactured products intend to limit the monopolistic price setting power of protected manufacturers. Price controls for imported products serve to prevent manipulation of invoices, but are frequently also used as an additional nontariff import protection measure. Imports have been discouraged by long delays, since Customs does not release price controlled goods until their prices are fixed. Both government authorities and consumers point to the ineffectiveness of control procedures, while importers and manufacturers complain about red tape and cost increasing delays during the price

^{21/} EXICO'S current outstanding liability is TT\$15 million which is about 50% above the Government's stipulated guarantee limit. EXICO'S risk exposure is rather high, since a major share of insured exports are for Guyana and Jamaica, which are facing serious problems of paying for their imports in convertible currency. The Government should solve the problem of the unsecured liability as soon as possible. The guarantee limit should be raised to at least TT\$20 million. In addition, EXICO's portfolio should be analyzed carefully and excessive risks should be eliminated.

control process. The Secretariat of the Prices Commission is inadequately staffed to determine prices in a speedy manner or to control and enforce the determined prices effectively.^{22/} Domestic manufacturers and distributors may withhold price controlled products from the market during the process of establishing a new price. This may create shortages (as is the case of automobiles) or black markets. Where shortages of price controlled products are not apparent, producers and traders have raised prices to the level where demand matches the limited supply. Finally, some investments for the production of price controlled goods may also have been discouraged due to the uncertainty on future levels of prices and profitability, while the controls seem to have had little effect on containing inflation.

198. Tax incentives are used in Trinidad and Tobago to strengthen consumer demand, rather than to support production. Only 12 firms categorized under the Fiscal Incentives Act benefit from corporate tax exemption. But manufacturers of consumer products benefit indirectly from past frequent reductions of sales and excise taxes on their products which helped to maintain consumer demand at higher levels.^{23/}

199. The Industrial Development Corporation is the government agency which intervenes directly in light industry. Since 1959, IDC has established 10 industrial estates which provide 137 industrial sites. In view of the scarcity and high cost of industrial sites, IDC intends to further strengthen its industrial estate program. This may still provide insufficient relief for new industries which cannot afford the speculation determined prices of industrial real estate. IDC also functions as a holding company with supervisory functions for four industrial enterprises wholly or majority owned by the Government. Two of the enterprises (Trinidad and Tobago Electronics Ltd. and Trincity Garment Manufacturing Company) were acquired from the private sector to prevent their permanent closure. The other two enterprises (Metal Industries Co. and Trinidad Bagasse Products) were established by IDC, which assumed the entrepre-

^{22/} A 1980 study of the price control system by a government appointed committee indicates that a major deficiency of controls is due to application of the "maximum price method" by the Prices Commission. This method determines final prices on the basis of a detailed analysis of cost structures and margins at different distribution stages.

^{23/} While few tax incentives are given to industry, a public discussion is currently going on in Trinidad and Tobago on the overall level and structure of taxation, and on the appropriateness of corporate taxation in particular. This discussion could well lead to an increased use of the tax instrument as an industrial incentive.

neurial role. The mission did not inquire about the performance of publicly owned manufacturing enterprises, but the high and rapidly rising budget appropriations for the participation in the Commercial Enterprises Fund would indicate that the Government may not be particularly successful as an industrial entrepreneur.

Suggestions for a New Industrial Policy

200. The suggested policy package for changing the direction of industrial development would aim to strengthen domestic market-oriented manufacturing by raising production efficiency, reducing product prices and improving product quality levels and to increase manufactured exports both to CARICOM and non-CARICOM markets. Trade policy plays the key role in this policy package. The following paragraphs present a summary of the package; subsequently the main components are discussed in more detail.

201. On the export side, it is suggested that the current system of export allowance be abolished immediately and replaced with export cash subsidies for non-traditional exports (including both manufactured and agricultural products) to countries outside of CARICOM. Rates of export incentives would depend on the cost-increasing effect of protection and the potential of learning by doing. Both factors would require high incentives for manufactured products, incentives at a medium level for intermediate products (e.g., fertilizer, iron and steel), and low subsidies for unprocessed goods. Additional export support measures would include a broadened export insurance system, an export credit system, double tax deductions for promotional expenditures by new exporters and marketing support from an export promotion organization. The additional export support would be given to both CARICOM and extra-CARICOM exports. The suggested export financing system has proven to be a useful export promotion instrument in other developing countries (as well as in developed countries); this system could also provide necessary interest rate subsidies to exporters, in case importing countries threaten to impose countervailing duties on cash subsidized exports.^{24/}

202. On the import side, the mission suggests the abolition of the "negative list" (NL), import licensing and import duty concessions. A considerable number of products could be excluded immediately from the NL without endangering industry. The remainder of the list should be phased-out over a period of, say, five years. The process of phasing-out

^{24/} In case of proven damage, GATT regulations on export subsidies permit implementation of countervailing measures by the importing country. Interest rate subsidies in export financing, on the other hand, are permitted by GATT.

the NL should be coupled with increasingly liberal handling of import licensing, until the latter is also effectively abolished. Eventually, protection of domestic industry would rest only on import tariffs.

203. The gradual replacement of import prohibitions and licensing by tariffs should be accompanied by the elimination of price controls. Excessive profit margins, strongly fluctuating supplies and incentives for under- and over-invoicing would largely disappear with free access to dutiable imports, making price controls unnecessary. Abolition of import and price controls would also provide an opportunity to restructure the tax system with a view to strengthening industrial profitability and propensity to invest, since both would be negatively affected by the measures to liberalize imports. In particular, the proportion of indirect taxes should be raised, while reducing the share of direct taxes. As consumers would be the main beneficiaries of the suggested measures, a reduction of consumer subsidies would be possible without adversely affecting income distribution. In turn, it would be worthwhile to consider implementing an investment incentive system, preferably in the form of a simple cash incentive as a percentage of the investment amount.

204. The suggested policy package would result in a net fiscal gain for the Government budget, particularly due to the elimination of import duty concessions and the "negative list". Additional revenue from import duties (in 1981, duty concessions totaled TT\$890 million)^{25/} would provide the resources needed to subsidize extra-CARICOM non-traditional exports at the required levels and to reduce drastically corporate taxation. The fiscal cost of double tax deductions for promotional activities is negligible. On the other hand, effective investment cash subsidies could be quite costly and would probably have to be implemented in conjunction with higher and broader sales taxes. Additional sales and excise taxes (or, preferably, value added taxes) would discourage consumption and production of luxuries and, thus, help to achieve income distribution targets. Sales taxes would also help generate a more uniform protection level.

205. Implementation of the suggested policy package would release a number of highly qualified government officials, now occupied in IDC, Customs and the Ministry of Industry with licensing, granting of concessions, price fixing and control for other important administrative tasks. In particular, experienced staff would be available to operate the new system of incentives and export financing. On the other hand, it is important to recognize that the suggested policy package would not relax government control over industrial development and foreign trade. Rather, industry and trade would be influenced through setting price signals instead of direct administrative interventions.

^{25/} Total Central Government revenues in that year were over TT\$6.8 billion.

Export Promotion

206. An export promotion scheme should be cost-effective, simple and automatic. The suggested cash incentive would satisfy these criteria. A cash incentive is highly visible and exporters can easily calculate the profitability of export production. Cash incentives also do not require lengthy administrative processing, but can be paid-out to exporters on presentation of export documents (commercial banks, the central bank or IDC could perform this function). The existing export allowance, on the other hand, does not satisfy these criteria, and the suggestions made by the Committee to Examine Export Development in the Non-oil Sector on improving the export allowance are in general steps in the direction of more administrative processing and control. The Committee suggests a percentage deduction from taxable profits (export allowance) of a manufacturer equal to the share of export sales in total sales. While this suggestion simplifies the existing system,^{26/} it would not be cost effective. The level of incentives suggested by the Committee would be small and inadequate to compensate exporters for the effects on export profits of the acceleration of relative costs and import protection. Further, unprofitable enterprises can not benefit from the incentive because it varies in proportion to the profitability of domestic and export sales. Because of these disadvantages the export allowance does not meet the requirement of an export incentive, which is to increase the profitability of exports in the most simple and direct manner.

207. Assuming that the basic structure and level of the CARICOM common external tariff remains unchanged, and that all duty exemptions would be abolished, export cash compensation rates could be fixed at 15%, 30% and 45% of FOB value, respectively. 15% would be an appropriate rate for unprocessed agricultural products; 30% would be given to processed agricultural products and to industrial intermediate products; and finished manufactures would obtain the highest rate of 45%. This rate structure would roughly correspond to the structure of tariff protection and would basically compensate for the additional cost incurred by exporters due to the protection system. Under this system, exports and production for the domestic market would tend to be equally profitable.^{27/} Sugar, coffee and

^{26/} The existing tax allowance follows the same principle, but requires in addition a minimum export share of 10% in total sales, and deductions from taxable profits are limited to between 25% and 50% of the tax allowance.

^{27/} The excess cost of imports for manufactures is probably somewhat lower than 45%. Thus, export incentives contain a margin for compensating manufacturers for external economies not reflected in product prices (mainly by providing opportunity for learning-by-doing).

cacao would be excluded from the export compensation scheme, largely because they face low demand elasticities on world markets. This situation requires a different system of subsidies (in case of low world market prices) and export taxation (at high world market prices) than for the other products. Further, desirable domestic processing of these commodities should also not be discouraged by giving them export incentives. Similarly, exports to CARICOM would not obtain export compensation. Since CARICOM manufacturers face the same level of protection and intra-CARICOM trade is duty-free, export compensation would not be justified.^{28/}

208. In addition to CARICOM exports, the Committee studying non-oil exports recommends the exclusion from export incentives of enterprises enjoying tax holidays under existing legislation. However, export compensation and tax holidays are unrelated and given for completely different purposes. Therefore, the mission recommends that export compensation be given also to firms receiving tax incentives. Further, the Committee recommends a time limit on export compensation (15 years) which is inappropriate. Export incentives are given to manufacturers to compensate for higher production costs caused by protection. They are not "infant exporter subsidies", like e.g., double tax deductions for the promotional costs of new exporters. Therefore, as long as tariff (and non-tariff) protection exists, exports require compensating incentives.

209. The suggested export financing system would provide preshipment and postshipment financing at market interest rates. Preshipment financing would cover the procurement of production inputs and the cost of processing; postshipment financing would cover the receivables. The export financing system would assist particularly small and new exporters who face difficulties in gaining access to commercial bank financing. In the particular case of possible imposition of countervailing duties, incentives for the affected exports can be shifted from cash incentives to interest subsidization within the proposed export financing system, e.g., interest free export credits would be a practical (although only partial) replacement of the cash compensation.

210. It appears useful to concentrate all components of the suggested export promotion package under one organization. For better coordination and control, the Export Promotion Division in the Ministry of Industry, the still inoperative International Marketing Corporation, and the Export Credit Insurance Company in IDC should be merged under one organization

^{28/} The difficulties Trinidad and Tobago exporters face in Guyana and Jamaica are due to non-tariff measures taken by these countries. Export incentives are not appropriate compensation for this category of trade barriers.

which should also administer the export compensation and the export financing systems. The Committee reporting on non-oil exports recommends the establishment of a "new and separate body...to manage...the export development program" (Committee Report para. 223). This suggestion may lead to an unnecessary proliferation of government institutions. It may be better to put IDC in charge of the export promotion activity. As a consequence of the suggested elimination of import duty concessions and import licensing, IDC would have experienced staff available for the new tasks. In addition, during a period of transition, close coordination of export promotion and reduction of import protection and licencing--which are largely handled by IDC--would be useful.

Import Protection

211. Elimination of the non-tariff protection system is the most important measure required to develop an efficient, export-oriented manufacturing sector which is a net producer of resources. Industry in Trinidad and Tobago was treated during 25 years as an "infant"; it is now an opportune time to "let the infant grow-up". The transition from an overly protected industry to a maturing efficient sector is not an easy one and will not be without losses. There may be some industrial firms which have no proper place in Trinidad and Tobago. Other enterprises may not have a management flexible enough to adjust to a new more competitive environment. These firms would have to close, with a corresponding loss to the country of jobs and production. However, transition losses can be minimized by reducing non-tariff protection in well planned steps over a period of time (five years probably would be adequate), and by taking compensatory measures to partly off-set the effects of import liberalization. It is not possible here to develop a detailed program for the suggested transition period after which all imports would be permitted to enter at the stipulated duty. Nevertheless, a few important criteria for establishing the program would be:

- (i) The overall program and the detailed steps should be announced in advance, to give enterprises the necessary time to adjust.
- (ii) The progressively liberal handling of import licenses for products on the "negative list" requires close coordination with the adjustments made by industry. Therefore, a monitoring system should be established.
- (iii) The import duty concessions for machinery and equipment could be abolished immediately. These products have the lowest duty rates and their re-introduction would only affect investment, not current operations. Exporters should be the final group of enterprises to lose the duty-free import privilege, since they earn the foreign exchange spent on low-cost imports; this measure would also provide temporary incentives to establish export businesses.

- (iv) Newly established industry which would demand "infant industry" status should obtain--after careful analysis--temporary tax concessions and/or financing from public sources. "Infant industry" should not receive import duty concessions or non-tariff protection. It is essential to remove the protection and duty concession system over a given period of time in well defined steps, without a complicating reintroduction of "infant industry" concessions.

212. The above suggestions and criteria are not in line with recommendations on import protection made by the Committee on non-oil exports. Specifically, the Committee recommends that continued non-tariff protection be linked to export performance. The Committee believes that high protection is required to raise industrial productivity so as to become competitive in export markets. It appears to the mission that the past experience of industrialization in Trinidad and Tobago shows the opposite. Industry has not become competitive as result of high long-term protection. There is no indication that continuation of this system will help to establish export competitiveness in the future.

213. The suggested policy package--unrestricted imports, elimination of duty concessions, export incentives--will have considerable effect on enterprise profitability, industrial employment and income distribution. Overall, income distribution would tend to improve, as consumers would gain access to low cost imports and improved domestic products. Profits of domestic manufacturers and import traders would tend to fall under increased competitive pressures, which would also positively affect income distribution. The Government may want to take advantage of this situation to introduce a general sales tax (or value added tax) and to reduce consumer subsidies. Income distribution, balance of payments, and fiscal targets would be further enhanced by excise taxation of luxury goods. Industrial Employment is the most critical area during the transition period, since some plants might have to close-down and release their work force. It would not be in line with the mission's overall policy suggestions for the Government to rescue collapsing firms--as it has done in the past--in order to save jobs. This measure would not help to establish an efficient industrial sector. Rather, unemployed workers should obtain financial support from the unemployment fund, while being trained for reintegration into the work force.

214. The profitability of manufacturing enterprises will suffer--at least during the transition period--both due to increased import competition and from the higher import cost of production inputs which cannot be fully passed on to the consumers. Several measures can be taken to prevent this desired reduction of profitability from going too far. First, corporate taxes, which are now at 55% (including 5% for the unemployment

fund) might be re-examined on a selective basis for key nontraditional exports.^{29/}Second, there seems to be scope for raising the depreciation allowance, possibly by shortening the period of depreciation. This measure would also help to reduce taxable inflationary profits. Third, investment activity, which could suffer most from a profit squeeze, should be supported by creating an investment subsidy for both capacity expansion and re-equipment. Increased fiscal income from duties and taxes would provide the needed resources for generous investment subsidies, possibly up to 20% of investment cost. This incentive would be extremely effective in helping industry acquire the machinery needed to be competitive in foreign and domestic markets. Effective July 1, 1983, the Government took some steps in this area by raising the rate of investment allowance on new plant and equipment.

SUMMARY OF RECOMMENDATIONS

215. This chapter of the report made several recommendations for changes of industrial and trade policies which are summarized below:

- (a) Recommendations on export promotion policies.
 - (i) Abolish immediately the current system of export allowance and replace it with cash subsidies for all nontraditional exports. The subsidy rates should vary between 15% and 45% of FOB value;
 - (ii) Introduce an export credit system for both pre- and post-shipment financing;
 - (iii) Strengthen the export insurance system by raising the Government guarantee limit to at least TT\$20 million;
 - (iv) Introduce a double tax deduction for promotional expenditures of new exporters;
 - (v) Strengthen the institutional support to nontraditional exporters.
- (b) The Industrial Development Corporation (IDC) should administer the export promotion system. IDC should administer the new export compensation and export financing system, incorporating also the Export Promotion Division of the Ministry of Industry, the Credit Insurance Company of IDC and the International Marketing Corporation.

^{29/} This measure should, naturally, exclude the oil companies.

- (c) Recommendations on Import Promotion Policies.
Abolish the "negative list," import licensing and import duty concessions in preannounced stages over a period of five years.
- (d) Price controls should be eliminated in line with the trade liberalization.
- (e) Recommendation on taxation and subsidies.
 - (i) Corporate tax rates might be re-examined on a selective basis for key nontraditional exports.
 - (ii) An investment cash subsidy should be introduced of up to 20% of investment cost;
 - (iii) The depreciation allowance should be raised by shortening the period of depreciation;
 - (iv) A general sales tax (or, preferably, a value added tax) should be introduced;
 - (v) An excise tax on luxuries should be introduced;
 - (vi) Consumer subsidies, both in the form of direct subsidies and in the form of excise tax reductions should be eliminated.
- (f) The Government should guide development of light industry by providing price signals instead of intervening directly. Government institutions supervising light industry enterprises should sell their participations to the private sector. The Government should also refrain from rescuing collapsing enterprises, but should take appropriate support measures for unemployed workers.

Tourism

216. In contrast with most of the countries in the Caribbean region, tourism is not an important part of the economy in Trinidad and Tobago. The minor role of tourism chiefly reflects the fact that traditionally tourism has ranked very low as a development priority and that the Government deliberately has limited its growth. As a result, in 1980 Trinidad and Tobago earned US\$151 million in receipts from tourism compared to US\$251 million for Barbados and US\$242 million for Jamaica. In the same year, the combined total of stop-over and cruise ship visitors was 280,000 compared to 526,000 for Barbados and 543,000 for Jamaica. The period 1976-80 was in general a high growth period for tourism in the Caribbean with total visitor arrivals increasing an average of 6.4% a year. In

Trinidad, the number of stay-over visitors rose by 6% a year between 1976 and 1979, rising from 129,400 to 155,200. However, because of lower cruise ship arrivals, the total number of tourist arrivals in Trinidad and Tobago has gradually declined since 1977. The drop in cruise ship arrivals was due partly to the poor conditions in the dock area of Port of Spain and the congestion in the port.

217. In spite of the limits which have been placed on it, tourism receipts account for about 20% of exports of goods and non-factor services excluding crude petroleum and petroleum products. Given the need for the country to broaden its sources of growth and foreign exchange in the future, Trinidad and Tobago could tap the potential for tourist activity to a greater degree. The proposed physical development plan for tourism during 1983-90 includes the provision of facilities in the major beach areas, hotel promotion and the improvement of facilities for cruise ships. Proper maintenance of the infrastructure being built now is necessary and some upgrading of tourist facilities, particularly government-owned hotels, is required. In addition, the number of hotel rooms in Trinidad and Tobago is somewhat limited, particularly when compared to other areas in the Caribbean. Trinidad and Tobago has approximately 1700 rooms available while the comparable numbers in Barbados and Jamaica are 2,818 and 8,289, respectively. There is a Hotel Development Act which offers incentives for hotel construction such as tax exemptions of 5-10% on profits, accelerated depreciation, capital allowances, exemption from import duties, more liberal licensing requirements and carry-over tax benefits. In addition, there is a special capital grant of TT\$25 million for hotel construction in Tobago. Both the Development Finance Company (DFC) and the Industrial Development Corporation (IDC) can make loans for hotels. In spite of these incentives only one hotel is being built at the present and there are only a few small projects in the conceptual stage. One of the reasons for the small amount of hotel construction is that it costs about TT\$100,000 to establish one first class hotel room, a result of the rapid escalation of costs in the construction industry. Given that cost, it is more profitable to build for the housing market. Because of this problem, consideration should be given to providing greater incentives for hotel, inn and guest house construction in order to support the steady increase in tourist arrivals which is envisaged in the plan.

218. Reflecting the Government's general attitude towards tourism, promotion expenditures have been relatively low. The budget of the Tourist Board was US\$4.8 million in 1980 and US\$6.1 million in 1981. A marginal decrease from the 1981 level is estimated for 1982. In Jamaica, expenditures for tourist promotion reached US\$9.5 million in FY80/81 and US\$19.0 million in FY81/82. Trinidad and Tobago only recently has extended its promotion efforts to Europe, after concentrating only on the North American market. The other Caribbean islands began to diversify their tourism market several years ago. Trinidad could strengthen their promotion efforts; there are many features of the country which appeal to tourists--

geographical attractions, nature sites and the unspoiled beaches on Tobago. The existence of the established national airline, British West Indian Airways (BWIA) could be an important part of a promotion program through charter flights. In order to design an effective, well-targeted promotion campaign, the Tourist Board also should develop a more complete and detailed statistical base on tourism.

219. The major infrastructure requirement in the tourist sector is the upgrading of the airport facilities at Piarco and Crown Point. Presently, conditions and services at the airports are relatively poor given the amount of traffic and compared to facilities in other Caribbean islands. Both these projects should be given high priority by the Government. In order to increase air connections to Tobago and to lessen the financial burden Trinidad-Tobago Air Service (TTAS) places on BWIA, the Government also might consider requiring some foreign carriers to stop in Tobago as well as in Trinidad.

220. Tourism has the potential to become a more important source of economic growth and foreign exchange. It could also promote growth in agriculture and create employment, particularly if a concerted effort was made to maximize local linkages. Expansion of tourism need not conflict with the Government's desire to avoid the social problems associated with tourism and not to establish facilities exclusively for visitors, if prohibitions against casinos are continued and if specific markets are targeted.

V. EMPLOYMENT AND MANPOWER

221. This section reviews some selected topics and issues that relate to the labor market in Trinidad and Tobago. The primary purpose is to spell out the dimensions, magnitude and structure of unemployment and to point out what needs to be done, in order to utilize better the human resource base. The topics discussed include the dimensions and structure of labor force employment and unemployment, trends in wage rates, productivity, wage determination and industrial relations, education and training needs, and the Special Works Program (also known as Development and Environmental Works-DEWD).^{30/} The last section outlines the basic guidelines for policy action.

Measurement and Levels of Labor Force and Unemployment

222. A feature of the labor-force data in Trinidad and Tobago that deserves special attention is the definition of unemployment. In many countries the term "unemployed" is restricted to persons who are without jobs but actively seeking employment during the reference week. Persons who are not actively seeking are (with some exceptions, such as those on temporary layoff) generally considered to be outside the labor force. In Trinidad and Tobago a broader definition is used, embracing not only those who were actively seeking employment but also many who were not. All except those who do not want to work are included in the labor force and classified according to the length of time since they last looked for work. Those who actually have sought employment at some time during the three months preceding enumeration are included in the labor force as unemployed.

223. The Central Statistical Office (CSO) strongly favors this broader definition of unemployed on the ground that it is more meaningful and more accurate for a developing country like Trinidad and Tobago. It argues that in a developing country where jobs are scarce and there is not a well recognized system of unemployment registration, a week is too short a reference period for "looking for work". While the broader definition is used, some separate data are provided on "seekers" and other unemployed. The figures in Trinidad and Tobago on unemployment and labor force participation should not be compared to the data in other countries, where a narrower definition of the labor force is used.

224. The annual growth of the labor force (1.6%) over the 1970-80 period exceeded that of the population (1.3%), at least partially because of the tendency for the female participation rate to increase. There has

^{30/} Statistical tables relating to manpower, employment, unemployment, wages and productivity are contained in Sections I and VII of the Statistical Appendix.

been a noticeable upward shift in the age composition of the labor force. Although the largest cohort in the labor force is those in the 15-24 age range, who account for about 32% of the total, growth was higher within the 25-34 age range over the past decade. While in 1970 the labor force within the age range 25-34 was 20% of the total, by 1980 this age category of the labor force had increased to 27% of the total.

225. There has been considerable variation in the levels (and rates) of unemployment among the administrative areas, and also over the years 1977-81. Unemployment rates rose from an average of 12.5% in 1970 to a peak of 15% in 1975, and then declined to about 10% in 1981. Looking at specific administrative areas, unemployment rates varied from a high of 23% in St. Patrick, an oil-drilling region feeling the effects of retrenchment in 1977, to a low of 4% in San Fernando, in the same year. More recently the highest unemployment rates were in Nariva/Mayaro (15%), St. Andrew/St. David (14%), and Tobago (20%), all agricultural areas.

226. Unemployment is not only a problem in terms of numbers but also in the duration of "joblessness". The proportion of those who had never worked--entrants into the job market--fell from 20% to 12% of the labor force, in 1977 and 1979 respectively. By 1981 the proportion of first job seekers who had no jobs had increased to 17% of the unemployed. Forty percent of the unemployed remain without jobs for more than a month. Since 1977, the prevalence of joblessness for a period of over a year has affected about 13% of the unemployed population. All these figures point to some hard core unemployment, making the problem more difficult to alleviate. The problem of unemployment falls more heavily on youths, particularly on the 15-19 age group where more than 26% of the labor force remained unemployed over the 1977-81 period. Closely affected also are the 20-24 age group, where unemployment rates exceed the national average.

227. In addition to the labor force size, another supply problem is its composition. There is a notable surplus of unskilled workers but serious shortages in many occupations that require a degree of skill, technical competence and functional education. While the government is aware of this problem, there is no precise information with regard to job-vacancy relationships and to the best of our knowledge, no comprehensive studies of manpower requirements have been carried out. In recent years occupational unemployment rates have ranged from as low as 2% for professional and technical workers to as high as 27% for construction workers. Workers classified as "administrative, executive, managerial and clerical" have had an unemployment rate of around 7%, about half the national average; and if clerical workers were excluded it would still be lower.

228. While these figures reveal much less about labor market imbalances than a job-survey would, they are at least suggestive. The data confirm the shortages of highly skilled, technical and professional

manpower. An unemployment rate for professional and technical workers that averages less than 2% would be an indicator of serious manpower shortage even in advanced countries. The exclusion of clerical workers would reveal that the administrative, executive, and managerial category is also in short supply. The group "craftsmen, production process and laborers, n.e.c." is too broad to analyze but unskilled production-process workers and laborers probably have inflated the group rate. Among skilled craftsmen unemployment appears quite low and shortages, at least at the upper levels, are a problem. The category "construction workers" contains mainly unskilled workers, which explains the consistently high unemployment status of this group. While workers in "primary" occupations i.e. farmers, fishermen, hunters, loggers, forest workers., are statistically a low unemployment group, this cannot be taken at face value because of the large quantity of under-employment to be found in some of these occupations.

229. In recent years, those with the least education have had almost as low a level of unemployment as those with university training or a secondary school certificate. The highest unemployment rate--around 14-15%--has been among those with an intermediate level of education, from standard 1 to the early years of secondary education. The explanation is that many of those with very low levels of education are middle-aged and older workers who are willing to accept and have held poorly paid jobs with a low skill content. Younger people coming onto the labor market, with more basic education than previous generations, will not take this kind of work, but at the same time do not have enough training in specific marketable skills to find anything else. What Trinidad and Tobago requires to bring down the unemployment rate of these persons with intermediate-level education, is a greater effort in vocational education and adult-worker training with more emphasis on the acquisition of specific skills, as well as a lowering of expectations. It is difficult to measure the extent to which the unemployment problem could be alleviated by training Trinidadians/Tobagonians to fill vacancies in professional, technical and skilled fields, but there can be no doubt that some relief would be provided. This, together with the contribution that a better-trained labor force could make to economic development in the area, should make manpower policy a matter of high priority.

Wage Trends and Industrial Relations

230. Wages and other terms of employment are determined in a three-tier process of collective bargaining, conciliation and arbitration. Collective bargaining is the normal mechanism of setting terms of employment but may, when it fails, be followed by conciliation under the guidance of the Ministry of Labor. Failure to reach agreement at this stage may lead to referring the dispute to the Industrial Court for arbitration. Strikes may be resorted to in non-essential services, only when conciliation procedures have been exhausted.

231. In the labor laws, a provision is made that all wage agreements have a minimum duration of three years, with the largest increase usually falling in the first year. Since 1977 several wage contracts have been signed, providing for between 40-90% wage increases, spread over a period of between three to four years. During 1981, 114 industrial agreements expired, including those in the petroleum sector. Monthly-paid workers in government were granted wage increases ranging between 62% and 86% for the period 1981-83, while for the same period wage increases of 50% were awarded to daily paid workers of the Water and Sewerage Authority (WASA), and the San Fernando Borough Council. Wage increases totaling, on average, 94%, 48% and 65% of existing wage levels, were granted to sugar workers, workers of the Public Transport Corporation and to the senior staff of the Telephone Company, respectively. Workers of two major oil companies received wage increases totaling a minimum of 42% for the period 1981-83. Assembly workers and those in maintenance/repair of the motor vehicle industries received wage increases almost equal to 63% and 27%, for the period 1981-83, and 1981-82, respectively. All wage contracts and other agreements must be registered with the Industrial Court and have the force of law.

232. Between 1977 and May 1981, minimum money wage rates for all manufacturing industry increased by 138.1%, an average annual growth rate of 24.2%.^{31/} Over the 1977-81 period the greatest increases in minimum wage rates were in textiles/garments and footwear (32.2%), assembly (31.9%), food drink and tobacco (30.2%), and in services (28.8%). The lowest increases were, over the same period, in the sugar (18.9%), central/local government (19.9%), and electricity/water and sewerage (20.0%), sectors.

233. Average weekly earnings in manufacturing industries, including oil and sugar, more than doubled over the 1977-81 period, an annual growth rate of 20%, 4.5% in real terms. The highest wage increases were awarded in the sugar, textile/garment and footwear, food processing, oil and assembly-type and related industries. In all these, average weekly earnings registered between 21% and 28% annual growth rates. Over the 1977-81 period the lowest increases in average weekly earnings were in miscellaneous manufacturing industries, electricity, drink and tobacco. Average weekly earnings for all employees in these sectors grew at 13%, 15.3%, and 17.3% annually, respectively; compared to the "all industry" growth rate of 20%.

234. Comparative wage data for 1979 and 1980, expressed in US\$ for Trinidad, Jamaica, and Barbados illustrate how high Trinidad's wages are compared to those in the Caribbean region (see Statistical Appendix Table

^{31/} In contrast, the cost of living rose about 60% (15.5% per annum) over the same period, while productivity grew by only 12% (3.0% a year).

7.10). Only in the relatively insignificant category of salaries in bakeries does Trinidad not show higher wages. In all other sectors, the difference between wage rates in Trinidad and in the other countries ranged from 18% to 3 times higher during the two year period. In the wearing apparel industry where the price of labor is a critical factor in determining international competitiveness and in attracting foreign investment, Trinidad's wages were about 60% higher than Jamaica's in both years. In the case of Barbados, the wage differential in the wearing apparel industry decreased in 1980 to 18% compared to 27% in 1978. In 1980, wages in Trinidad in the manufacturing sectors of chemicals and base metals and metal products were double those in Jamaica. The difference in wages in the sugar industry is also striking; wages in Trinidad in 1979 were double those in Jamaica and nearly 3 times as high in 1980. The data also show that wages in the petroleum industry are still very high relative to wages in the other sectors.

235. Presently more than 70% of the labor force is unionized, and firms are concerned about current trends in industrial relations. Although direct negotiations between management and the unions characterize the bargaining process, and the Government intervenes only when a deadlock is reached, the process sometimes turns into a test of strength between management and labor, and the Government (Ministry of Labor) is often placed in a politically awkward position. The number of disputes unresolved by the Ministry of Labor and consequently sent to the Industrial Court has increased from 48 in 1976 to 76 in 1981.

236. Several factors seem to be responsible for the aggravation in the industrial relations climate:

- (i) Despite the need for a continuous dialogue among labor, management and government, there is not adequate provision for communication channels.
- (ii) The Government does not seem to have made a serious attempt to explain the evolving downturn in the economy to organized labor.^{32/}
- (iii) The machinery for mediation and conciliation in labor disputes is inefficient; conciliation personnel are few and undertrained.

237. Strike action in case of unsuccessfully mediated disputes has lost significance in Trinidad and Tobago. With the exception of 1978, between 1975-81 not only did the number of work stoppages decline

^{32/} Subsequent to the Missions visit (May 1982) there has been a significant program to make the general public in Trinidad and Tobago aware of the problems.

significantly, but so has the number of workers involved, and, consequently, the number of mandays lost.

238. However, the reduction in strikes does not reflect successful industrial relations. Instead a system of compulsory arbitration seems to be developing, evidenced by the number of disputes unresolved by the Ministry of Labor, the length of time it takes to solve disputes, and the number of what seem to be simple or petty disputes taken to the Industrial Court by employees, trade unions and by the Ministry of Labor. The main burden of solving disputes is shifting from both collective bargaining and conciliation; the number of trade disputes reported to the Ministry of Labor has declined from 735 in 1979 to only 665 in 1981.

239. Despite the shift to arbitration by the Industrial Court, an examination of its past operations reveals several problems including the absence of any central guidelines and the Court's limited authority in this field. More specifically:

- (i) the Industrial Court has no power or expertise (unlike, for example, a Public Utilities Commission) to evaluate, judge or monitor the economic issues in the cases which come before it.
- (ii) the principles the Court applies are not flexible enough to make compensatory adjustments. In addition, the range over which the decisions affect wages and prices is limited by the random incidence, significance and timing of unresolved disputes.
- (iii) decisions about profits, incomes, and prices in general, are matters of monetary and fiscal policy and rest in the hands of other institutions.

Productivity

240. In an open economy heavily dependent on export and import trade such as Trinidad and Tobago, there are statistical difficulties in deriving productivity measures. The value of output per unit of labor used to produce that output is an insufficient measure of productivity since it has to be adjusted for changes in the ratio between export and import prices--the income terms of trade--in order to reflect changes in purchasing power. In the case of Trinidad and Tobago, since the year to year movements in the terms of trade are erratic, the purchasing power of productivity data so derived would also be erratic. To compound this problem further, data on output and labor employment are difficult to compare; new series of

employment data covering 1980 and 1981 are not comparable with those of the periods before. Moreover, since employment levels are estimated by the use of a continuous household sample survey based on the results of the 1970 population census, employment data are overestimated, particularly for recent years, as the preliminary 1980 census results indicate that the population data for years between censuses have been overestimated.

241. The index of domestic production divided by the index of hours worked in manufacturing industries is the only usable indicator of productivity, but it is not available for sectors of the economy other than manufacturing. An analysis of indices of minimum wage rates, average weekly earnings of employees in various industries, compared to indices of labor productivity, reveals that:

- (i) there has been a wider degree of inter-industry variation in the rates of increase of labor productivity than there has been in the rates of increase in money wage rates.
- (ii) the increase in money wage rates for the economy as a whole, and for specific sectors (sugar, agriculture, manufacturing, oil and construction) have substantially exceeded the increase in labor productivity. The annual percent increase in weekly earnings was above 20% and minimum wage rates in all manufacturing subsectors registered an average annual growth of 24.2% over the 1977-81 period, but productivity in all industries (excluding oil and sugar) grew at a meager 2.4%. Growth rates of -10%, -4.3%, and -2.1% were recorded in sugar, oil refining and chemical industries respectively, over the same period.
- (iii) The annual increase of approximately 20% in weekly earnings and of 24.2% in minimum wage rates implies an annual rate of increase of real earnings over the 1977-81 period of approximately 5%. The increase in real wages may have not exceeded the increase in total labor productivity for the aggregate economy, but was certainly greater than productivity in the non-oil economy, particularly sugar and general agriculture.

It appears that wage increases have been awarded without sufficient regard for changes in productivity levels and the continued "ability to pay" in some enterprises/industries. Many sectors have had to "catch-up" with others to meet increasing labor costs. This trend has caused a deterioration in Trinidad and Tobago's international competitiveness outside the petroleum sector.

The Special Works Program (DEWD)

242. This program is a direct result of efforts in the 1950s to improve social conditions and housing, and to provide employment opportunities so as to reduce the incidence of petty crimes. About 10,000 people are employed in this program at any one time. In 1980 the total cost of the DEWD Program was TT\$110 million. Some 40,000 - 60,000 people go through this program every year, on a casual, permanent or daily-paid basis. In this program the Government is dealing with unemployment as an isolated problem; little attention has been paid to the wider human resources issue, of which unemployment and its related social vices are only a part.

243. Workers in the program have constructed roads, community centers, beach facilities, fish complexes, office buildings, environmental, and sanitation projects; members have also had training in crafts (caning, block and furniture making, sign writing, masonry and carpentry.)

244. The creation of such additional well paid jobs (at hourly rates of about TT\$20), has led to competition for these not only from the unemployed but also from persons in low income jobs (whose jobs are not likely to be filled by new entrants) and from persons not originally in the labor force (including women and older retired men). In so far as these additional jobs are for the unskilled and seem to have more of a political, than economic, rationale behind them, they attract workers away from other jobs (especially in agriculture).

245. DEWD has also been beset by several problems:

(i) The program has been negatively affected by inadequate management, especially at the supervision stage, and by the inefficient organization of the projects resulting in high costs and low productivity levels.

(ii) The selection of projects has not always been planned carefully. This, together with the pressure to keep as many people employed as possible, has led to a wastage of physical and financial resources.

(iii) There also has been an inadequate supply of technical skills; this is reflected in the cost and low standards of work on many projects.

(iv) Coordination of the supply and delivery of materials and tools has been poor.

(v) Because there seems to be a political element in many projects, recruitment of labor has been rather ad hoc.

(vi) Standards of work measurement and production are usually low; the actual number of hours worked per day (2 hours) do not merit the hourly rate of about TT\$20 that is paid.

Recommended Policy Actions

246. The first step of an employment strategy for Trinidad and Tobago may well have to be widening and deepening the data on the labor force and education system. Next, developing education and training measures that can eliminate structural unemployment and improving the labor market information and allocation system in order to lower frictional unemployment. In addition, there must be wide recognition and acceptance of the principle that wage hikes should be tied to increases in labor productivity and not to changes in the cost of living or to wages in the oil fields. Suggestions are also made to improve labor mediation services and the operation of the DEWD program.

a. The Labor Market Information Base

247. The labor market information system currently is inadequate and should be developed so as to permit a thorough monitoring of labor market variables and the timely adoption of appropriate policy measures. This exercise requires close cooperation of the Central Statistical Office, employers, and the Ministries of Finance, Education, and Labor. Specific suggested improvements are listed below.

- (i) At the sectoral level the information in some of the tables of the Continuous Sample Survey of Population (CSSP) is too aggregated for analytical applications. The classification of labor force into employed and unemployed could be more useful for manpower requirements assessment if the breakdown by occupation was cross-tabulated with industry of origin, both in finer detail. Also presentation of unemployed labor force by marital status and sex would be useful, especially if further broken down by status--into family head and dependents. For purposes of income analysis, a cross-tabulation of disaggregated labor income by sex, according to industry and occupation (currently unavailable) is desirable.
- (ii) The Continuous Sample Survey of Population would have more value if tabulations showing the methods used to search for jobs, months/years of unemployment according to labor experience and education, the proportion of households in which one or two persons are unemployed, and the time involved in traveling to places of work also were included.
- (iii) For manpower requirements' assessment purposes, cross-tabulations of occupational categories and the educational categories of those holding them, by sector,

need to be presented. Such an educational distribution table would be required in order to convert needed manpower in each occupational level into needed manpower in various educational levels. This is in essence an occupational/educational transformation matrix.

- (iv) Data need to be compiled to cover annual enrollments in each educational year and program, in every level and branch of the system together with age/grade distribution; the participation, drop-out and repetition rates; the stock of teachers by type (educational qualifications such as type of diploma and degree etc.); and desirable student/teacher ratios for each program. The data could then be used to determine the status of underage school leavers by age and level, and consequently to determine when they would enter the labor force. Current leavers of the educational system and potential participants would be "filtered" for participation--by age and program--into the labor force.
- (v) The proportion leaving employment due to death, retirement or moving to other countries in each occupational class in each sector need to be derived. This data, together with labor force data sufficiently disaggregated by nationals and expatriates and by occupation within sector, would be used to identify available national labor force by occupation and within sector. This would require the application of both promotion and lateral filters, to take account of movement upwards and horizontally in the occupational structure, and of the participation filter to take account of available new entrants from the education system.
- (vi) Manpower allocation priorities, which may be judgemental or based on labor market surveys designed to inventory critical skill needs of public and private enterprises, need to be set out. Such priorities would be necessary for purposes of allocating the supply from the labor force and from the future flows of students and trainees.

b. Allocation of Available Labor Force

248. A well integrated employment system should be formed by potential employers, education and training institutions and placement centers. The placement centers should be in charge of monitoring the changes in the numbers and types of vacancies and be responsible for knowing the skill needs that employers would have in the future. These centers should also provide guidelines for educational and training institutions on needed emphases; the centers should also serve as communication and information channels between firms and job seekers. Obviously these functions involve complex tasks and more active performance than has been the case in the past. It appears that decisions regarding training emphases still

sometimes are made haphazardly since no appreciable coordination between educational and training institutions, employers and placement centers seems to take place. The labor exchange is not fully dynamic and information relevant for its activities is either non-existent or, at best, spotty. In fact, it appears that the labor exchange is not well regarded by the private sector.

249. A more dynamic role should be played by the labor exchange, with regard to (i) contacting employers regarding current and future vacancies, (ii) assessing training needs, (iii) employment counseling and testing, (iv) encouraging the registration of a wider array of job applicants and employers, and (v) reaching students near graduation as well as persons with jobs but who are contemplating a change in employment. These objectives can only be attained if the labor exchange alters its present image of primarily being a welfare agency and if it were better staffed.

c. Education and Training Needs

250. Although unemployment is relatively high, labor shortages in specific trades do exist. The co-existence of surplus and labor shortages suggests that there is scope for attacking unemployment through manpower policies and measures aimed at improving factor allocation. Notwithstanding the lack of systematic sources of information regarding skills in short supply, it is apparent that skilled workers in construction such as carpenters, masons, painters and plumbers, qualified high- and middle-managers, instructors for skills training, and teachers, especially for physical sciences, mathematics and accounting, are in short supply.

251. The ongoing efforts to improve the quality and relevance of education and training need to be reinforced. Since technical skills continue to be scarce, these need to be encouraged. In general, top priority should be geared towards attaining higher quality education which in itself calls for better school management, greater emphasis on teacher training, provision of learning aids, and improvement in physical facilities.

252. The following actions seem to be worth taking: (i) special financial incentives might be given with the objective of attracting students to technical-and business-related fields where, at present, skills shortages exist; (ii) education and skills programs should cover such basic aspects of career development as personal relations, budgeting, personal appearance and punctuality; (iii) there is also a strong need for periodic re-evaluation of instructional programs; (iv) there should be follow-up studies of samples of graduates from skills training programs so as to assess the performance of trainees and be able to identify deficiencies in the programs; (v) annual manpower or training needs surveys, carried out by major sectors of activity are also recommended. Such surveys could be carried out by the Central Statistical Office in consultation with, in particular, the Ministries of Labor and of Education; (vi) near-graduation trainees should have in-plant training, as part of the selected regular training programs. Exploration of the possibility of enlisting the

cooperation of employers through special fiscal and labor cost incentives should be done. Such incentives may include transitory reduction of national insurance contributions and the payment of lower wage rates for trainees during the training period. Such an in-plant training scheme would not only permit trainees to become more familiar with actual work conditions, but would also permit firms to assess their potential performance and derive material returns from their collaboration. Such schemes would also provide factual bases for the evaluation of the relevance and appropriateness of skills training programs.

d. Industrial Relations, Productivity and Incomes Policy

253. The Government should strive to develop and maintain a climate of mutual trust between management, labor, and itself. In line with this objective, a practice of continuous dialogue is essential. In particular, the attempts by the Ministry of Labor to monitor bargaining processes, and to continue becoming involved as a bona fide mediator would require that the problems and constraints faced by the economy and each of the parties involved be reviewed and potential solutions explored. What is important also is that attempts to mediate should take place before differences between management and labor reach crisis proportions. This obviously calls for an improvement in the quantity and quality of training for the Labor Ministry staff responsible for mediation services. In this regard, in addition to the training programs already available at the Labor College, programs at other institutions such as the United States Federal Mediation Service (USFM) should be explored.

254. Wage determination should be seen as an instrument for the attainment of the objectives of price stability and increased production and, therefore, employment. The movement in real wages should be tied to rises in output per worker, especially in the more labor intensive enterprises. It should be possible to devise formulas and guidelines which simultaneously meet the objective of rises in output per worker, a margin of profitability, and also provide partial re-adjustments in nominal wages for changes in cost of living. These adjustments would seek to prevent the deterioration of the standards of living of, especially, low income earners.

255. In order to avoid excessive increases in labor costs, voluntary tying of real wages to productivity increases should be set as a key national economic objective. Efforts to increase productivity growth rates above those of the cost of living would enable workers' money incomes to advance somewhat faster than the cost of living. The rationale for this national economic objective should be widely publicized and discussed with labor and management, as part of the follow-up of the National Productivity Conference discussions. The need to sell a wage policy to trade unions and their membership is crucial and largely would depend on the ability (moral authority and persuasiveness) of the trade union leadership itself.

256. Regarding DEWD, the Government should avoid the temptation to set up "make work" projects of high labor content but low economic validity; instead it should regard the creation of productive employment as a preferred priority. Since creation of such subsidized programs as the DEWD attracts labor force (both unemployed and employed), there is reason to believe such incentives should be directed to currently labor-starved sectors. Agriculture would be primary among these. The real issue to be resolved is to what sectors should subsidized labor be directed. A corollary of the above is that government would have to meet a proportion of the wage costs, particularly where the agricultural activities in which such labor is hired cannot earn enough to meet the expected wage levels. Finally, stockpile depots for working materials and tools, and improved knowledge and experience of the staff in planning and scheduling their work in relation to the supplies of material would enhance the output and productivity of workers.

VI. FUTURE OF THE TRINIDAD AND TOBAGO ECONOMY

257. During the 1970s the economy of Trinidad and Tobago experienced the same circumstances as most other oil producing countries and behaved in a roughly similar fashion. The beginning of the decade saw intense pressures on the economy and on the society as oil earnings stagnated. However, judicious policies favoring exploration were set in place and thus in 1973-74 the economy had more resources available than it could absorb as both output and earnings increased. By 1978 the decline in real petroleum prices had once again brought constraint and crisis to the economy, a situation which was alleviated once again with the price rises of 1980. It is popular in Trinidad and Tobago to say that the country has the "OPEC disease" but, compared to other oil exporting countries, Trinidad has had a fairly mild "case." Well intentioned management has dampened some of the effect of the swings in oil earnings on the economy. Excess funds have been kept abroad and earmarked for specific investment programs. Domestically, resources have been devoted to making impressive improvements in income distribution, to the alleviation of absolute poverty, and to the minimization of the impact of international inflation on the economy. However, as has been the case even more intensely in most other oil countries, inefficiencies have become ingrained in the economy, industry has become overly protected, wages in the non-oil economy have advanced significantly ahead of productivity, agriculture has stagnated, and the international competitiveness of the non-oil economy has sharply declined. On balance, however, the performance of the economy and its managers has been better than might have been expected under the intoxicating influence of oil during the 1970s, and certainly better than that of most other oil-producing countries.

258. However, the reality of Trinidad and Tobago's future is that the oil is rapidly running out, that oil prices are likely to be soft for the duration of the country's reserves, and that the government budget is rapidly deteriorating both as a result of the continued acceleration of the subsidy and welfare program as well as the momentum of an investment program that is now beyond the country's means, while revenues are stagnating. Industry and agriculture have been so emasculated that they cannot, in the short time required, increase so as to take up the slack left by the gradual disappearance of oil. Natural gas abounds in the country, but its uses are few and the costs of exploitation are high. The potential revenues to the Government from natural gas are far less than those accruing from petroleum and the net foreign exchange earnings from such projects as ISCOTT, the petrochemical plants and potentially the LNG plant are, at best, negative at least until the middle of the decade of the 1980s. A possible scenario resulting from a continuation of present trends without significant policy changes will be rapidly increasing constraints, first on the Government budget but soon after on the balance of payments leading to a necessary slowdown in economic activity, to a necessity to dismantle the welfare state, and to increasing unemployment and falling real consumption.

259. The problem is well illustrated by the prospects for exports. During the 1970-81 period, export earnings increased nine-fold, a real growth of over 10% per annum; in contrast, during 1981-90 it is estimated that nominal earnings will increase by only 28% which translates into no growth in real terms. This projection is based on a continuation of present trends which include a continuing decline in petroleum production, an increase in internal demand for petroleum products at subsidized prices, a stagnation in manufacturing exports exacerbated by the protection of the negative list and by an inappropriate (for the sector) exchange rate, and by a gradual disappearance of agricultural exports. Energy-based industries will, during the decade, begin to make significant contributions to export earnings but the overall magnitude will remain small and the foreign exchange costs will continue to be fairly large. While petroleum will still be the major earner of foreign exchange in 1990, receipts from transportation (which includes bunkers), travel (tourism), and ISCOTT will have achieved significant proportions by that time.

260. The implications of the stagnant outlook for exports on the rest of the balance of payments are serious. Zero growth in exports will require, in the first instance, a similar stagnation in imports. Judicious use of borrowing power and of existing reserves might have allowed import growth of as much as 2-3% per year, however the contractual momentum of the public investment program will exhaust this capacity by 1984. Historically, the elasticity of imports with respect to aggregate expenditure (investment plus consumption) has been almost unity, thus under a continuation of existing patterns of behavior, aggregate expenditure would not be able to increase in real terms. As it is estimated that the population is growing by roughly $\frac{1}{2}$ % (net) per annum, real per capita consumption could be kept constant only by significant reductions in investment. During the decade of the 1970s, per capita consumption in real terms increased by 8% annually, thus, the outlook is for a virtual stagnation if not a decline. Continuing the present trends will bring about increasing deficits on the balance of payments (current account) which by 1990 would exceed US\$2.5 billion annually. Covering this deficit by the exports of non-petroleum products and services would require that this type of export grow at over 14% per year in real terms, whereas the current outlook is for about 4% annual increase.

261. In order to illustrate the above trends and to analyze the problems and potential of the future of the economy of Trinidad and Tobago, the mission constructed a simple model focussing on the Government budget, the national accounts, both production and expenditure, balance of payments, and the financing of fiscal and balance of payments deficits. This model was extensively discussed and further developed with the government and with the Task Force for the National Development Plan during the latter part of 1982 and in early 1983. The model incorporated the decline on the production of petroleum, however during the discussions it became evident that the price projections were too optimistic, that the momentum of the public sector investment program was greater than had been foreseen, and that the state enterprise sector had contracted somewhat more external debt

than had been thought. Whereas the original projection assumed a continuation of the 5.4% p.a. growth characteristic of the 1970s, the analysis indicated that this would not be feasible. Accordingly, a plan framework was set up which incorporated fairly low growth rates of GDP (less than 2% per annum), a drop in public sector investment, improvements in the fiscal management of the public sector, and a modest amount of foreign borrowing. As a first step, some subsidies were eliminated and some taxes increased as a part of the 1983 budget, but more action in this direction will be required to bring the economy to a stable growth path.

262. The key problem facing the economy of Trinidad and Tobago during the 1980's will be the management of the finances of the Government in the face of declining revenues from petroleum. As the fiscal system has developed to be highly dependent on petroleum, it is weak in the non-petroleum part of the economy. An analysis, using the model, indicates that there is a strong interconnection between the fiscal system and the balance of payments. If the growth of the economy is slowed, the balance of payments improves as fewer imports are demanded, at the same time the sources of government income, taxes on imports, income and consumption, slow down and the welfare needs rise, thus increasing the fiscal deficit. Increasing the growth of the economy improves the fiscal situation, but creates significant balance of payments deficits. In fact, given the projected decline in petroleum revenues and a continuation of past trends and structure of the economy of Trinidad and Tobago, there is no growth rate of the economy for which the fiscal situation and the balance of payments are simultaneously of manageable proportions.

263. Table 14 illustrates a projection to 1990 which, given a substantial package of policies, should prove to be viable. The key to this projection is a sharp reduction in the public sector investment program in the next few years. In 1982, capital expenditure of the Government, not including the DEWD program or the deficits of the state enterprises, was TT\$3.8 billion, over 20% of GDP. Given the momentum of the program, even with the stringent cutting, it will not be possible to reduce the program below TT\$3.2 billion in 1983 and this will more than exhaust the Development Fund during the year. Given this, and utilizing every possible source of borrowing, both internal and external, plus making significant cuts in expenditures and increases in non-oil revenues, the most that can be sustained on the development program in 1984 and beyond is \$TT 1000 million, slightly more than 5% of GDP.

264. Public sector revenues, which were over 40% of GDP in 1980 and 1981 have been very much weakened both by the decline in the price of petroleum as well as by the gradual fall in the domestic production of oil. If no policy measures were taken to increase revenues, the ratio would fall to 30% by 1990. Combining this with a continuation of present trends in public expenditure without significant restraint produces a deficit of 16% of GDP by the end of the decade. Measures implicit in Table 14 reduce this deficit to a still significant 5% of GDP by increasing revenues to 33% and containing overall expenditures to 38%. On the revenue side, two increases are proposed, first an increase of taxes on consumption from the current 3% yield to 5% and second, by the elimination of import

duty exemptions, the increase of the revenue from tariffs from 8% to 15% of the value of imports. In expenditures, by gradually eliminating the subsidies given to consumer through the state enterprises, particularly the utilities, and thus by approaching real cost pricing, the utility deficit, which could exceed \$2000 million by the end of the decade can be brought down to about \$700 million and potentially eliminated thereafter. Although the subsidy to cement consumption was eliminated in 1983, there still remains a substantial subsidy to food which, if unchecked could exceed \$450 million by 1990. This could, if the proper measures are enacted, be kept to \$250 million. Similarly, expenditure on goods and services and on transfers could also be trimmed, resulting in potential savings of about \$200 million. The most significant expenditure item however is public sector wages. In 1980 these amounted to \$1.2 billion. In 1982 and 1983 they will be \$2.8 billion and it is expected that they will increase by some 10% per annum. By keeping this increase to 8%, some \$1200 million can be saved in 1990.

265. Even with all the above measures, which, given the past fiscal record of the country, are quite significant, the overall deficit will still be about 4-5% of GDP. Given the weakness of the domestic financial market and the desire on the part of the authorities not to exert under inflationary pressures, it is deemed prudent to restrict borrowing inside the country to no more than 2% GDP. This leaves a net gap to be financed abroad of 3%. Given the need to borrow well over US\$ 1000 million in 1983, given US\$ 1100 million already existing in medium and long-term external debt and given the need to borrow 3% of GDP abroad, the debt service ratio jumps from 3% in 1982 to 12% in 1983, and would stay below 15% thereafter if the measures outlined above, as well as the slowing of the economy, are adopted. Failure to take such measures would quickly produce unviable levels of debt.

266. The projections, even though they are fairly crude, highlight the types of policies that will be necessary if the economy of Trinidad and Tobago is to make a successful transition to a structure that does not depend on petroleum as its single source of growth and output. A key consideration is the expansion of non petroleum exports. Policies conducive to this goal are discussed in Chapter IV; they include improving the efficiency of domestic industry, abolition of the "negative list" and measures to improve the international competitiveness of Trinidadian manufacturers. Equally important are policies to moderate the rapid increase in real per capita consumption. As the economy could easily go to a situation of stagnation, consumption expectations need to be directed towards very modest average rates, with the possibility that in some years the growth may have to be negligible. To this end increases in the collection of taxes on imports, the increases of tax collections on goods and services, and the elimination of a major part of consumer subsidies, particularly where such subsidies appear as transfers from the central government budget to the state enterprises, are measures that need to be taken. Finally, the exercise of restraint on wage increases in the public sector, and hopefully on the rest of the economy as well, will not only serve to restrain consumption, but in addition will have a significant impact, in conjunction with the fiscal measures already mentioned, on the viability of the government budget.

Table 14. Projections

TRINMAY (MAY 83)	1980	1981	1982	1983	1984	1985	1986	1987	1988	1989	1990	Basis for Projection
A. Govt. Revenues												
Dil Prodn. (M Bbl)	77.61	69.11	64.62	63.00	63.50	64.00	62.00	57.30	55.80	52.70	50.60	Exogenous Exogenous \$US * 2.4 \$TT * 0.7
\$/Bbl	36.53	36.95	32.12	28.12	28.12	28.12	30.37	32.80	35.42	38.26	41.32	
\$TT/Bbl	87.67	88.68	77.09	67.49	67.49	67.49	72.89	78.72	85.02	91.82	99.16	
Govt. Take/Bbl	53.30	61.54	54.65	47.24	47.24	47.24	51.02	55.10	59.51	64.27	69.41	
Corporate Tax	3591.50	3649.10	2998.40	2620.40								
Royalty	545.00	603.90	533.00	502.70								
Dil Revenue	4136.50	4253.00	3531.40	3123.10	2999.84	3023.46	3163.30	3157.38	3320.70	3387.12	3512.32	Production * Take
Income Tax	1004.20	1325.10	1911.20	2167.40	1957.93	2176.09	2397.25	2641.86	2912.52	3212.11	3543.86	Elasticity 1.0 Non-Oil GDP Elasticity 1.0 Income Tax
Unemployment Levy	88.90	144.50	120.00	110.00	99.37	110.44	121.67	134.08	147.82	163.02	179.86	
Goods & Services	260.30	283.20	314.70	467.10	787.86	865.63	947.63	1031.56	1122.92	1221.87	1331.99	5% of Consumption
Trade Tax	426.60	463.70	503.30	528.30	1096.79	1103.98	1190.99	1259.42	1327.61	1436.77	1515.17	15% of Imports
Other Tax Revenues	14.10	15.00	15.10	47.70	52.23	56.93	61.49	66.41	71.72	77.46	83.65	Constant real terms from 1983
Non Tax Revenues	321.90	142.10	158.90	112.70	125.41	134.51	145.27	156.90	169.45	183.00	197.64	
Interest Received	247.00	27.60	31.50	10.60								
Other Non Tax	74.90	114.50	127.40	102.10								
Profits Cent. Bank	113.30	192.00	235.50	233.00	181.00	91.00	90.00	90.00	90.00	90.00	90.00	Exogenous
Total Revenues	6365.80	6818.60	6788.10	6456.90	7298.42	7562.04	8117.60	8537.60	9162.73	9771.34	10454.49	
Revenues/GDP (%)	42.94	41.89	38.90	36.42	37.82	36.05	35.52	34.58	33.96	33.31	32.64	
(Rev/GDP) non-pet	22.75%	24.27%	25.79%	24.37%	28.30%	26.86%	26.62%	26.24%	25.85%	25.62%	25.26%	
B. Govt. Expenditure												
Wages	1213.50	1342.60	2812.80	2802.40	3026.59	3268.72	3530.22	3812.63	4117.65	4447.06	4802.82	Nominal growth 8% p.a. Elasticity 1.0 GDP
Goods & Services	468.50	404.40	610.70	552.70	601.67	654.04	712.60	769.79	841.09	914.61	998.47	
Interest	125.00	179.40	206.40	415.42	648.51	689.53	749.77	801.42	879.09	953.71	1074.72	Internal Debt * Dom. Inflation From Balance of Payments
Domestic	12.47	44.71	53.28	67.90	107.82	136.88	155.24	191.81	231.32	274.48	321.42	
Foreign	112.53	134.69	153.12	347.52	540.69	552.65	594.53	609.61	647.78	679.23	753.30	
Subsidies	656.70	753.30	1027.90	1287.90	1049.15	996.07	996.07	996.07	996.07	996.07	996.07	Exogenous (Task Force) Exogenous (Task Force)
Food & Cement	289.40	328.80	399.10	253.70	253.70	253.70	253.70	253.70	253.70	253.70	253.70	
Utilities	367.30	424.50	628.80	1034.20	795.45	742.37	742.37	742.37	742.37	742.37	742.37	Constant Real Terms from 1984 Exogenous (Task Force) Exogenous (Task Force)
Transfers	671.30	885.10	1622.70	1376.50	1479.74	1583.32	1678.32	1779.02	1885.76	1998.90	2118.84	
D.E.W.B.				410.00	300.00	300.00	300.00	300.00	300.00	300.00	300.00	
Deficit St.Ent.				400.00	300.00	300.00	300.00	300.00	300.00	300.00	300.00	
Total Expenditure	3135.00	3564.80	6280.50	7244.92	7405.66	7791.68	8266.98	8758.93	9319.66	9910.35	10590.92	
Expenditures/GDP (%)	21.15	21.90	35.99	40.87	38.37	37.14	36.17	35.47	34.55	33.78	33.07	
Current Surplus	3230.80	3253.80	507.60	-788.02	-107.24	-229.64	-149.39	-221.33	-156.93	-139.01	-136.42	
Surplus/GDP	0.22	0.20	0.03	-0.04	-0.01	-0.01	-0.01	-0.01	-0.01	-0.00	-0.00	
Capital Expenditure	2331.30	3110.10	3808.00	3248.90	1000.00	1000.00	1000.00	1080.00	1166.40	1259.71	1360.49	Exogenous; 8% growth from 1986
Total Expenditure	5466.30	6674.90	10088.50	10493.82	8405.66	8791.68	9266.98	9838.93	10486.06	11170.06	11951.40	(Excludes amortization)
Total Exp./GDP	0.37	0.41	0.58	0.59	0.44	0.42	0.41	0.40	0.39	0.38	0.37	
Overall Surplus	899.50	143.70	-3300.40	-4036.92	-1107.24	-1229.64	-1149.39	-1301.33	-1323.33	-1398.72	-1496.91	
Surplus/GDP	0.06	0.01	-0.19	-0.23	-0.06	-0.06	-0.05	-0.05	-0.05	-0.05	-0.05	
C. Domestic Finance												
-Net Borrowing	14.30	-24.00	142.60	354.56	385.97	419.57	457.13	493.82	539.56	586.72	640.52	Maximum 2% GDP
Debt Outstanding												
-Internal Debt TT	661.80	637.80	780.40	1134.96	1520.93	1940.49	2397.63	2891.45	3431.00	4017.73	4658.24	
Develp. Fund Net	-116.60	-407.40	1770.50	2150.00								
Cash Net	-889.00	150.50	31.50									
Total Financing	-991.30	-280.90	1944.60	2504.56	385.97	419.57	457.13	493.82	539.56	586.72	640.52	
Uncovered Gap	-91.80	-137.20	-1355.80	-1532.36	-721.27	-810.07	-692.25	-807.51	-783.77	-812.00	-856.40	
Foreign (Net)	147.36	35.76	145.97	855.60	-379.08	-476.62	-575.00	-493.26	-453.13	-346.81	-308.73	Existing flows Gap to be Financed \$TT
Foreign Gap	-55.56	101.44	1209.83	676.76	1100.35	1286.68	1267.26	1300.76	1236.89	1158.81	1165.13	

Table 14. Projections (Cont'd)

D. Exogenous Data												
Internatl. Price	0.10	-0.04	0.04	0.06	0.08	0.07	0.06	0.06	0.06	0.06	0.06	Exogenous From Dom. Price Change International + 2%
Domestic Pr. index	5.17	5.43	5.76	6.22	6.81	7.42	8.01	8.65	9.35	10.10	10.90	
Domestic Pr. change		0.05	0.06	0.08	0.10	0.09	0.08	0.08	0.08	0.08	0.08	
Exports\$	3140.20	3176.20	2974.90	2706.00	2914.00	3108.00	3316.00	3441.00	3660.00	3832.00	4051.00	Exogenous (separate analysis)
Trade Prices (70=100)												
Export Price Indx.	1850.67	2040.37	1866.53	1740.00	1791.00	1839.00	1980.00	2134.00	2296.00	2472.00	2661.00	Exogenous
Import Price Indx.	384.03	357.66	371.96	394.28	423.85	453.52	480.73	509.57	540.15	572.56	606.91	Exogenous
Terms of Trade	481.90	570.49	501.81	441.31	422.56	405.49	411.87	418.78	425.07	431.75	438.45	
E. Real GDP (FC)												
Petroleum	271	245	229	223	225	227	220	203	198	187	179	From oil volume
Export Agriculture	41	37	33	31	29	26	24	23	21	19	18	Exogenous (Task Force)
Dom. Agriculture	40	42	43	44	46	47	48	49	50	52	53	Exogenous (Task Force)
Petrochemicals	52	42	46	50	54	59	65	70	77	84	91	Exogenous (Task Force)
Manufacturing	302	284	300	317	334	352	372	392	414	436	460	Exogenous (Task Force)
Construction	277	313	316	319	322	325	328	332	335	338	342	Exogenous (Task Force)
Utilities	71	86	89	92	95	99	102	106	109	113	117	Exogenous (Task Force)
Government	216	232	233	234	235	236	237	239	240	241	242	Exogenous (Task Force)
Other Services	1525	1659	1684	1709	1734	1760	1787	1814	1841	1869	1897	Exogenous (Task Force)
Total	2794	2939	2973	3019	3074	3132	3183	3227	3285	3339	3400	
-(Non-Petroleum)	2523	2694	2744	2795	2849	2905	2964	3024	3087	3152	3220	
F. Real GDP (MP)												
GDP	2866	2997	3031	3078	3135	3194	3246	3291	3350	3405	3467	From GDPfc
Imports	1487	1643	1994	1797	1725	1623	1652	1648	1639	1673	1664	From nominal imports
Exports	414	356	350	373	390	406	402	387	383	372	365	Exogenous
TTADJ	1580	1677	1406	1274	1260	1239	1254	1234	1244	1234	1237	From TTI
GDY	4446	4674	4437	4352	4395	4433	4500	4525	4593	4639	4703	
Consumption	2857	3058	3501	3582	3738	3791	3870	3925	3972	4030	4083	Residual
Investment	1083	1226	1174	921	732	621	626	626	634	675	683	From nominal investment
ICOR	-	8.3	36.0	25.0	16.2	12.4	11.9	14.0	10.7	11.4	10.9	
ICOR (Private)	-	4.0	14.3	6.8	4.3	9.2	8.6	10.4	7.9	8.5	8.3	Ip / Change in GDP
Savings	1589	1616	936	771	657	643	630	599	621	609	620	
Savings/GDP	0.55	0.54	0.31	0.25	0.21	0.20	0.19	0.18	0.19	0.18	0.18	
Population	1067	1071	1075	1080	1084	1088	1092	1096	1101	1105	1109	.3867% per annum growth
Real Cons./Pop.	2677	2855	3256	3318	3449	3484	3543	3580	3609	3648	3681	
G. Nominal GDP												
GDP	14824	16277	17449	17728	19299	20978	22857	24691	26978	29336	32026	
-Oil	6440	6292	5436	4509	4544	4580	4792	4783	5031	5131	5321	From real oil GDP
-Non-Oil	8384	9985	12013	13219	14754	16398	18065	19908	21947	24205	26705	From real non-oil GDP
Priv. Dom. Income	7291	8516	9981	10942	12697	14111	15546	17132	18887	20830	22981	Non-oil GDP less taxes
CP/PDY	0.92	0.93	0.95	0.92	0.90	0.90	0.90	0.89	0.88	0.87	0.86	Policy variable
Consumption	8494	9839	13101	13887	15757	17313	18953	20631	22458	24437	26640	
-Public	1807	1926	3630	3771	4277	4612	4993	5384	5838	6315	6876	From budget
-Private	6687	7913	9471	10117	11480	12700	13960	15247	16621	18122	19764	From CP/PDY
Savings	6330	6438	4348	3841	3541	3666	3904	4060	4520	4899	5386	
Savings/GDP	0.43	0.40	0.25	0.22	0.18	0.17	0.17	0.16	0.17	0.17	0.17	
Imports	5831	5987	7417	7086	7312	7360	7940	8396	8851	9578	10101	Residual
Exports	7655	7271	6530	6494	6994	7459	7958	8258	8784	9197	9722	From real exports
Gap	-1824	-1285	886	591	318	-99	-18	138	67	382	379	
Investment/GDP	0.30	0.32	0.30	0.25	0.20	0.17	0.17	0.17	0.17	0.18	0.18	
Investment	4506	5154	5235	4432	3860	3566	3886	4197	4586	5281	5765	From Investment/GDP
-Public	2331	3110	3808	3249	1000	1000	1000	1080	1166	1260	1360	From Govt. Accts.
-Private	2174	2044	1427	1183	2860	2566	2886	3117	3420	4021	4404	Difference

Table 14. Projections (Cont'd)

H. Balance of Payments (\$US)												
Gap (\$)	-760.17	-646.92	564.88	246.39	132.64	-41.40	-7.69	57.38	27.80	159.04	157.79	Nominal gap / 2.4
-Interest Rec'd	232.30	341.70	297.80	175.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	From Govt. Accts.
-Interest Paid Ex.	34.80	56.12	63.80	144.80	198.50	166.80	153.00	122.40	85.68	51.41	25.70	From existing debt
-Interest Paid New	0.00	0.00	0.00	0.00	26.79	63.47	94.72	131.60	184.23	231.60	288.17	Gapfill DOD + (IPI + 2%)
-Oth. Factor Pmts.	498.50	417.08	348.79	389.74	392.84	395.93	414.24	413.47	434.85	443.55	459.95	22% Gross Oil Earnings
Goods&Services Bal	459.17	515.42	-679.67	-605.94	-750.77	-584.80	-654.27	-724.85	-732.56	-885.60	-931.61	Constant nominal
Net Transfers	-65.50	-90.70	-76.70	-76.70	-76.70	-76.70	-76.70	-76.70	-76.70	-76.70	-76.70	
Balance Curr. Acct	393.67	424.72	-756.37	-682.64	-827.47	-661.50	-730.97	-801.55	-809.26	-962.30	-1008.31	
Private Capital	157.67	289.37	300.25	277.68	396.60	377.61	409.12	424.96	456.82	503.23	538.26	50% other factor payments
-Direct Investment	137.00	203.29	190.71	194.87	196.42	197.96	207.12	206.73	217.43	221.78	229.97	16.8% private for. investment
-Other	20.67	86.08	109.54	82.81	200.18	179.64	201.99	218.22	239.39	281.46	308.29	
Public Capital	61.40	14.90	60.82	356.50	-157.95	-198.39	-239.58	-205.52	-188.80	-144.50	-128.64	From existing debt
-Disbursements	231.80	34.40	77.12	545.20	7.60	6.02	3.53	1.36	0.29			On Gapfill DOD
-Amortization Ex.	170.40	19.50	16.30	188.70	130.30	147.30	176.10	140.88	98.62	59.17	29.58	
-Amortization New	0.00	0.00	0.00	0.00	35.25	57.31	67.01	66.00	90.48	85.33	99.05	
Off.Lend.	3.30	-74.83	24.21	-62.50	-62.50	-62.50	-62.50	-62.50	-62.50	-62.50	-62.50	Trinidad aid program
Other Capital	8.33	91.45	-152.30	-75.67	0.00	0.00	325.44	723.81	682.68	792.42	751.92	BOP Gap to be filled
Desired Reserves	1012.31	1039.36	1287.61	1230.16	1269.43	1277.75	1378.46	1457.66	1536.58	1662.93	1753.66	5 months imports
Actual Reserves	2640.29	3203.00	2984.21	2873.26	2221.94	1676.96	1378.46	1457.66	1536.58	1662.93	1753.66	
I. Gapfilling												
BOP Deficit				-75.67	0.00	0.00	325.44	723.81	682.68	792.42	751.92	From BOP
Government Gap	0.00	42.27	504.10	281.99	458.48	536.12	528.02	541.99	515.37	482.84	485.47	From fiscal accts
New Borrowing	0.00	0.00	0.00	281.99	458.48	536.12	528.02	723.81	682.68	792.42	751.92	Larger Gap
Additional DOD	0.00	0.00	0.00	281.99	705.22	1184.02	1645.03	2302.84	2895.04	3602.13	4254.99	Gapfill DOD
Total Debt Service	205.20	75.62	80.10	333.50	390.84	434.88	490.84	460.89	459.00	427.52	442.51	
9.5% of Exports	303.02	287.82	258.49	257.07	276.83	295.26	315.02	326.90	347.70	364.04	384.85	Ideal maximum
Total DSR	6.43	2.50	2.94	12.32	13.41	13.99	14.80	13.39	12.54	11.16	10.92	
Government DSR	7.93	3.32	3.62	13.45	14.33	15.61	16.42	15.20	14.55	13.31	13.23	As ratio to revenues
J. Summary												
B.O.C.A.	393.67	424.72	-756.37	-682.64	-827.47	-661.50	-730.97	-801.55	-809.26	-962.30	-1008.31	
Public Capital	61.40	14.90	60.82	638.49	300.53	337.53	288.44	518.29	493.88	647.92	623.28	
-Disbursements	231.80	34.40	77.12	827.19	466.08	542.14	531.55	725.17	682.97	792.42	751.92	
-Amortization	170.40	19.50	16.30	188.70	165.55	204.61	243.11	206.88	189.09	144.50	128.64	
Other Capital	169.30	305.99	172.16	139.51	334.10	315.11	346.62	362.46	394.32	440.73	475.76	
Change Reserves	-624.37	-745.61	523.39	-95.36	192.84	8.86	95.92	-79.20	-78.93	-126.35	-90.73	
Govt. Cur. Exp.	3135.00	3564.80	6280.50	7244.92	7405.66	7791.68	8266.98	8758.93	9319.66	9910.35	10590.92	
Current Surplus	3230.80	3253.80	507.60	-788.02	-107.24	-229.64	-149.39	-221.33	-156.93	-139.01	-136.42	
Surplus/GDP	21.79%	19.99%	2.91%	-4.45%	-0.56%	-1.09%	-0.65%	-0.90%	-0.58%	-0.47%	-0.43%	
Capital Expenditur	2331.30	3110.10	3808.00	3248.90	1000.00	1000.00	1000.00	1080.00	1166.40	1259.71	1360.49	
Overall Surplus	490.54	96.90	-339.52	-4489.80	-1504.56	-1720.70	-1732.86	-1797.85	-1777.15	-1745.53	-1805.64	(Including amortization)
Surplus/GDP	3.31%	0.60%	-19.14%	-25.33%	-7.80%	-8.20%	-7.58%	-7.28%	-6.59%	-5.95%	-5.64%	

Creditworthiness

267. Trinidad and Tobago has always been a very creditworthy borrower. Its past performance has been characterized by sound, conservative management. Ratios of external debt service to exports have always been considerably below 10% while the ratio of debt outstanding to GDP, now at the end of the petroleum boom, stands at 15%. The recent fall in export earnings and thus in revenues to the Government has presented the country with a fiscal problem of significant proportions as the momentum of oil generated expenditure both on subsidies as well as capital investment has still to run its course. The mission's projections outline the magnitude of the problem and indicate that unless significant corrective action is taken, the fiscal situation could quickly spill over into the balance of payments causing within a few years an external debt burden of unmanageable proportions. Such action should include the elimination of subsidies, both direct and those extended through state corporation deficits, and the winding down of the investment program, with the completion of both, heavy industry and infrastructure projects. The subsidy program arose from the desire to alleviate poverty, this it has done, but its chief beneficiaries are the middle class; better targetting could eliminate this fiscal burden. The heavy industry program was designed to provide a non-petroleum source of export earnings and this it will do, but what is currently in place needs to be properly digested and profitably producing before additional expenditures are made. Immediate fiscal action is also needed to improve the revenue base, specifically in the area of indirect taxation.

268. Provided a fiscal package of this nature, capable of keeping the overall deficit (excluding debt amortization) within 5% of GDP, is put in place, and provided that the Government of Trinidad and Tobago maintains its past record of prudent financial policies, the country should be able to avoid serious balance of payments problems, and should be able also to keep the debt service ratio between 10 and 15%, and should remain creditworthy for all types of borrowing.

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Table 1.1: TRINIDAD & TOBAGO: POPULATION, MID-YEAR 1950-80 a/
(Thousands)

Year	Mid-Year Population			% Rate of Increase
	Male	Female	Total	
1950	317.0	315.0	632.0	2.6
1951	326.0	323.0	649.0	2.2
1952	332.0	331.0	663.0	2.3
1953	340.0	338.0	678.0	2.9
1954	350.0	348.0	698.0	2.9
1955	361.0	359.0	721.0	3.3
1956	372.0	370.0	743.0	3.1
1957	384.0	381.0	765.0	3.0
1958	396.0	393.0	789.0	3.1
1959	410.0	407.0	817.0	3.5
1960	415.3	419.1	834.4	2.1
1961	431.9	435.7	867.6	4.0
1962	449.0	451.4	900.5	3.8
1963	460.7	463.5	924.2	2.6
1964	474.4	476.7	951.1	2.9
1965	485.5	488.4	973.9	2.4
1966	495.7	499.1	994.8	2.1
1967	504.4	505.7	1,010.1	1.5
1968	510.2	510.4	1,020.6	1.0
1969	516.1	511.7	1,027.8	0.7
1970	518.4	508.3	1,026.7	-0.1
1971	526.5	505.9	1,032.5	0.5
1972	533.8	511.3	1,045.1	1.2
1973	541.4	516.3	1,057.8	1.2
1974	545.7	521.4	1,067.0	0.9
1975	553.2	528.4	1,081.6	1.4
1976	561.5	536.7	1,098.2	1.5
1977	568.8	549.9	1,118.6	1.9
1980 a/	532.7	534.4	1,067.1	

a/ Population data for 1971-77 are estimates based on the 1970 Census. The preliminary results of the 1980 Census are given, but revised estimates for previous years and a detailed breakdown of the data are not yet available.

Note: Numbers may not add up to totals due to rounding.

Source: Central Statistical Office

Table 1.2: TRINIDAD & TOBAGO: MID-YEAR POPULATION BY AGE GROUP AND SEX, 1950-80 ^{a/}
(Thousands)

Year	Total			0-14		15-44		45-64		65 and over	
	Both Sexes	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
1950	632.0	317.0	315.0	127.0	124.0	138.0	138.0	41.0	38.0	11.0	14.0
1951	649.0	326.0	323.0	130.0	128.0	140.0	141.0	43.0	40.0	12.0	15.0
1952	663.0	332.0	331.0	134.0	132.0	142.0	143.0	44.0	42.0	12.0	15.0
1953	678.0	340.0	338.0	139.0	136.0	144.0	145.0	46.0	43.0	12.0	15.0
1954	698.0	350.0	348.0	143.0	141.0	146.0	147.0	48.0	45.0	12.0	15.0
1955	721.0	361.0	359.0	151.0	148.0	149.0	150.0	49.0	46.0	12.0	15.0
1956	743.0	372.0	370.0	158.0	155.0	152.0	152.0	50.0	48.0	12.0	15.0
1957	765.0	384.0	381.0	163.0	160.0	156.0	156.0	52.0	50.0	12.0	15.0
1958	789.0	396.0	393.0	169.0	165.0	160.0	160.0	54.0	52.0	12.0	15.0
1959	817.0	410.0	407.0	176.0	172.0	166.0	166.0	56.0	53.0	12.0	15.0
1960	834.4	415.3	419.1	180.1	177.4	165.9	170.8	54.9	51.5	14.4	19.3
1961	867.6	431.9	435.7	187.4	186.4	174.5	179.9	56.5	52.8	13.6	18.4
1962	900.5	449.0	451.4	193.3	190.1	183.8	188.3	58.2	54.5	13.7	18.6
1963	924.2	460.7	463.5	199.0	195.4	187.7	193.0	60.1	56.2	13.9	18.9
1964	951.1	474.4	476.7	204.6	200.4	193.6	199.0	62.0	58.1	14.2	19.3
1965	973.9	485.5	488.4	209.5	204.9	197.6	203.5	63.8	60.1	14.7	19.8
1966	994.8	495.7	499.1	213.4	208.6	200.9	207.1	66.3	62.8	15.1	20.5
1967	1,010.1	504.4	505.7	216.6	211.1	203.9	208.6	68.6	64.8	15.2	21.1
1968	1,020.6	510.2	510.4	218.5	213.1	207.1	208.6	68.8	67.0	15.7	21.7
1969	1,027.8	516.1	511.7	218.7	211.8	212.2	210.2	69.5	67.8	15.7	21.9
1970	1,026.7	518.4	508.3	215.1	208.0	214.7	209.4	72.5	68.5	16.1	22.4
1971	1,032.5	526.5	505.9	213.9	205.4	221.4	208.3	74.2	69.5	17.0	22.7
1972	1,045.1	533.8	511.3	213.7	204.7	226.9	213.3	75.5	70.1	17.7	23.2
1973	1,057.8	541.4	516.3	212.6	203.9	233.6	218.4	76.9	70.8	18.2	23.1
1974	1,067.0	545.7	521.4	211.6	203.1	238.9	224.0	76.4	70.7	18.9	23.5
1975	1,081.6	553.2	528.4	210.3	201.0	246.9	231.6	76.4	71.9	19.6	23.7
1976	1,098.2	561.5	536.7	208.0	198.1	256.7	240.8	76.5	73.7	20.2	24.0
1977	1,118.6	568.8	549.9	205.4	197.1	265.1	252.2	77.4	75.9	20.9	24.7
1980 ^{a/}	1,067.1	532.7	534.4	...	...	...	...	...	...	...	...

^{a/} Population data for 1971-77 are estimates based on the 1970 Census. The preliminary results of the 1980 Census are given, but revised estimates for previous years and a detailed breakdown of the data are not yet available.

Note: Numbers may not add up to totals due to rounding.

Source: Central Statistical Office

**Table 1.3: TRINIDAD AND TOBAGO - AGE SPECIFIC PARTICIPATION RATES BY SEX AND AGE GROUP
1977-81**

(%)

Age Group	Male					Female				
	1977	1978	1979	1980	1981	1977	1978	1979	1980	1981
All Ages	82.5	82.5	81.5	79.5	81.5	36.0	37.5	37.0	31.4	37.8
15 - 19	53.5	56.5	55.5	50.9	55.2	20.0	22.0	20.5	18.0	21.7
20 - 24	94.0	94.0	92.5	90.2	92.9	51.0	52.5	51.0	45.5	49.1
25 - 34	97.0	96.5	95.5	94.5	96.4	47.0	46.5	48.0	41.6	49.9
35 - 44	98.0	98.5	98.0	96.2	96.9	41.0	46.0	46.5	37.6	46.5
45 - 54	96.0	95.0	96.5	94.7	96.5	38.0	44.0	41.0	32.5	44.6
55 - 59	92.0	89.5	91.5	89.6	87.9	40.0	38.0	37.5	28.4	32.3
60 - 64	79.0	82.0	75.0	71.4	77.0	32.0	24.5	23.5	18.2	22.9
65 and Over	36.0	32.5	30.0	22.0	31.0	9.0	8.0	6.0	4.9	8.0

Source: Central Statistical Office

Table 1.4: TRINIDAD & TOBAGO: SELECTED VITAL STATISTICS, 1960-80 ^{a/}
(Thousands)

Year	Mid-Year Population	No. of Live Births	Number of Deaths	Natural Increase	Net Emigration	Total Increase
1960	834.4	32.9	6.6	26.3	- 0.2	26.1
1961	867.6	32.9	6.9	26.0	0.4	26.4
1962	900.5	34.1	6.5	27.6	2.5	30.1
1963	924.2	32.9	6.7	26.2	2.4	28.6
1964	951.1	33.0	6.6	26.4	- 2.2	24.2
1965	973.9	32.0	6.7	25.3	- 3.1	22.2
1966	994.8	30.1	7.1	23.0	- 5.2	17.8
1967	1,010.1	28.5	6.8	21.7	- 8.9	12.8
1968	1,020.6	28.1	7.1	21.0	- 9.1	11.9
1969	1,027.8	25.1	7.1	18.1	- 15.6	2.5
1970	1,026.7	25.2	7.0	18.2	- 17.4	0.8
1971	1,032.5	26.1	7.0	19.1	- 7.5	11.5
1972	1,045.1	28.0	7.0	21.1	- 7.0	14.1
1973	1,057.8	26.2	7.5	18.7	- 9.6	9.1
1974	1,067.0	26.1	6.7	19.4	- 6.7	12.8
1975	1,081.6	25.7	6.9	18.8	- 6.0	12.5
1976	1,098.2	26.7	7.3	19.3	- 2.2	17.1
1977	1,118.6	27.9	7.3	20.6	- 2.6	18.0
1978	...	28.3	6.8	21.5	- 10.6	11.1
1979 ^{a/}	...	28.3	7.7	20.6	- 9.3	11.3
1980 ^{a/}	1,067.1	29.0	7.6	21.4	- 4.4	17.0

^{a/} Population data for 1971-77 are estimates based on the 1970 census. The preliminary results of the 1980 Census are given, but revised estimates for previous years and a detailed breakdown of the data are not yet available.

Source: Central Statistical Office

**Table 1.5: TRINIDAD AND TOBAGO - POPULATION, LABOR FORCE AND EMPLOYMENT BY AGE, 1970-81
SELECTED YEARS ^{a/}**

('000)

	<u>1970</u>	<u>1973</u>	<u>1975</u>	<u>1977</u>	<u>1980^{b/}</u>	<u>1981^{b/}</u>
<u>Total (Mid-year) population ^{c/}</u>	<u>1,026.7</u>	<u>1,057.8</u>	<u>1,081.6</u>	<u>1,118.6</u>	<u>1,067.1</u>	<u>1,073.2</u>
<u>Total Labor Force</u>	<u>366.2</u>	<u>376.0</u>	<u>395.8</u>	<u>430.8</u>	<u>430.3</u>	<u>431.4</u>
Employed	320.4	324.1	335.7	370.6	387.9	386.4
Unemployed	45.8	51.9	60.1	60.2	42.4	44.9
<u>15-64 Years</u>	<u>565.1</u>	<u>599.7</u>	<u>626.8</u>	<u>665.4</u>	<u>657.8</u>	<u>661.6</u>
<u>In Labor Force</u>	<u>353.9</u>	<u>362.7</u>	<u>382.3</u>	<u>418.3</u>	<u>419.5</u>	<u>419.3</u>
Employed	308.8	311.9	323.1	359.2	377.6	374.6
Unemployed	45.2	50.8	59.2	59.1	41.9	44.6
Not in Labor Force	211.2	237.0	244.5	242.2	283.3	242.4
<u>65 Years and Over</u>	<u>38.5</u>	<u>41.3</u>	<u>43.3</u>	<u>45.5</u>	<u>64.1</u>	<u>64.2</u>
<u>In Labor Force</u>	<u>12.3</u>	<u>13.3</u>	<u>13.5</u>	<u>12.5</u>	<u>10.8</u>	<u>12.1</u>
Employed	11.7	12.2	12.6	11.4	10.3	11.8
Unemployed	0.6	1.1	0.9	1.1	0.5	0.3
Not in Labor Force	26.2	28.0	29.8	44.9	53.3	52.1
Dependency Ratio	82	76	73	68	62	62
Population 15-64 as % of Total Population	55	57	58	60	62	62
Total Labor Force as % of Total Population	36	36	37	39	40	40
Employed Labor Force as % of Population 15 years and above	53	51	50	52	54	53
Unemployed Labor Force as % of Total Population	4	5	6	5	4	4
Unemployed Labor Force as % of Total Labor Force	13	14	15	14	9.9	10.4

^{a/} Labor Force Statistics refer to June of each year, except for 1980 when December data were used.

^{b/} Statistics for 1980 and 1981 are not directly comparable to those of previous years because of a change in the sample base on which the post 1979 data were derived.

^{c/} Actual Population Census data for 1970 & 1980, and estimates for the other years.

Source: Central Statistical Office.

Table 1.6: TRINIDAD AND TOBAGO - LABOR FORCE CLASSIFIED BY SEX & AGE GROUP, 1970-81 a/
('000)

		1970	1977	1979	1980	1981	Percentage Distribution		
							1970	1977	1981
All Ages	T	363.5	428.3	446.2	430.3	431.4	100.0	100	100
	M	252.9	299.7	309.6	293.6	295.1	69.5	70.0	68.5
	F	110.6	128.6	136.6	136.7	136.2	30.4	30	31.5
15-24	T	115.8	142.4	141.3	136.3	132.6	31.9	33.2	30.8
	M	81.4	98.6	97.7	94.4	92.0	22.4	23.0	21.3
	F	34.4	43.6	43.6	41.4	40.6	9.5	10.2	9.4
25-34	T	73.5	108.5	118.8	116.0	121.0	20.2	25.2	28.0
	M	51.7	75.4	80.0	76.5	80.2	14.2	17.6	18.6
	F	21.8	33.1	38.8	39.5	40.8	6.0	7.7	9.4
35-44	T	66.8	72.2	80.4	78.1	78.2	18.4	16.8	18.1
	M	43.9	49.8	54.9	51.6	52.7	12.1	11.6	12.2
	F	22.8	22.4	25.5	26.6	25.6	6.3	5.2	5.9
45-54	T	61.8	57.3	56.4	52.2	52.9	17.0	13.4	12.3
	M	42.6	40.5	38.9	34.0	34.6	11.7	9.4	8.0
	F	19.2	16.8	17.5	18.2	18.3	5.3	3.9	4.2
55-64	T	34.2	35.7	38.3	36.9	34.6	9.4	8.3	8.0
	M	25.0	26.1	29.3	28.4	26.3	6.9	6.1	6.1
	F	9.3	9.6	9.0	8.6	8.2	2.6	2.2	1.9
65+	T	11.6	12.4	11.0	10.8	12.1	3.2	2.9	2.8
	M	8.5	9.4	8.7	8.3	9.4	2.3	2.2	2.2
	F	3.1	3.0	2.3	2.5	2.7	0.9	.7	.6

a/ Population estimates have been revised in the light of the 1980 Population Census. The labor force data for 1980 & 1981 represent a new series and are not directly comparable to those of previous years.

Note: July to December for 1980 and January to June for 1981.

Source: Central Statistical Office.

Table 1.7: TRINIDAD & TOBAGO - UNEMPLOYED AND UNEMPLOYMENT BY EDUCATIONAL ATTAINMENT, 1977-81

(Thousands of persons and % of labor force at each education level)

	1977		1978		1979		1980		1981	
	No.	%	No.	%	No.	%	No.	%	No.	%
Total All Education	60.2	14	53.5	12	53.1	12	42.4	10	44.0	10
No	0.9	7	0.5	3	0.5	5	0.4	4	0.3	3
Kindergarten	0.4	8	0.3	6	0.4	12	0.8	16	0.2	6
Standard 1-2	2.5	16	2.6	16	1.6	12	1.5	12	0.8	6
Standard 3-5	11.7	14	10.6	12	10.2	13	7.7	10	9.9	12
Standard 6-7	26.8	15	23.6	14	25.1	13	17.0	10	17.5	10
Secondary Certificate not obtained	15.4	17	12.0	13	11.5	12	13.2	12	14.1	13
Secondary Certificate obtained	2.1	7	2.0	6	2.0	5	1.2	3	1.4	5
University	0.2	3	0.1	1	-	-	0.1	1	0.2	2
Educated Abroad	0.1	4	-	-	-	-	0.2	13	-	-
Other	-	-	0.8	11	1.8	17	0.4	11	0.6	13
Not Stated	-	-	0.2	39	-	-	-	-	-	-

Source: Central Statistical Office

Table 1.8: TRINIDAD AND TOBAGO - LABOR FORCE CLASSIFIED BY EMPLOYMENT STATUS, TYPE OF WORKER AND SEX, 1977-81 a/

('000)

	1977	1978	1979	1980	1981
TOTAL LABOR FORCE	428.3	440.6	446.2	430.3	431.4
Male	299.7	305.7	309.6	293.6	295.1
With Jobs	(266.0)	(278.0)	(283.9)	(270.2)	(268.9)
Unemployed	(33.8)	(28.7)	(25.8)	(23.4)	(26.2)
Female	128.6	134.8	136.6	136.7	136.2
With Jobs	(104.8)	(110.8)	(113.2)	(117.7)	(117.6)
Unemployed	(23.8)	(24.0)	(23.4)	(19.0)	(18.6)
Paid Employees	337.2	355.8	362.2	349.2	345.6
Male	241.8	251.5	253.2	238.7	238.9
With Jobs	(214.4)	(225.4)	(229.4)	(219.2)	(216.1)
Unemployed	(27.4)	(26.1)	(23.9)	(19.4)	(22.8)
Female	95.4	104.4	109.0	110.5	106.7
With Jobs	(78.9)	(86.4)	(90.4)	(96.1)	(92.7)
Unemployed	(16.6)	(18.0)	(18.6)	(14.5)	(14.0)
Of which:					
Government:	142.9	158.4	164.2	153.6	158.0
Male	104.8	113.6	116.2	107.3	112.0
With Jobs	(94.4)	(103.2)	(106.4)	(99.2)	(101.3)
Unemployed	(10.4)	(10.3)	(9.8)	(8.1)	(10.6)
Female	38.4	44.8	48.0	46.3	46.1
With Jobs	(29.6)	(34.4)	(37.9)	(38.9)	(38.2)
Unemployed	(8.8)	(10.4)	(10.2)	(7.4)	(7.8)
Other	194.0	197.6	198.0	195.5	187.6
Male	136.9	137.9	137.2	131.3	126.9
With Jobs	(120.0)	(122.2)	(123.1)	(120.0)	(114.8)
Unemployed	(17.0)	(15.8)	(14.0)	(11.4)	(12.2)
Female	57.0	59.6	60.9	64.2	60.6
With Jobs	(49.4)	(52.0)	(52.4)	(57.1)	(54.5)
Unemployed	(7.6)	(7.6)	(8.4)	(7.1)	(6.2)
Unpaid Workers	19.3	17.2	17.3	16.9	15.1
Male	10.2	8.7	8.0	8.2	5.6
With Jobs	(10.1)	(8.7)	(8.0)	(8.2)	(5.6)
Unemployed	0.1	(-)	(-)	(-)	(-)
Female	9.0	8.4	9.3	8.7	9.4
With Jobs	(9.0)	(8.4)	(9.2)	(8.7)	(9.4)
Unemployed	(-)	(-)	(0.1)	(-)	(-)
Employers	10.1	11.0	11.0	8.0	8.3
Male	8.6	9.7	10.0	7.4	7.6
With Jobs	(8.5)	(9.7)	(9.9)	(7.4)	(7.6)
Unemployed	(0.1)	(-)	(0.1)	(-)	(-)
Female	1.6	1.3	1.0	0.6	0.8
With Jobs	(1.6)	(1.3)	(1.0)	(0.6)	(0.8)
Unemployed	(-)	(-)	(-)	(-)	(-)
Own Account Workers	48.6	48.0	49.0	48.0	54.5
Male	33.2	33.2	36.4	35.4	39.9
With Jobs	(33.0)	(33.2)	(36.4)	(35.3)	(39.6)
Unemployed	(0.3)	(-)	(-)	(0.1)	(0.3)
Female	15.4	14.7	12.8	12.6	14.6
With Jobs	(15.2)	(14.6)	(12.6)	(12.4)	(14.6)
Unemployed	(0.2)	(0.1)	(0.2)	(0.2)	(-)
Never Worked	11.8	8.0	6.4	7.3	7.5
Male	5.2	2.4	1.8	3.1	3.0
With Jobs	.	.	.	.	.
Unemployed	.	.	.	3.1	3.0
Female	6.6	5.7	4.7	4.2	4.5
With Jobs	.	.	.	.	.
Unemployed	.	.	.	4.2	4.5
Not Stated	1.4	0.5	0.3	1.0	0.4
Male	0.8	0.2	0.2	0.9	0.2
With Jobs	(-)	(-)	(0.2)	(0.1)	(-)
Unemployed	(0.8)	(0.2)	(-)	(0.8)	(0.2)
Female	0.6	0.3	0.1	0.1	0.3
With Jobs	(0.1)	(-)	(-)	(-)	(0.1)
Unemployed	(0.5)	(0.3)	(0.1)	(0.1)	(0.2)

a/ Population estimates have been revised in the light of the 1980 Population Census. The labor force data for 1980 and 1981 represent a new series and are not directly comparable to those of previous years. Estimates are for January-June, except for 1977 and 1980 when July-December estimates are used.

Source: Central Statistical Office.

Table 1.9: TRINIDAD AND TOBAGO - LABOR FORCE CLASSIFIED BY EMPLOYMENT STATUS & OCCUPATIONAL GROUP, 1977-81

('000)

Occupational Groups	1977 #/			1978 #/			1979 #/			1980 #/			1981 #/		
	Total	Persons with Jobs	Unem- ployed	Total	Persons with Jobs	Unem- ployed	Total	Persons with Jobs	Unem- ployed	Total	Persons with Jobs	Unem- ployed	Total	Persons with Jobs	Unem- ployed
Total, All Occupations	430.8	370.6	60.2	439.0	385.4	53.5	447.3	394.3	53.1	430.3	387.8	42.5	431.4	386.5	44.9
Professional & Technical	33.3	32.6	0.7	33.0	32.2	0.7	34.9	34.3	0.6	35.6	35.1	0.5	32.9	32.4	0.5
Administrative, Executive, Managerial & Clerical	48.2	44.3	3.9	54.5	50.8	3.7	57.8	53.2	4.6	58.7	54.4	4.3	54.8	51.2	3.6
Commercial, Financial & Insurance	38.3	36.2	2.1	37.9	35.3	2.6	40.3	37.4	2.9	38.6	36.1	2.5	40.9	38.1	2.7
Farmer, Fisherman, Hunter & Lodger	52.1	48.8	3.3	49.4	46.5	3.0	45.6	43.3	2.3	28.5	27.4	1.1	39.3	38.2	1.1
Craftsmen, Production Process Workers & Laborers n.c.c.	92.1	85.3	6.8	88.6	82.2	6.4	97.4	91.9	5.6	84.7	80.6	4.1	87.0	83.2	3.8
Workers in Transportation & Communications	26.9	25.7	1.2	27.2	25.5	1.7	26.0	24.7	1.3	28.0	27.6	0.4	28.3	27.4	1.4
Construction Workers	73.4	51.6	21.8	84.8	62.7	22.1	85.6	62.1	23.5	97.1	79.4	17.7	89.7	70.1	19.5
Service Workers	51.0	45.0	6.0	55.2	49.7	5.4	52.8	47.1	5.8	49.1	45.6	3.5	49.3	45.1	4.2
Never Worked	12.1	..	12.1	6.8	..	6.8	6.4	..	6.4	6.6	..	6.6	7.5	..	7.5
Not Stated	3.5	1.0	2.5	1.5	0.5	1.1	0.4	0.3	0.1	3.4	1.5	1.9	1.3	0.7	0.6
Proportion of (%):															
(a) Professional & Technical Workers	7.7	...	...	7.5	...	...	7.8	...	...	8.3	...	...	7.6	...	...
(b) Craftsmen & Production Process Workers	21.4	...	...	20.2	...	...	21.8	...	...	19.7	...	...	20.2	...	...

a/ Figures may differ slightly from Tables 1.6 and 1.8 because surveys were done at different times of year.

NOTE: Numbers may not add up due to rounding.

Source: Central Statistical Office.

Table 1.10: TRINIDAD AND TOBAGO - LABOR FORCE CLASSIFIED BY INDUSTRIAL BRANCH AND SEX, 1977-81 ^{a/}

('000)

Industrial Group		1977	1978	1979	1980 ^{b/}	1981 ^{b/}
<u>Total Labor Force</u>	T	430.8	439.0	447.3	430.3	431.4
	M	(301.0)	(306.5)	(309.1)	(293.6)	(295.1)
	F	(129.8)	(132.4)	(138.1)	(136.7)	(136.3)
Agriculture, Forestry, Hunting & Fishing	T	57.6	53.3	47.5	41.3	43.7
	M	(43.8)	(41.2)	(36.3)	(30.9)	(30.7)
	F	(13.8)	(12.3)	(11.2)	(10.4)	(13.1)
Mining, Quarrying & Manufacturing	T	79.8	80.9	78.6	66.2	70.6
	M	(59.1)	(62.4)	(59.9)	(47.2)	(54.2)
	F	(20.6)	(18.5)	(18.7)	(19.1)	(16.4)
Construction, Electricity, Gas & Water	T	78.7	90.1	98.5	97.6	100.6
	M	(69.4)	(76.4)	(83.8)	(84.4)	(87.4)
	F	(9.3)	(13.7)	(14.6)	(13.2)	(13.2)
Commerce	T	73.8	70.9	78.4	84.7	78.0
	M	(40.1)	(36.3)	(40.5)	(41.2)	(35.3)
	F	(33.7)	(34.5)	(37.9)	(43.5)	(42.6)
Transportation & Communications	T	33.3	31.9	31.6	33.2	33.8
	M	(29.1)	(28.3)	(29.1)	(29.8)	(30.0)
	F	(4.2)	(3.5)	(2.5)	(3.4)	(3.8)
<u>Services ^{c/}</u>	T	92.1	103.5	105.7	97.7	96.4
	M	(52.0)	(58.6)	(57.1)	(55.4)	(54.1)
	F	(40.1)	(44.8)	(48.7)	(42.3)	(42.3)
Never Worked	T	12.2	6.8	6.8	6.6	7.5
	M	(5.5)	(2.3)	(2.1)	(2.7)	(2.9)
	F	(6.8)	(4.5)	(4.3)	(3.9)	(4.5)
Not Stated	T	3.4	1.5	0.5	3.0	0.8
	M	(2.1)	(0.9)	(0.3)	(2.1)	(0.5)
	F	(1.3)	(0.6)	(0.3)	(0.9)	(0.3)

^{a/} Data for January-June only, except for 1980 when July-December data was used. Figures may differ slightly from Tables 1.6 and 1.8 because surveys were done at different times of year.

^{b/} The 1980-81 data are not directly comparable to those of previous periods because of a change in the labor force sample base after the 1980 Population Census.

^{c/} Includes Public Administration.

Note: Numbers may not add up to totals due to rounding.

Source: Central Statistical Office.

**Table 1.11: TRINIDAD AND TOBAGO - PERSONS WITH JOBS CLASSIFIED
BY ECONOMIC BRANCH AND SEX, 1977-81 ^{a/}**

('000)

Industrial Group		1977	1978	1979	1980	1981
<u>Total Employed Labor Force</u>	T	370.6	385.4	394.2	387.8	386.5
	M	(266.5)	(276.6)	(281.3)	(270.1)	(268.9)
	F	(104.1)	(108.8)	(112.9)	(117.8)	(117.6)
Agriculture, Forestry, Hunting and Fishing	T	54.4	50.4	45.2	39.6	42.4
	M	(41.3)	(39.0)	(35.2)	(29.5)	(29.7)
	F	(13.1)	(11.5)	(10.0)	(10.1)	(12.7)
Mining, Quarrying and Manufacturing	T	72.6	75.4	72.8	62.6	66.4
	M	(54.6)	(57.9)	(56.3)	(44.5)	(50.9)
	F	(18.0)	(17.5)	(16.5)	(17.7)	(15.4)
Construction, Electric- ity, Gas and Water	T	58.9	69.1	75.5	81.0	81.3
	M	(55.7)	(63.6)	(69.3)	(73.6)	(74.2)
	F	(3.2)	(5.5)	(6.2)	(7.4)	(7.1)
Commerce	T	68.4	65.7	71.8	79.2	72.8
	M	(37.3)	(34.4)	(38.4)	(39.5)	(33.5)
	F	(31.1)	(31.4)	(33.3)	(39.7)	(39.3)
Transportation and Communications	T	31.1	29.9	30.0	32.4	31.9
	M	(27.8)	(26.7)	(27.6)	(29.2)	(28.5)
	F	(3.3)	(3.2)	(2.4)	(3.2)	(3.4)
Services ^{b/}	T	84.4	94.6	08.6	92.6	91.3
	M	(49.0)	(54.7)	(54.2)	(52.9)	(51.8)
	F	(35.4)	(39.8)	(44.4)	(39.6)	(39.5)
Not Stated	T	0.8	0.4	0.4	0.8	0.2
	M	(0.8)	(0.4)	(0.3)	(0.8)	(0.2)
	F	(0.1)	(0.1)	(0.1)	(-)	(0.0)

^{a/} January to June only, except for 1980 when July to December data was used. Figures may differ slightly from Tables 1.6 and 1.8 because surveys were done at different times of year.

^{b/} Includes Public Administration.

Note: The 1980-81 data are not directly comparable to those of previous periods because of a change in the labor force sample base, after the 1980 Population Census.

Note: Numbers may not add up to totals due to rounding.

Source: Central Statistical Office (CSSP).

Table 1.12: TRINIDAD AND TOBAGO - TOTAL, MALE AND FEMALE, UNEMPLOYED PERSONS CLASSIFIED BY INDUSTRIAL BRANCH AND STATUS OF UNEMPLOYMENT, 1977-81a/

('000)

	1977			1978			1979			1980			1981		
	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F
All Industries															
Total	60.2	34.5	25.7	53.5	29.9	23.6	53.1	27.9	25.2	42.5	23.5	18.9	44.9	26.2	18.6
Job Seekers	(39.9)	(21.2)	(13.8)	(28.0)	(16.4)	(11.6)	(28.7)	(16.3)	(12.3)	(24.7)	(14.7)	(10.1)	(23.3)	(15.2)	(8.1)
Other Unemployed	(25.3)	(13.3)	(11.9)	(25.5)	(13.5)	(12.0)	(24.4)	(11.5)	(12.9)	(17.8)	(8.9)	(8.8)	(21.6)	(11.1)	(10.5)
Agriculture															
Total	3.3	2.6	0.7	3.1	2.2	0.8	2.4	1.2	1.2	1.7	1.4	0.3	1.3	0.9	0.3
Job Seekers	(1.3)	(1.2)	(0.1)	(1.1)	(0.8)	(0.3)	(0.4)	(0.2)	(0.3)	(0.4)	(0.4)	(0.0)	(0.4)	(0.3)	(0.0)
Other Unemployed	(1.9)	(1.3)	(0.6)	(2.0)	(1.5)	(0.5)	(2.0)	(1.0)	(0.9)	(1.3)	(1.0)	(0.3)	(0.9)	(0.6)	(0.3)
Mining, Quarrying & Manufacturing															
Total	7.2	4.5	2.6	5.5	4.6	0.9	5.8	3.7	2.2	4.1	2.7	1.4	4.3	3.2	1.1
Job Seekers	(3.9)	(2.6)	(1.3)	(3.5)	(2.7)	(0.7)	(3.4)	(2.4)	(1.0)	(2.4)	(1.8)	(0.6)	(2.2)	(1.5)	(0.7)
Other Unemployed	(3.3)	(2.0)	(1.3)	(2.0)	(1.9)	(0.2)	(2.4)	(1.3)	(1.1)	(1.7)	(0.9)	(0.8)	(2.0)	(1.7)	(0.3)
Construction & Power															
Total	19.7	13.6	6.1	21.0	12.8	8.3	23.0	14.5	8.4	16.6	10.8	5.8	19.3	13.2	6.1
Job Seekers	(12.4)	(9.1)	(3.3)	(12.1)	(7.7)	(4.5)	(12.6)	(8.4)	(4.2)	(10.8)	(7.3)	(3.5)	(11.1)	(8.4)	(2.7)
Other Unemployed	(7.3)	(4.5)	(2.8)	(8.9)	(5.1)	(3.8)	(10.3)	(6.1)	(4.2)	(5.8)	(3.5)	(2.3)	(8.1)	(4.8)	(3.4)
Commerce															
Total	5.4	2.7	2.6	5.1	1.9	3.2	6.6	2.0	4.6	5.5	1.7	3.8	5.1	1.7	3.4
Job Seekers	(2.7)	(1.5)	(1.2)	(2.6)	(1.1)	(1.5)	(3.8)	(1.6)	(2.2)	(3.1)	(0.9)	(2.2)	(2.7)	(1.1)	(1.6)
Other Unemployed	(2.6)	(1.2)	(1.4)	(2.5)	(0.9)	(1.6)	(2.8)	(0.5)	(2.3)	(2.4)	(0.8)	(1.6)	(2.4)	(0.6)	(1.8)
Transportation & Communications															
Total	2.2	1.3	0.9	2.0	1.7	0.4	1.6	1.6	0.1	0.8	0.6	0.2	1.9	1.5	0.3
Job Seekers	(1.6)	(0.9)	(0.7)	(0.9)	(0.8)	(0.1)	(0.7)	(0.7)	(-)	(0.7)	(0.5)	(0.2)	(0.9)	(0.7)	(0.2)
Other Unemployed	(0.6)	(0.4)	(0.2)	(1.2)	(0.9)	(0.3)	(0.9)	(0.8)	(0.1)	(0.1)	(0.1)	(-)	(1.1)	(0.8)	(0.2)
Services b/															
Total	7.7	2.9	4.7	8.9	3.9	5.0	7.1	2.8	4.3	5.1	2.4	2.7	5.1	2.3	2.8
Job Seekers	(4.6)	(1.9)	(2.7)	(4.2)	(2.0)	(2.2)	(3.5)	(1.5)	(2.1)	(3.2)	(1.5)	(1.7)	(2.8)	(1.4)	(1.4)
Other Unemployed	(3.1)	(1.0)	(2.0)	(4.7)	(1.9)	(2.8)	(3.6)	(1.4)	(2.2)	(1.9)	(0.9)	(0.9)	(2.3)	(0.9)	(1.4)
Never Worked															
Total	12.2	5.5	6.8	6.8	2.3	4.5	6.4	2.1	4.3	6.6	2.7	3.9	7.5	3.0	4.5
Job Seekers	(7.6)	(3.6)	(4.0)	(3.5)	(1.3)	(2.2)	(4.1)	(1.6)	(2.4)	(3.7)	(2.0)	(1.7)	(2.9)	(1.4)	(1.4)
Other Unemployed	(4.6)	(1.9)	(2.7)	(3.3)	(1.1)	(2.2)	(2.4)	(0.5)	(1.9)	(2.8)	(0.7)	(2.2)	(4.6)	(1.5)	(3.0)
Not Stated															
Total	2.6	1.3	1.2	1.1	0.5	0.6	0.2	(-)	0.2	2.3	1.3	0.9	0.6	0.3	0.3
Job Seekers	(0.7)	(0.4)	(0.4)	(0.1)	(-)	0.1	(0.1)	(-)	(0.1)	(0.5)	(0.3)	(0.2)	(0.3)	(0.2)	(0.0)
Other Unemployed	(1.8)	(0.9)	(0.9)	(1.0)	(0.5)	(0.5)	(0.1)	(-)	(0.1)	(1.7)	(1.0)	(0.7)	(0.3)	(0.2)	(0.2)

a/ The 1980-81 data are not directly comparable to those of previous years because of a change in the labor force sample base after the 1980 Population Census. Figures may differ slightly from Table 1.6 and 1.8 because surveys were taken at different times of year.

b/ Includes Public Administration.

Note: January to June only, except for 1980 when July to December data were used.

Note: Numbers may not add up to total due to rounding.

Source: Central Statistical Office (SCCP)

Table 1.13: TRINIDAD AND TOBAGO - UNEMPLOYMENT RATES BY INDUSTRIAL BRANCH, UNEMPLOYMENT STATUS AND SEX, 1977-81 ^{a/}

(%)

	1977			1978			1979			1980			1981		
	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F
All Industries															
Total	14.0	8.0	6.0	12.1	6.8	5.4	11.9	6.2	5.6	9.9	5.5	4.4	10.4	6.1	4.3
Job Seekers	(8.2)	(4.9)	(3.2)	(6.4)	(3.7)	(2.6)	(6.4)	(3.6)	(2.7)	(5.7)	(3.4)	(2.4)	(5.4)	(3.5)	(1.9)
Other Unemployed	(5.8)	(3.1)	(2.8)	(5.8)	(3.1)	(2.7)	(5.5)	(2.6)	(2.8)	(4.1)	(2.1)	(2.0)	(5.0)	(2.6)	(2.4)
Agriculture															
Total	0.8	0.6	0.2	0.7	0.5	0.2	0.5	0.3	0.3	0.4	0.3	0.1	0.3	0.2	0.1
Job Seekers	(0.3)	(0.3)	(0.0)	(0.2)	(0.2)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0.1)	(0)	(0.1)	(0.1)	(0.1)
Other Unemployed	(0.4)	(0.3)	(0.1)	(0.5)	(0.3)	(0.2)	(0.4)	(0.2)	(0.2)	(0.3)	(0.2)	(0.1)	(0.2)	(0.1)	(0)
Mining, Quarrying & Manufacturing															
Total	1.7	1.0	0.6	1.2	1.0	0.2	1.3	0.8	0.5	0.9	0.6	0.3	0.9	0.7	0.2
Job Seekers	(0.9)	(0.6)	(0.3)	(0.8)	(0.6)	(0.2)	(0.8)	(0.5)	(0.2)	(0.5)	(0.4)	(0.1)	(0.4)	(0.3)	(0.1)
Other Unemployed	(0.8)	(0.5)	(0.3)	(0.5)	(0.4)	(0)	(0.5)	(0.3)	(0.3)	(0.4)	(0.2)	(0.2)	(0.5)	(0.4)	(0.1)
Construction & Power															
Total	4.6	3.2	1.4	4.8	2.9	1.9	5.1	3.2	1.9	3.9	2.5	1.4	4.4	3.1	1.4
Job Seekers	(2.9)	(2.1)	(0.8)	(2.8)	(1.8)	(1.0)	(2.8)	(1.9)	(0.9)	(2.5)	(1.7)	(0.8)	(2.5)	(2.0)	(0.6)
Other Unemployed	(1.7)	(1.0)	(0.6)	(2.0)	(1.2)	(0.9)	(2.3)	(1.3)	(0.9)	(1.4)	(0.8)	(0.5)	(0.9)	(1.1)	(0.8)
Commerce															
Total	1.2	0.6	0.6	1.2	0.4	0.7	1.5	0.4	1.0	1.3	0.4	0.9	1.2	0.4	0.8
Job Seekers	(0.6)	(0.4)	(0.3)	(0.6)	(0.3)	(0.3)	(0.9)	(0.3)	(0.5)	(0.7)	(0.2)	(0.5)	(0.6)	(0.3)	(0.4)
Other Unemployed	(0.6)	(0.3)	(0.3)	(0.6)	(0.2)	(0.4)	(0.6)	(0.1)	(0.5)	(0.6)	(0.2)	(0.4)	(0.6)	(0.1)	(0.4)
Transportation & Communications															
Total	0.5	0.3	0.2	0.5	0.4	0.1	0.4	0.4	0	0.2	0.1	0.1	0.4	0.3	0.1
Job Seekers	(0.4)	(0.2)	(0.2)	(0.2)	(0.2)	(0)	(0.2)	(0.2)	(0)	(0.2)	(0.1)	(0.1)	(0.2)	(0.1)	(0.1)
Other Unemployed	(0.1)	(0.1)	(0.0)	(0.3)	(0.2)	(0.1)	(0.2)	(0.2)	(0)	(0)	(0)	(0)	(0.2)	(0.2)	(0)
Services ^{b/}															
Total	1.8	0.7	1.1	2.0	0.9	1.1	1.6	0.6	0.9	1.2	0.6	0.6	1.1	0.5	0.6
Job Seekers	(1.1)	(0.4)	(0.6)	(1.0)	(0.5)	(0.5)	(0.8)	(0.3)	(0.4)	(0.7)	(0.4)	(0.4)	(0.6)	(0.3)	(0.3)
Other Unemployed	(0.7)	(0.2)	(0.5)	(1.1)	(0.4)	(0.6)	(0.8)	(0.3)	(0.5)	(0.5)	(0.2)	(0.2)	(0.5)	(0.2)	(0.3)
Never Worked															
Total	2.8	1.3	1.6	1.5	0.5	1.0	1.4	0.5	0.9	1.5	0.6	0.9	1.7	0.7	1.0
Job Seekers	(1.8)	(0.8)	(0.9)	(0.8)	(0.3)	(0.5)	(0.9)	(0.4)	(0.5)	(0.8)	(0.5)	(0.4)	(0.7)	(0.3)	(0.7)
Other Unemployed	(1.1)	(0.4)	(0.6)	(0.8)	(0.3)	(0.5)	(0.5)	(0.1)	(0.4)	(0.7)	(0.1)	(0.5)	(1.0)	(0.4)	(0.3)
Not Stated															
Total	0.6	0.3	0.3	0.2	0.1	0.1	(0)	0	0	0.5	0.3	0.2	0.5	0.1	0
Job Seekers	(0.2)	(0.1)	(0.1)	(0)	(0)	(0)	(0)	(0)	(0)	(0.1)	(0.1)	(0.1)	0.1	0.1	(0)
Other Unemployed	(0.4)	(0.2)	(0.2)	(0.2)	(0.1)	(0.1)	(0)	(0)	(0)	(0.4)	(0.2)	(0.1)	(0.4)	(0)	(0)

^{a/} January to June only, except for 1980 when July to December data were used. Figures may differ slightly from Tables 1.6 and 1.8 because surveys were done at different times of year.

^{b/} Includes Public Administration.

NOTE: Numbers may not add up total due to rounding.

Source: World Bank and Central Statistical Office (COSP).

**Table 1.14: TRINIDAD AND TOBAGO - UNEMPLOYMENT RATES BY AGE GROUP
AND UNEMPLOYMENT STATUS, 1977-81 ^{a/}**

(%)

	1977	1978	1979	1980	1981
All Ages					
<u>Total</u>	14.0	12.2	11.9	9.9	10.4
Job Seekers	(8.2)	(6.3)	(6.4)	(5.7)	(5.4)
Other Unemployed	(5.8)	(5.3)	(5.5)	(4.2)	(5.2)
15 - 24					
<u>Total</u>	8.5	7.3	6.4	5.5	6.3
Job Seekers	(5.0)	(3.9)	(3.6)	(3.3)	(3.3)
Other Unemployed	(3.5)	(3.4)	(2.8)	(2.2)	(3.0)
25 - 34					
<u>Total</u>	2.8	2.3	2.7	2.3	2.3
Job Seekers	(1.5)	(1.2)	(1.4)	(1.4)	(1.3)
Other Unemployed	(1.3)	(1.1)	(1.3)	(1.1)	(1.0)
35 - 44					
<u>Total</u>	1.2	1.2	1.3	0.8	0.9
Job Seekers	(0.8)	(0.7)	(0.7)	(0.4)	(0.4)
Other Unemployed	(0.5)	(0.5)	(0.6)	(0.4)	(0.5)
45 - 54					
<u>Total</u>	0.7	0.8	0.9	0.7	0.5
Job Seekers	(0.4)	(0.4)	(0.5)	(0.3)	(0.3)
Other Unemployed	(0.3)	(0.4)	(0.4)	(0.4)	(0.2)
55 - 64					
<u>Total</u>	0.6	0.5	0.4	0.4	0.3
Job Seekers	(0.4)	(0.3)	(0.2)	(0.2)	(0.1)
Other Unemployed	(0.2)	(0.2)	(0.2)	(0.2)	(0.2)
65 +					
<u>Total</u>	0.3	0.2	0.1	0.1	0.0
Job Seekers	(0.1)	(0.0)	(0.0)	(0.0)	(0.0)
Other Unemployed	(0.2)	(0.2)	(0.1)	(0.1)	(0.0)

^{a/} January to June only, except for 1980 when July to December data were used. Figures may differ slightly from Tables 1.6 and 1.8 because surveys were taken at different times of year.

Note: Numbers may not add up to totals due to rounding.

Source: Central Statistical Office (CSSP)

Table 1.15: TRINIDAD AND TOBAGO - UNEMPLOYMENT RATES BY ADMINISTRATIVE AREA AND UNEMPLOYMENT STATUS, 1977-81^{a/}

(%)

	1977	1978	1979	1980	1981
Trinidad and Tobago					
Total	14.0	12.2	11.9	9.9	10.4
Job Seekers	(8.1)	(6.4)	(6.4)	(5.7)	(5.4)
Other Unemployed	(5.9)	(5.8)	(5.5)	(4.2)	(5.0)
Port of Spain					
Total	0.7	0.6	0.6	0.7	0.4
Job Seekers	(0.4)	(0.4)	(0.4)	(0.6)	(0.3)
Other Unemployed	(0.3)	(0.2)	(0.2)	(0.1)	(0.1)
San Fernando					
Total	0.2	0.6	0.5	0.4	0.4
Job Seekers	(0.1)	(0.3)	(0.2)	(0.3)	(0.1)
Other Unemployed	(0.1)	(0.3)	(0.3)	(0.1)	(0.2)
St. George					
Total	5.1	3.5	3.7	3.2	2.9
Job Seekers	(3.3)	(2.0)	(2.1)	(2.0)	(1.7)
Other Unemployed	(1.8)	(1.5)	(1.6)	(1.2)	(1.2)
Caroni					
Total	1.9	1.5	1.3	1.1	1.6
Job Seekers	(1.3)	(0.9)	(0.8)	(0.7)	(0.9)
Other Unemployed	(0.6)	(0.6)	(0.5)	(0.4)	(0.7)
Nariva/Mayaro					
Total	0.4	0.4	0.5	0.3	0.5
Job Seekers	(0.2)	(0.2)	(0.3)	(0.1)	(0.2)
Other Unemployed	(0.2)	(0.2)	(0.2)	(0.2)	(0.3)
St. Andrew/St. David					
Total	0.6	0.6	0.6	0.4	0.7
Job Seekers	(0.3)	(0.3)	(0.3)	(0.2)	(0.3)
Other Unemployed	(0.3)	(0.3)	(0.3)	(0.2)	(0.4)
Victoria					
Total	2.4	2.2	2.2	2.1	1.8
Job Seekers	(1.4)	(1.1)	(1.2)	(1.1)	(1.1)
Other Unemployed	(1.0)	(1.1)	(1.0)	(1.0)	(0.7)
St. Patrick					
Total	2.5	2.0	1.7	1.1	1.3
Job Seekers	(1.0)	(0.9)	(0.9)	(0.5)	(0.5)
Other Unemployed	(1.5)	(1.1)	(0.7)	(0.6)	(0.8)
Tobago					
Total	0.3	0.7	0.6	0.6	0.9
Job Seekers	(0.1)	(0.2)	(0.2)	(0.4)	(0.3)
Other Unemployed	(0.2)	(0.5)	(0.4)	(0.2)	(0.5)

^{a/} January to June only, except for 1980 when July-December data were used. Figures may differ slightly from Tables 1.6 and 1.8 because surveys were taken at different times of year.

Note: Numbers may not add to total due to rounding.

Source: Central Statistical Office (CSSP).

Table 1.16: TRINIDAD & TOBAGO - DURATION OF UNEMPLOYMENT, 1977-81

Interval Since Last Employed	1977		1978		1979		1980		1981	
	Number in'000	% of Total Unemployed								
Total All Periods ^{a/}	60.2	100	53.5	100	53.1	100	42.4	100	44.9	100
Under 1 month	10.3	17	8.1	15	8.2	15	6.4	15	6.5	14
1-3 months	21.0	35	22.4	42	23.9	45	15.1	36	18.3	41
4-6 months	6.1	10	5.6	10	5.8	11	5.0	12	6.3	14
7-11 months	2.8	5	4.0	7	2.5	5	2.5	6	1.5	3
1 year or more	7.8	13	6.5	12	6.2	12	6.2	15	4.8	11
Never worked	12.1	20	6.9	13	6.4	12	7.3	17	7.5	17

^{a/} Figures may differ slightly from Tables 1.6 and 1.8 because surveys were taken at different times of year.

Source: Central Statistical Office

Table 2.1: TRINIDAD AND TOBAGO - GROSS DOMESTIC PRODUCT BY INDUSTRIAL ORIGIN AT CURRENT FACTOR COST, 1970-81

(In millions of TT dollars)

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	Provisional 1980	Estimated 1981
Petroleum Sector	356.5	353.1	414.7	683.0	1,807.5	2,226.5	2,479.2	2,993.6	2,867.9	4,052.7	6,420.7	6,139.2
Exploration and Production	127.1	126.8	165.3	420.9	1,410.5	1,810.9	1,966.2	2,401.4	2,245.4	3,046.0	5,103.1	4,782.5
Refining	163.8	160.4	182.6	195.3	290.2	305.7	339.3	383.6	380.5	714.2	981.2	992.3
Marketing (Bulk distribution)	8.7	7.8	6.2	4.6	15.7	13.5	36.6	30.1	39.6	48.0	51.4	60.2
Service Contractors	17.9	23.1	22.2	29.0	34.4	41.7	92.5	126.6	139.3	148.1	146.9	189.1
Others	39.0	35.0	38.4	33.2	56.7	54.7	44.6	51.9	63.1	96.4	138.1	115.0
Retail distribution	(4.5)	(4.7)	(5.1)	(5.6)	(6.1)	(7.1)	(7.9)	(10.5)	(11.1)	(13.0)	(15.4)	(16.8)
Distribution & Transmission of natural gas	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(38.3)	(35.9)	(46.8)
Petrochemicals	(31.9)	(27.9)	(30.5)	(25.1)	(47.6)	(44.5)	(34.4)	(38.6)	(49.9)	(40.6)	(80.2)	(43.8)
Asphalt	(2.6)	(2.4)	(2.8)	(2.5)	(3.0)	(3.1)	(2.3)	(2.8)	(2.1)	(4.5)	(6.6)	(7.6)
Non-Petroleum Sector	1,303.2	1,438.2	1,658.0	1,895.0	2,330.7	3,020.9	3,599.9	4,507.1	5,671.1	7,233.7	8,698.1	10,592.5
Agriculture	99.0	105.3	129.8	128.2	179.8	253.9	279.9	292.4	302.9	355.1	361.8	443.4
Export	(12.9)	(10.9)	(10.8)	(9.5)	(13.3)	(19.8)	(22.4)	(41.2)	(61.4)	(44.4)	(45.4)	(56.6)
Domestic	(34.9)	(43.1)	(50.2)	(63.3)	(68.6)	(92.5)	(121.3)	(144.3)	(159.0)	(181.5)	(205.0)	(276.2)
Sugar	(51.2)	(51.3)	(68.8)	(55.4)	(97.9)	(141.6)	(136.2)	(106.9)	(82.5)	(129.2)	(111.4)	(110.6)
Manufacturing	152.0	159.5	182.9	202.2	245.3	308.3	395.8	510.0	612.7	760.5	911.9	996.7
Food, beverage & tobacco	(48.9)	(43.2)	(42.6)	(49.1)	(74.7)	(84.1)	(101.0)	(161.1)	(181.5)	(219.0)	(257.8)	(284.2)
Textile, garments & footwear	(14.3)	(14.3)	(16.2)	(17.6)	(23.7)	(25.3)	(37.4)	(48.7)	(67.5)	(70.8)	(90.9)	(97.1)
Printing and publishing	(11.0)	(13.7)	(15.6)	(18.5)	(20.6)	(26.3)	(29.3)	(47.6)	(55.3)	(60.8)	(76.6)	(80.6)
Wood and related products	(7.7)	(8.0)	(8.7)	(13.5)	(16.8)	(22.6)	(28.1)	(38.0)	(46.8)	(59.9)	(72.2)	(63.5)
Chemicals and nonmetallic minerals	(22.9)	(24.8)	(32.5)	(31.2)	(33.5)	(38.4)	(54.2)	(75.8)	(83.3)	(96.5)	(132.9)	(138.5)
Assembly type industries	(39.6)	(46.1)	(56.0)	(59.6)	(61.5)	(89.8)	(114.0)	(119.0)	(149.7)	(216.8)	(243.5)	(283.2)
Other manufactures	(7.6)	(9.4)	(11.3)	(12.7)	(14.5)	(21.8)	(31.8)	(19.8)	(28.6)	(36.7)	(38.0)	(49.6)
Construction & Quarrying	93.9	132.1	156.4	174.3	234.5	352.3	398.5	536.3	769.1	929.7	1,263.3	1,655.9
Construction	(91.7)	(129.7)	(153.8)	(169.9)	(228.9)	(345.7)	(390.9)	(527.0)	(756.1)	(912.1)	(1,232.1)	(1,608.9)
Quarrying	(2.2)	(2.4)	(2.6)	(4.4)	(5.6)	(6.6)	(7.6)	(9.3)	(13.0)	(17.6)	(31.2)	(47.0)
Transportation, storage & communications	242.2	216.2	273.6	327.5	360.3	419.0	575.2	800.7	1,058.9	1,367.9	1,572.4	1,938.0
Other services	716.1	825.1	915.3	1,062.8	1,310.8	1,687.4	1,950.5	2,367.7	2,927.5	3,820.5	4,588.7	5,558.5
Electricity & water	(36.5)	(45.8)	(51.1)	(53.7)	(51.1)	(67.0)	(73.4)	(94.1)	(125.0)	(159.0)	(180.2)	(201.4)
Distribution & restaurants	(266.1)	(275.0)	(299.3)	(351.0)	(461.1)	(574.3)	(635.0)	(747.5)	(917.5)	(1,125.9)	1,381.5	(1,648.3)
Hotels & guest houses	(8.9)	(10.2)	(10.2)	(14.1)	(15.8)	(19.9)	(23.0)	(31.6)	(38.1)	(47.1)	(56.6)	(69.2)
Finance, insurance & real estate	(155.2)	(177.2)	(179.3)	(230.8)	(252.3)	(320.4)	(419.5)	(505.1)	(640.5)	(943.3)	(1,154.9)	(1,598.4)
Government	(138.7)	(191.8)	(236.0)	(249.8)	(319.6)	(452.5)	(498.0)	(602.1)	(731.4)	(1,002.1)	(1,145.9)	(1,310.4)
Education & community services	(48.4)	(59.7)	(67.1)	(78.4)	(116.4)	(131.3)	(157.1)	(213.2)	(266.6)	(303.5)	(381.8)	(399.4)
Personal services	(62.3)	(65.4)	(71.7)	(85.0)	(94.5)	(122.0)	(144.5)	(174.0)	(208.4)	(239.6)	(278.8)	(331.4)
Gross Domestic Product at Factor Cost	1,659.7	1,791.3	2,072.7	2,578.0	4,138.2	5,247.4	6,079.1	7,300.7	8,539.0	11,286.4	15,118.8	16,731.7
Net Indirect Taxes	117.5	133.4	164.2	176.0	147.1	204.7	240.8	383.5	345.2	325.3	384.3	326.3
Indirect Taxes	(118.0)	(134.1)	(165.5)	(177.9)	(180.2)	(230.2)	(301.8)	(446.7)	(447.0)	(518.6)	(706.1)	(803.7)
Less: Subsidies	(6.5)	(6.7)	(1.3)	(1.9)	(33.1)	(25.5)	(61.0)	(63.2)	(101.8)	(193.3)	(321.8)	(477.4)
Gross Domestic Product at Market Prices	1,777.2	1,924.7	2,236.9	2,754.0	4,285.3	5,452.1	6,319.9	7,884.2	8,884.2	11,611.7	15,503.3	17,058.0
Note:												
Sugar consists of:												
Cane farming	7.6	6.7	12.3	8.8	24.1	23.3	33.8	32.9	30.4	32.8	31.7	32.3
Sugar companies	37.0	39.8	48.8	37.0	59.6	103.9	82.7	62.4	41.4	83.4	64.0	59.3
Distilleries	6.6	6.8	7.7	9.6	14.2	14.4	19.7	11.6	10.7	13.0	15.7	19.0
Total	51.2	53.3	68.8	55.4	97.9	141.6	136.2	106.9	82.5	129.2	111.4	110.6
O.W. Sugar refining	(12.1)	(12.5)	(11.7)	(19.6)	(24.6)	(66.3)	(45.0)	(23.7)	(10.1)	(20.0)	(28.7)	(26.6)

Source: Central Statistical Office

Table 2.22. TRINIAD AND TOBAGO - GROSS DOMESTIC PRODUCT BY SECTORAL ORIGIN AT CONSTANT FACTOR COST, 1970-81
(In millions of 1970 TT dollars)

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	Provisional 1980	Estimated 1981
Petroleum Sector	356.5	347.2	354.3	367.5	371.7	301.5	349.2	324.7	324.1	311.1	307.3	271.3
Exploration and production	127.1	118.5	128.7	132.5	171.2	165.5	160.8	162.4	160.5	150.3	149.0	133.6
Refining	163.8	135.8	154.4	151.6	140.0	79.1	125.9	105.9	92.0	88.8	83.9	71.4
Marketing (Bulk distribution)	8.7	8.7	5.6	3.2	4.0	3.3	6.9	5.5	6.2	5.7	4.6	4.0
Service contractors	17.9	25.4	22.5	25.7	24.6	31.0	24.7	25.1	24.3	21.5	18.2	21.3
Others	39.0	38.8	43.1	34.5	31.9	31.0	30.9	25.8	41.1	44.8	51.6	42.0
Retail distribution	(4.5)	(4.7)	(5.1)	(5.1)	(5.6)	(6.5)	(7.2)	(8.5)	(9.6)	(10.1)	(11.0)	(12.0)
Distribution & transmission of natural gas ^{a/}	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(-)	(3.2)	(3.1)
Petroleum products	(31.9)	(31.8)	(35.9)	(27.4)	(24.8)	(23.0)	(22.5)	(16.5)	(30.4)	(29.1)	(36.7)	(26.3)
Asphalt	(2.6)	(2.3)	(2.1)	(2.0)	(1.5)	(1.5)	(1.2)	(0.8)	(1.1)	(1.1)	(0.7)	(0.6)
Nonpetroleum sector	1,303.2	1,369.3	1,420.4	1,498.4	1,542.3	1,621.9	1,755.2	1,942.4	2,114.6	2,305.2	2,486.7	2,667.9
Agriculture	99.0	96.4	107.5	97.9	98.5	100.6	101.5	94.9	89.9	87.7	81.1	78.0
Export	(12.9)	(10.8)	(11.9)	(8.6)	(8.7)	(12.3)	(9.0)	(8.4)	(9.4)	(8.8)	(7.9)	(8.5)
Domestic	(34.9)	(38.0)	(42.5)	(44.6)	(44.0)	(46.5)	(40.6)	(45.2)	(43.9)	(42.4)	(40.3)	(42.5)
Sugar	(51.2)	(47.6)	(53.1)	(44.7)	(45.8)	(41.8)	(51.9)	(41.3)	(36.6)	(36.5)	(32.9)	(28.2)
Manufacturing	152.0	153.3	173.3	169.9	178.0	188.5	217.4	244.0	256.6	280.0	302.9	284.4
Food, beverage & tobacco	(48.9)	(41.8)	(45.9)	(48.2)	(55.0)	(59.7)	(62.7)	(61.9)	(65.3)	(67.2)	(72.5)	(71.5)
Textile, garments & footwear	(14.3)	(15.4)	(15.4)	(14.5)	(12.6)	(15.8)	(20.6)	(24.5)	(24.5)	(23.8)	(24.9)	(21.2)
Printing & publishing	(11.0)	(12.0)	(13.1)	(15.4)	(17.5)	(14.3)	(14.3)	(14.8)	(18.3)	(20.1)	(23.0)	(22.3)
Wood & related products	(7.7)	(7.7)	(7.7)	(10.4)	(10.6)	(12.5)	(14.0)	(14.4)	(12.8)	(14.8)	(18.2)	(14.1)
Chemical & nonmetallic minerals	(32.9)	(23.9)	(28.7)	(24.0)	(21.1)	(20.7)	(25.6)	(23.3)	(25.6)	(27.6)	(29.3)	(25.0)
Assembly type industries	(59.6)	(44.8)	(52.0)	(49.3)	(46.5)	(53.1)	(67.1)	(88.9)	(101.5)	(114.2)	(123.2)	(117.7)
Other manufactures	(9.6)	(9.1)	(10.5)	(8.7)	(10.7)	(12.7)	(13.4)	(10.0)	(10.4)	(12.3)	(11.1)	(12.6)
Construction & quarrying	81.8	108.9	118.4	124.7	134.7	133.5	155.9	192.5	236.4	248.2	276.6	312.5
Construction	(91.7)	(107.5)	(118.9)	(122.5)	(132.4)	(151.0)	(152.2)	(187.3)	(226.3)	(235.4)	(261.4)	(289.6)
Quarrying	(2.2)	(1.4)	(1.5)	(2.2)	(2.3)	(2.5)	(3.7)	(5.2)	(10.1)	(12.8)	(15.2)	(22.9)
Transport, storage & communications	242.2	242.7	248.2	260.3	271.8	283.2	309.6	368.5	411.4	442.5	512.6	543.6
Other services	718.1	748.0	773.0	846.0	859.3	896.1	970.8	1,042.5	1,120.3	1,246.8	1,314.4	1,448.4
Electricity & water	(38.5)	(38.0)	(42.1)	(40.0)	(43.6)	(43.8)	(49.4)	(53.9)	(56.6)	(63.1)	(70.8)	(86.0)
Distribution & restaurants	(286.1)	(274.1)	(298.7)	(340.5)	(362.6)	(374.3)	(399.8)	(425.3)	(446.3)	(476.0)	(505.5)	(530.3)
Hotels & guest houses	(8.9)	(10.3)	(9.0)	(10.5)	(9.5)	(10.3)	(12.3)	(16.2)	(16.9)	(18.4)	(19.3)	(20.1)
Finance, insurance & real estate	(155.2)	(171.2)	(158.5)	(177.8)	(159.3)	(172.7)	(208.1)	(224.1)	(257.8)	(331.1)	(345.0)	(417.1)
Government	(138.7)	(142.2)	(152.8)	(153.3)	(158.0)	(163.0)	(173.2)	(183.5)	(194.1)	(206.6)	(216.3)	(231.6)
Education & community services	(48.4)	(49.3)	(46.4)	(32.7)	(35.4)	(37.6)	(35.9)	(60.1)	(62.2)	(64.6)	(68.8)	(69.7)
Personal services	(62.3)	(62.9)	(65.5)	(71.2)	(70.9)	(74.4)	(72.1)	(79.4)	(86.4)	(87.0)	(88.7)	(93.6)
Gross Domestic Product at Factor Cost	1,659.7	1,696.5	1,774.7	1,885.9	1,914.0	1,923.4	2,104.4	2,267.1	2,438.7	2,616.3	2,794.0	2,939.2

Note:

Sugar consists of:
Cane farming 7.6
Sugar companies 37.0
Distilleries 6.6
Total 51.2

O.W. sugar refining (12.1)
Sugar (11.9)
Cane farming 7.1
Sugar companies 33.2
Distilleries 7.3
Total 47.6

a/ Deflated by marketing deflator.

Source: Central Statistics Office

Table 2.3: TRINIDAD-TOBAGO - GROSS DOMESTIC PRODUCT BY EXPENDITURE AT CURRENT MARKET PRICES, 1970-81
(In millions of TT dollars)

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	Provi- sional 1980	Estimated 1981
Consumption												
Private	1338.3	1376.6	1728.3	1984.9	2232.1	3290.5	3714.8	4701.4	5786.0	7504.7	9145.4	10219.5
Public	...	...	...	...	...	...	...	...	...	...	...	...
Gross domestic investment	420.8	639.3	647.3	620.8	856.2	1150.6	1614.4	2219.8	2712.9	3456.6	4505.6	5153.7
Resource balance	18.1	-91.2	-138.7	148.3	1197.0	1011.0	990.7	963.0	385.3	650.4	1852.3	1684.8
Exports of goods and non-factor services	(703.0)	(757.1)	(824.2)	(1132.1)	(2546.6)	(2876.5)	(3435.3)	(3742.3)	(3775.9)	(4995.4)	(7536.4)	(7622.9)
Imports of goods and non-factor services	(684.9)	(848.3)	(962.9)	(983.8)	(1349.6)	(1865.5)	(2444.6)	(2779.3)	(3390.5)	(4345.0)	(5684.2)	(5938.1)
<u>Gross domestic product at market prices</u>	<u>1777.2</u>	<u>1924.7</u>	<u>2236.9</u>	<u>2754.0</u>	<u>4285.3</u>	<u>5452.1</u>	<u>6319.9</u>	<u>7884.2</u>	<u>8884.2</u>	<u>11611.7</u>	<u>15503.3</u>	<u>17058.0</u>
Factor income payments (net)	-130.2	-132.2	-136.0	-180.2	-585.8	-249.1	-268.6	-372.5	-207.9	-610.7	-826.1	-746.8
<u>Gross national product at market prices</u>	<u>1647.0</u>	<u>1792.5</u>	<u>2100.9</u>	<u>2573.8</u>	<u>3699.5</u>	<u>5203.0</u>	<u>6051.3</u>	<u>7511.7</u>	<u>8676.3</u>	<u>11001.0</u>	<u>14677.2</u>	<u>16311.2</u>
Gross domestic savings	438.9	548.1	508.6	769.1	2053.2	2161.6	2605.1	3182.8	3098.2	4107.0	6357.9	6838.5
Net transfers	-8.4	-13.8	-12.8	-14.5	-19.7	-21.5	-47.0	-74.9	-91.2	-109.7	-157.2	-209.8
Gross national savings	300.3	402.1	359.8	574.4	1891.0	1891.0	2289.5	2735.4	2799.1	3386.6	5374.6	5881.9

Source: Central Statistical Office.

Table 2.4: TRINIDAD AND TOBAGO: GROSS DOMESTIC PRODUCT BY EXPENDITURE AT CONSTANT MARKET PRICES, 1970-81

(In millions of 1970 TT dollars)

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	Provi- sional 1980	Esti- mated 1981
Consumption	1338.30	1279.39	1486.17	1603.79	1826.41	2023.91	2120.38	2330.50	2620.15	2758.81	2856.56	3058.48
Investment	420.80	540.20	551.38	495.89	517.56	529.00	700.33	900.34	997.76	1201.27	1082.55	1225.53
Fixed	366.50	536.13	547.24	488.13	486.33	498.32	696.58	894.86	985.20	1208.06	1070.88	1213.20
Inventory	54.30	4.07	4.14	7.76	31.22	30.69	3.75	5.17	14.56	-6.78	11.67	12.32
Resource Balance	18.1	3.25	-122.25	-106.4	-361.92	-604.48	-632.95	-845.38	-1078.57	-1267.03	-1072.9	-1286.69
Exports of Goods and Non-Factor Services	703.00	685.16	682.85	695.39	624.63	488.37	504.60	439.55	423.21	431.12	407.23	373.60
Imports of Goods and Non-Factor Services	684.90	681.91	805.10	801.79	986.55	1092.85	1137.55	1284.93	1501.78	1698.15	1480.13	1660.29
<u>Gross Domestic Product</u>	<u>1777.20</u>	<u>1822.84</u>	<u>1915.29</u>	<u>1993.28</u>	<u>1982.04</u>	<u>1948.43</u>	<u>2187.76</u>	<u>2385.46</u>	<u>2539.34</u>	<u>2693.05</u>	<u>2866.21</u>	<u>2997.32</u>
Terms of Trade Adjustment	-	-76.56	6.28	227.26	1236.92	1196.75	1093.96	1290.60	1249.28	1512.22	1555.21	1757.75
<u>Gross Domestic Income</u>	<u>1777.20</u>	<u>1746.28</u>	<u>1921.57</u>	<u>2220.55</u>	<u>3218.96</u>	<u>3195.18</u>	<u>3281.72</u>	<u>3676.06</u>	<u>3788.62</u>	<u>4205.27</u>	<u>4421.42</u>	<u>4755.07</u>
Factor Income Payments (Net)	-130.20	-106.30	-113.70	-146.90	-428.20	-145.90	-125.00	-172.20	-92.10	-238.70	-215.10	-208.80
<u>Gross National Product</u>	<u>1647.0</u>	<u>1716.54</u>	<u>1659.89</u>	<u>1846.38</u>	<u>1553.84</u>	<u>1802.53</u>	<u>2062.76</u>	<u>2213.26</u>	<u>2447.24</u>	<u>2454.35</u>	<u>2651.11</u>	<u>2788.52</u>
Gross Domestic Savings (Adjusted for the Terms of Trade)	438.9	466.9	435.4	616.8	1392.6	1171.3	1161.3	1345.6	1168.5	1446.5	1564.9	1696.6
Net transfers	-8.4	-11.1	-10.7	-11.8	-14.4	-12.6	-21.9	-34.6	-40.4	-42.9	-40.9	-58.7
<u>Gross National Savings</u> (Adjusted for the Terms of Trade)	<u>300.3</u>	<u>349.5</u>	<u>311.0</u>	<u>458.1</u>	<u>950.0</u>	<u>1012.8</u>	<u>1014.4</u>	<u>1138.8</u>	<u>1036.0</u>	<u>1164.9</u>	<u>1308.9</u>	<u>1429.1</u>

Source: Unpublished Central Statistical Office data, Table 2.3 and staff estimates.

Table 3.1: TRINIDAD AND TOBAGO - BALANCE OF PAYMENTS, 1970-81

(In millions of US dollars)

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	Provisional 1980	Estimate 1981
Exports of goods and n.f.s.	351.6	411.0	447.4	547.9	1246.0	1212.6	1418.8	1559.3	1573.3	2081.4	3137.7	3176.2
Merchandise exports (f.o.b.) ^{a/}	227.0	234.1	267.3	316.7	933.2	931.9	1071.8	1179.3	1224.5	1649.3	2533.6	2606.9
Travel	23.9	34.2	35.1	38.6	54.8	68.7	77.0	91.2	109.2	119.7	151.1	-
Transportation	62.2	94.9	98.4	94.2	178.7	140.7	172.5	199.5	153.2	216.4	314.3	-
Other non-factor services	38.5	47.8	46.4	98.4	79.3	71.3	97.5	89.3	84.4	96.0	138.7	-
Government	(7.1)	(7.6)	(9.8)	(5.7)	(10.0)	(11.7)	(16.1)	(18.3)	(19.9)	(24.5)	(27.2)	(-)
Other services ^{b/}	(31.4)	(40.2)	(36.6)	(92.7)	(69.3)	(59.6)	(81.4)	(71.0)	(64.5)	(71.5)	(111.5)	(-)
Imports of goods and n.f.s.	342.5	460.5	522.7	476.2	660.3	786.4	1018.6	1158.0	1412.9	1810.4	2407.3	2474.2
Merchandise imports (c.i.f.) ^{a/}	276.3	381.3	440.9	385.8	530.5	677.8	875.4	977.8	1187.2	1498.9	1986.8	1976.2
Travel	22.9	26.4	28.3	22.5	25.9	30.5	37.8	51.7	66.3	101.6	139.6	-
Transportation	33.2	46.9	47.4	32.9	43.6	37.4	49.5	58.8	60.6	77.8	118.4	-
Other non-factor services	10.1	5.9	6.1	35.0	60.3	40.7	55.9	69.7	98.8	132.1	162.5	-
Government	(0.8)	(1.1)	(1.5)	(5.5)	(9.2)	(6.7)	(8.0)	(10.5)	(15.0)	(19.4)	(23.5)	(-)
Other services	(9.3)	(4.8)	(4.6)	(29.5)	(51.1)	(34.0)	(47.9)	(59.2)	(83.8)	(112.7)	(139.0)	(-)
Resource gap	9.1	-49.5	-75.3	71.7	-585.7	-426.2	-400.2	-401.3	-160.4	-271.0	-730.4	-702.0
Investment income (net)	-65.1	-71.8	-73.8	-87.2	-286.6	-105.0	-111.9	-155.3	-86.5	-254.5	-330.2	-311.2
Interest	(-1.8)	(-1.3)	(-2.2)	(-6.8)	(-3.7)	(19.2)	(41.3)	(66.8)	(100.6)	(99.9)	(160.2)	(-)
Income	[5.6]	[5.9]	[6.0]	[4.8]	[19.5]	[39.5]	[61.2]	[77.0]	[125.0]	[159.9]	[232.5]	[]
Payments	[-7.4]	[-7.2]	[-8.2]	[-11.6]	[-23.2]	[-20.4]	[-19.9]	[-10.2]	[-24.4]	[-60.0]	[-70.3]	[-]
Other (net)	(-63.3)	(-70.5)	(-76.0)	(-80.4)	(-282.9)	(-124.2)	(-153.2)	(-222.1)	(-187.2)	(-354.4)	(-492.4)	(-)
Transfers (net)	-2.1	-5.1	-4.6	-9.1	-17.2	-19.3	-30.5	-31.2	-38.0	-45.7	-65.5	-87.4
Private	(2.1)	(2.4)	(2.3)	(-2.1)	(-7.6)	(-10.3)	(-10.9)	(-16.2)	(-21.1)	(-27.3)	(-43.7)	(-62.4)
Government	(-4.2)	(-7.5)	(-6.9)	(-7.0)	(-9.6)	(-9.0)	(-19.6)	(-15.0)	(-16.9)	(-18.4)	(-21.8)	(-25.0)
Current account balance	-58.1	-126.4	-153.7	-24.6	281.9	301.9	257.8	214.8	35.9	-29.2	334.7	259.7
Private capital	85.2	119.2	107.6	39.3	121.5	179.0	121.3	150.2	195.9	287.8	231.2	372.2
Direct investment	83.2	111.8	90.4	62.1	120.7	183.3	108.8	140.1	127.0	173.5	202.5	283.0
Commercial Banks	-1.3	-1.7	18.1	9.3	-5.7	6.3	3.8	6.7	15.4	-27.5	-26.0	9.2
Other private	3.3	9.1	-0.9	-32.1	6.5	-13.0	8.7	3.4	53.5	141.8	54.7	80.0
Official capital (net)	-3.7	17.0	18.2	28.3	-94.0	-27.3	-159.4	142.0	109.3	66.9	18.0	-59.5
Borrowing	-3.9	2.2	21.0	27.4	-7.1	-8.0	-35.6	151.7	107.0	55.1	61.5	12.0
Drawings	(4.8)	(21.0)	(25.1)	(31.9)	(23.1)	(4.6)	(4.9)	(156.5)	(112.1)	(60.6)	(231.9)	(-)
Amortization	(-8.7)	(-18.8)	(-4.1)	(-4.5)	(-30.2)	(-12.6)	(-40.5)	(-4.8)	(-5.1)	(-5.5)	(-170.4)	(-)
Lending (net)	-	-	-	-	-54.2	-4.2	-75.0	-8.9	-	-	-57.6	-71.5
Other official (net)	0.2	14.8	-2.8	0.9	-32.7	-15.1	-48.8	-0.8	2.3	11.8	14.1	-
Allocation of SDRs	7.4	7.2	7.2	-	-	-	-	-	-	11.0	11.3	10.7
Errors and omissions	42.4	3.8	7.2	-47.2	-20.3	-36.8	11.2	-53.6	-2.1	22.9	-1.6	-15.4
Change in reserves (increase =)	11.6	-20.8	13.5	4.2	-289.1	-416.7	-230.9	-453.4	-339.0	-359.4	-593.6	-567.7
Government	0.8	1.8	-2.6	-1.0	0.9	-2.0	-3.5	7.8	-9.7	-0.4	-	0.5
Monetary authorities	10.8	-22.6	16.1	5.2	-290.0	-414.7	-227.4	-461.2	-329.3	-359.0	-593.6	-568.2

^{a/} Excludes trade under petroleum processing agreement.

^{b/} Includes payments for petroleum processing.

Source: Central Statistical Office and IMF estimates.

Table 3.2: TRINIDAD AND TOBAGO - ADJUSTED EXPORTS, f.o.b., 1970-81

(In millions of US dollars)

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
Total	227.0	234.1	267.5	316.7	933.1	931.9	1,071.8	1,179.3	1,226.5	1,649.3	2,533.6	2,606.9
Re-exports	9.4	19.8	9.9	11.1	22.0	17.8	25.5	17.7	38.5	37.4	28.8	129.6
Of which: machinery and equipment	2.9	5.1	3.2	2.2	4.5	6.4	17.1	8.2	28.2	16.9	17.3	-
Domestic Exports	217.6	214.3	257.6	305.6	920.6	986.1	1,030.7	1,081.5	1,194.3	1,615.3	2,508.1	2,483.7
Major petroleum, mineral and related products	156.5	141.4	174.6	232.2	787.8	812.9	902.7	988.5	1,089.1	1,479.4	2,325.3	2,280.4
Crude petroleum	5.1	1.0	36.6	105.2	(414.1)	(575.2)	(596.6)	(860.4)	(847.9)	(978.7)	(1,635.3)	(1,612.3)
Petroleum products	116.3	108.7	103.3	95.7	(314.9)	(185.4)	(254.4)	(53.5)	(166.9)	(414.4)	(590.9)	(586.9)
Ammonium compounds	16.2	13.0	16.3	10.5	(11.5)	(16.9)	(13.6)	(14.5)	(38.9)	(39.5)	(49.8)	(50.4)
Manufactured fertilizers	5.0	4.5	5.1	7.6	(13.4)	(12.6)	(10.0)	(10.9)	(11.8)	(9.2)	(12.7)	(6.5)
Natural asphalt	2.0	1.8	1.9	2.0	(2.3)	(1.9)	(1.8)	(1.3)	(0.1)	(1.4)	(0.3)	(0.5)
Tar oils	11.9	12.4	11.4	11.2	(31.6)	(20.9)	(26.3)	(28.0)	(23.6)	(36.2)	(36.4)	(23.8)
Major agricultural products	27.7	27.9	35.0	27.5	57.9	85.9	55.0	49.9	40.7	51.8	41.5	39.7
Sugar	21.0	22.0	29.7	22.6	(52.2)	(76.6)	(47.9)	(34.8)	(22.4)	(35.2)	(28.0)	(27.1)
Coffee	1.6	3.0	1.7	1.8	(0.8)	(2.7)	(2.7)	(6.2)	(7.0)	(7.2)	(6.2)	(5.3)
Cocoa	4.5	2.3	3.2	2.9	(4.7)	(6.3)	(4.1)	(8.8)	(11.2)	(9.1)	(7.1)	(7.3)
Citrus fruits	0.6	0.6	0.4	0.2	(0.2)	(0.3)	(0.3)	(0.1)	(0.1)	(0.3)	(0.2)	(-)
Other food and beverages	13.4	12.7	13.4	19.4	23.0	25.9	27.7	21.9	21.1	10.0	30.2	26.8
Dairy products	0.2	0.2	0.5	0.7	(0.7)	(1.0)	(0.3)	(1.0)	(0.7)	(1.1)	(1.4)	(2.3)
Fish	2.4	1.0	0.7	2.0	(1.1)	(1.1)	(1.0)	(0.8)	(0.8)	(1.0)	(1.9)	(2.5)
Rum	1.1	1.3	1.6	3.2	(3.6)	(3.8)	(2.9)	(3.3)	(4.3)	(6.0)	(5.3)	(4.8)
Bitters	1.3	1.3	1.4	1.5	(1.3)	(1.5)	(1.3)	(1.4)	(-)	(1.3)	(1.0)	(1.2)
Other	8.4	8.9	9.2	12.0	(16.3)	(18.5)	(22.2)	(14.6)	(15.3)	(0.5)	(20.6)	(16.1)
Manufactured goods classified chiefly by materials	8.1	8.6	8.9	10.9	13.8	16.5	12.7	11.8	11.4	12.9	17.3	22.1
Paper	1.1	2.4	1.8	2.3	(3.6)	(5.3)	(4.8)	(4.7)	(4.0)	(4.3)	(5.7)	(6.9)
Textiles	0.8	0.6	0.4	0.9	(2.3)	(1.6)	(2.7)	(2.8)	(2.6)	(3.2)	(4.2)	(4.5)
Cement	2.4	1.9	2.5	2.3	(2.1)	(2.2)	(0.5)	(-)	(-)	(-)	(-)	(-)
Metal manufactures	1.8	2.3	1.9	2.4	(3.9)	(4.2)	(3.2)	(3.5)	(3.5)	(3.2)	(1.7)	(4.7)
Other	(2.0)	1.4	2.3	3.0	(1.9)	(3.2)	(1.5)	(0.8)	(1.3)	(2.2)	(5.7)	(6.0)
Other manufactured goods	14.1	17.3	21.6	25.3	38.1	44.9	32.6	29.4	32.0	61.2	93.8	114.7
Furniture	0.8	0.7	0.5	0.6	(0.7)	(0.8)	(0.5)	(0.2)	(0.1)	(0.1)	(0.2)	(0.3)
Clothing	5.3	6.0	7.9	7.8	(7.9)	(8.6)	(7.3)	(6.8)	(6.4)	(5.6)	(5.8)	(5.7)
Footwear	0.6	0.8	1.0	1.5	(1.5)	(2.1)	(1.8)	(0.9)	(0.7)	(0.8)	(0.9)	(0.3)
Machinery	0.5	0.5	1.0	1.5	(9.4)	(12.9)	(5.5)	(2.9)	(3.0)	(2.1)	(4.3)	(4.5)
Miscellaneous chemicals	4.7	6.2	7.3	8.8	(12.1)	(12.7)	(11.3)	(9.1)	(9.9)	(31.8)	(45.2)	(63.9)
Other	2.2	3.1	3.9	5.1	(6.5)	(7.8)	(6.2)	(9.6)	(11.9)	(20.8)	(37.4)	(40.0)
Balance of payments adjustment ^{a/}	-2.2	+6.4	4.1	-9.7	-9.5	-72.0	15.6	80.1	-6.3	-3.4	-3.3	-6.4

^{a/} Includes domestic bunker sales.

Source: Central Statistical Office, Trade Division

Table 3.3: TRINIDAD-TOBAGO - MERCHANDISE IMPORTS (C.I.F.) CLASSIFIED BY S.I.T.C., 1970-80
(In millions of US dollars)

S.I.T.C.	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	
0	Food and live animals	51.7	62.2	72.1	77.9	122.5	120.2	133.9	152.8	184.3	223.3	294.9
1	Beverages and tobacco	4.1	5.9	5.8	5.5	6.2	7.4	9.3	14.2	20.1	27.2	35.2
2	Crude materials except fuels	6.5	7.2	9.0	9.1	12.2	11.5	20.6	30.0	37.1	40.8	63.0
3	Minerals, fuels, lubricants and related materials ^{a/}	24.3	22.3	26.2	15.6	13.5	4.9	14.4	21.0	8.4	7.5	...
4	Animal and vegetable oils, fats	4.5	4.4	4.8	5.4	11.2	8.6	8.9	11.9	12.1	15.5	18.8
5	Chemicals	23.7	28.3	35.1	36.7	57.0	63.2	76.1	88.9	105.4	111.7	159.2
6	Manufactured goods classified by material	69.7	106.7	109.6	104.1	153.1	192.4	201.3	239.9	305.3	343.5	450.0
7	Machinery and transport equipment	67.7	109.2	139.4	97.3	117.6	225.4	348.1	345.6	428.0	607.8	795.5
8	Miscellaneous manufactured articles	23.1	33.3	37.3	33.9	37.0	43.7	62.7	73.3	85.5	114.8	157.2
9	Miscellaneous transactions and commodities (n.e.i.)	1.0	1.8	1.6	0.3	0.2	0.5	0.1	0.2	1.0	0.8	5.6
	Total merchandise imports ^{a/}	<u>276.3</u>	<u>381.3</u>	<u>440.9</u>	<u>385.8</u>	<u>530.5</u>	<u>677.8</u>	<u>875.4</u>	<u>977.8</u>	<u>1187.2</u>	<u>1498.9</u>	<u>1986.8</u>
	Memo Item:											
	Merchandise imports including imports u.p.a.	<u>541.3</u>	<u>720.3</u>	<u>797.4</u>	<u>754.5</u>	<u>1846.0</u>	<u>1364.4</u>	<u>2042.9</u>	<u>1817.8</u>	<u>1977.0</u>	<u>2104.6</u>	<u>3177.7</u>

^{a/} Excludes imports u.p.a. and balance of payment adjustments. Note: Exchange rates used are: 1970 = 2.0, 1971-72 = 1.8421, 1973 = 2.0661, 1974 = 2.0439, 1975 = 2.3721, 1976 to date = 2.4.

Source: Central Statistical Office.

Table 3.4: TRINIDAD AND TOBAGO - Major Merchandise Imports c.i.f. (Constant and Current Prices) and Nonfactor Services, 1970-81

(In Millions of US\$)

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
IMPORTS												
GOODS & NON FACTOR SERVICES	342.50	460.50	522.70	476.20	660.30	786.40	1,018.60	1,158.00	1,412.90	1,810.40	2,368.40	2,474.20
GOODS ^{a/}	276.30	381.30	440.90	385.80	530.50	677.80	875.40	977.80	1,187.20	1,498.90	1,986.80	1,976.20
CONSUMER GOODS	95.61	119.65	136.98	135.01	176.20	220.20	240.20	304.70	326.20	357.10	482.90	
Non-durables	52.78	66.72	73.61	83.80	113.50	116.70	117.60	149.30	192.50	229.80	310.90	
Food	39.55	48.90	54.29	61.70	87.50	86.10	84.40	104.30	132.10	153.10	202.80	
Other	13.24	17.82	19.33	22.10	26.00	30.60	33.20	45.00	60.40	76.70	108.10	
Semi-durables	32.72	42.64	48.33	43.60	55.10	65.80	73.80	86.30	63.50	58.00	80.10	
Durables	10.11	10.29	15.03	7.61	7.60	37.70	48.80	69.10	70.20	69.30	91.90	
RAW & INTERMEDIATE GOODS	105.38	148.85	161.23	147.90	250.30	320.30	333.20	393.50	494.00	583.20	789.10	
Construction Materials	6.29	7.56	8.79	11.50	13.60	12.50	20.20	31.50	48.50	91.00	132.20	
Steel	25.23	47.54	37.68	25.70	33.00	111.40	83.00	100.50	97.30	60.40	95.40	
Chemicals	9.93	12.52	14.62	17.50	21.80	29.30	29.30	31.50	26.40	26.10	31.80	
Agricultural Materials	17.12	17.69	19.85	25.30	45.10	57.90	59.10	71.70	72.50	88.80	114.80	
Metal & Stone	1.83	2.47	2.85	3.30	6.90	8.70	9.60	10.20	12.70	15.20	28.10	
Other	44.98	61.07	77.44	64.60	129.90	100.50	132.00	148.10	236.60	301.70	386.80	
CAPITAL GOODS	51.15	85.47	97.65	119.40	125.10	204.30	280.90	250.40	353.40	561.20	727.10	
Power, Agricultural Machinery	6.10	12.80	17.39	9.50	10.30	27.00	32.40	32.20	31.80	91.30	121.00	
Oil Machinery	7.79	7.30	20.53	26.30	40.30	8.20	27.50	8.60	35.00	61.30	53.30	
Metal Manufactures	26.17	37.12	43.24	34.90	39.70	78.10	99.90	120.80	154.30	261.70	299.90	
Motors	4.76	8.03	8.30	8.30	23.60	66.70	87.50	40.20	92.00	73.00	145.70	
Other	6.34	20.22	8.18	40.40	11.20	24.30	33.60	48.60	40.30	73.90	107.20	
NON FACTOR SERVICES	66.20	79.20	81.80	90.40	129.80	108.60	143.20	180.20	225.70	311.50	381.60	498.00
Travel	22.90	26.40	28.30	22.50	25.90	30.50	37.80	51.70	66.30	101.60	139.70	
Transportation	33.20	46.90	47.40	32.90	43.60	37.40	49.50	58.80	60.60	77.80	91.80	
Other	10.10	5.90	6.10	35.00	60.30	40.70	55.90	69.70	98.80	132.10	150.10	
EXCHANGE RATE	2.00	1.84	1.84	2.07	2.04	2.37	2.40	2.40	2.40	2.40	2.40	2.40
IMPORT PRICE INDICES												
Food	100.00	106.05	116.04	155.57	201.40	222.15	228.39	223.15	247.72	261.82	289.62	
Other Non-durables	100.00	107.66	120.41	113.54	149.15	175.36	198.62	210.88	220.98	215.34	234.63	
Semi-durables	100.00	115.51	152.14	107.17	122.84	141.39	167.43	173.94	165.71	160.67	196.79	
Durables	100.00	104.55	135.00	108.32	103.24	112.50	131.93	149.73	146.15	145.04	183.22	
Raw & Intermediate Goods	100.00	96.13	108.31	98.84	115.91	134.01	139.72	141.57	157.39	137.82	187.41	
Capital Goods	100.00	86.28	106.42	110.24	70.57	64.36	72.76	109.39	113.55	118.99	160.62	
CONSTANT (US\$ Millions)												
CONSUMER GOODS	95.61	109.42	105.73	106.40	113.10	136.26	134.74	163.84	167.01	177.97	206.96	
Food	39.55	46.11	46.78	39.66	43.45	38.76	36.95	46.74	53.33	58.47	70.02	
Other	13.24	16.55	16.05	19.46	17.43	17.45	16.72	21.34	27.33	35.62	46.07	
Semi-durables	32.72	36.91	31.77	40.68	44.86	46.54	44.08	49.62	38.32	36.10	40.70	
Durables	10.11	9.85	11.13	6.39	7.36	33.51	36.99	46.15	48.03	47.78	50.16	
Raw & Intermediate Goods	105.38	154.84	148.87	149.84	215.95	239.00	238.49	277.95	313.87	423.16	421.06	
Capital Goods	51.15	99.05	91.76	108.31	177.26	317.42	386.06	228.91	311.22	471.65	452.67	
TOTAL	252.14	363.31	346.36	364.35	506.31	692.68	759.28	670.70	792.10	1,072.79	1,080.69	

^{a/} Goods total differs from sum of components because of balance of payments and coverage adjustments.

Source: Central Statistical Office.

Table 3.5: TRINIDAD & TOBAGO: STRUCTURE AND GROWTH OF NON-PETROLEUM EXPORTS ^{a/} f.o.b., 1970-80

	Percentage Distribution					Average Annual Growth Rates				
	1970	1973	1975	1977	1980	1973/70	1975/73	1977/75	1980/77	1980/70
Total Non-Petroleum Exports	100.0	100.0	100.0	100.0	100.0	4.97	36.47	-10.52	5.0	10.8
I. Non-Petroleum Domestic Exports	91.4	91.3	92.6	90.6	90.6					
1. Food, Beverages & Tobacco	37.4	36.8	47.2	39.5	23.3	4.50	54.26	-18.08	0.4	5.7
Sugar & sugar preparations	(19.4)	(20.4)	(33.2)	(19.6)	(10.8)	(6.87)	(73.76)	(-31.16)	(-5.7)	(4.1)
Coffee	(1.2)	(1.9)	(1.6)	(3.3)	(2.0)	(19.68)	(25.83)	(27.73)	(0)	(16.0)
Cocoa	(4.4)	(2.4)	(2.7)	(4.6)	(2.3)	(-14.50)	(44.91)	(18.19)	(-6.9)	(4.0)
2. Crude Materials (except fuels)	3.1	2.7	1.5	1.0	0.7	0.00	1.46	-24.41	3.2	-4.3
3. Chemicals	34.4	30.0	26.4	33.7	35.0	0.26	27.98	1.12	19.1	11.0
Inorganic Chemicals	(15.1)	(8.5)	(7.3)	(7.7)	(16.2)	(-12.93)	(25.98)	(-7.82)	(50.2)	(11.7)
Mineral Tar	(10.8)	(8.3)	(8.8)	(14.8)	(11.8)	(-2.00)	(36.60)	(15.75)	(9.1)	(11.8)
Perfumes, Cosmetics, Soaps	(2.4)	(3.5)	(3.4)	(3.2)	n.a.	(18.56)	(34.16)	(-13.22)	n.a.	n.a.
Manufactured fertilizers	(4.6)	(6.0)	(5.3)	(5.8)	(4.1)	(14.98)	(28.76)	(-6.56)	(5.2)	(9.8)
4. Manufactured Goods Classified Chiefly by Material	7.4	8.6	6.4	7.6	5.6	10.40	18.09	-3.0	13.6	7.9
Paper	(1.0)	(1.8)	(2.2)	(2.6)	(1.9)	(27.87)	(50.36)	(-2.93)	(6.6)	(7.9)
Textiles	(0.7)	(0.7)	(1.0)	(1.8)	(1.4)	(4.00)	(63.30)	(19.02)	(14.5)	18.0
Metal Manufactures	(1.7)	(1.9)	(1.4)	(2.1)	(0.6)	(10.06)	(17.26)	(8.71)	(-21.4)	(-0.6)
5. Machinery & Transport Equipment	0.4	1.2	2.7	1.6	1.4	44.22	108.17	-32.06	12.8	24.0
6. Other Manufactured Goods	8.0	11.4	7.5	7.0	4.3	17.84	10.87	-13.32	2.9	5.1
Clothing	(4.8)	(6.1)	(3.6)	(3.6)	(1.9)	(13.75)	(5.00)	(-10.43)	(-5.2)	(0.9)
7. All Other	0.6	0.6	0.9	0.2	0.3	4.55	62.02	-51.20	40.9	7.2
II. Re-Exports	8.6	8.7	7.4	9.4	9.4	5.33	26.28	0.0	17.6	11.7

^{a/} Excludes coverage adjustment and stores and bunkers. The growth rates have been computed on the current price series.

Note: Detail under S.I.T.C. categories is not inclusive.

Source: Table 3.2 and Central Statistical Office.

Table 3.6: TRINIDAD & TOBAGO: STRUCTURE AND GROWTH OF NON-PETROLEUM IMPORTS, c.i.f., 1970-80

	Percentage Distribution					Average Annual Growth Rates				
	1970	1973	1975	1977	1980	1973/70	1975/73	1977/75	1980/77	1980/70
Total Non-Petroleum Imports	100.0	100.0	100.0	100.0	100.0	15.63	37.11	13.24	27.4	22.9
1. Food	20.3	20.9	17.7	16.1	14.9	16.72	26.39	7.77	24.5	19.0
Meat & meat preparations	(2.9)	(3.0)	(1.7)	(1.9)	(2.2)	(17.90)	(2.51)	(21.15)	(29.7)	(18.6)
Dairy products	(3.7)	(3.6)	(2.7)	(2.6)	(2.3)	(15.42)	(18.85)	(9.91)	(64.7)	(27.9)
Cereals & cereal preparations	(6.3)	(6.2)	(7.7)	(5.2)	(3.8)	(14.87)	(52.84)	(-7.00)	(54.4)	(27.4)
Fruits & vegetables	(2.5)	(3.4)	(2.1)	(2.6)	(2.9)	(26.94)	(6.81)	(27.41)	(76.6)	(35.5)
2. Beverages & Tobacco	1.6	1.5	1.1	1.5	1.8	12.26	18.18	32.40	35.3	24.0
3. Crude Materials (except fuels)	2.5	2.4	1.7	3.1	3.2	13.88	14.56	53.27	28.1	25.5
4. Animal & Vegetable Oils & Fats	1.8	1.4	1.3	1.2	0.9	8.20	28.42	10.61	16.5	15.4
5. Chemicals	9.3	9.9	9.4	9.4	8.0	17.76	33.62	13.30	17.2	21.0
6. Manufactured Goods Classified										
Chiefly by Material	27.5	27.9	28.5	25.2	22.7	16.27	36.49	6.51	23.3	20.5
Paper Manufactures	(3.9)	(3.9)	(3.0)	(3.2)	n.a	(16.12)	(19.14)	(17.94)	n.a	n.a
Textile Yarn & Fabrics	(7.8)	(6.6)	(4.9)	(5.2)	(3.8)	(9.32)	(18.16)	(16.42)	(-46.6)	(-9.2)
Base Metals	(7.5)	(9.5)	(12.9)	(8.2)	n.a	(25.11)	(59.96)	(-10.13)	n.a	n.a
Manufactures of Metal	(4.9)	(4.2)	(4.3)	(4.3)	(5.2)	(9.77)	(39.90)	(12.60)	(59.6)	(36.5)
7. Machinery & Transport Equipment	26.6	26.1	33.3	35.4	40.1	14.86	54.97	16.77	32.0	27.9
Mining & Industrial Machinery	(11.8)	(11.3)	(11.9)	(8.9)	(7.5)	(13.80)	(41.02)	(-2.24)	(21.0)	(17.4)
Electric Machinery	(5.2)	(4.3)	(4.7)	(5.5)	(4.0)	(8.43)	(44.15)	(22.30)	(11.2)	(18.5)
Road Motor Vehicles	(5.9)	(6.4)	(4.6)	(7.9)	(8.5)	(18.72)	(16.73)	(48.09)	(31.2)	(27.4)
8. Miscellaneous Manufactured Articles	9.1	9.1	6.5	7.7	7.9	15.72	15.55	23.33	29.0	21.1
9. Other	1.3	0.8	0.5	0.4	0.3	-2.13	15.47	-1.26	203.7	18.8

Note: Detail under S.I.T.C. categories is not inclusive.

Source: Table 3.3 and Central Statistical Office

Table 3.7: TRINIDAD & TOBAGO: DIRECTION OF TRADE -- EXPORTS, 1970-80

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
Total Gross Exports ^{a/} (US\$ Million)	481.6	527.4	556.5	701.8	2,029.2	1,787.5	2,213.2	2,074.7	1,963.6	2,493.7	3,890.4
United States	223.4	213.6	235.1	368.9	1,232.8	1,186.6	1,461.1	1,533.1	1,347.7	1,449.1	2,277.4
Canada	6.8	7.4	15.3	11.1	47.8	20.7	17.1	25.2	21.6	11.5	28.5
United Kingdom	46.2	47.0	45.3	32.7	45.0	68.4	102.1	42.8	57.3	96.1	63.6
Other Western Europe	45.1	68.4	64.0	58.8	90.8	48.8	87.3	62.8	94.8	260.8	412.6
CARICOM	45.8	54.7	63.0	76.8	140.8	159.6	161.4	151.6	148.1	199.1	307.7
Other Caribbean	50.3	54.5	55.4	61.0	235.3	124.7	157.4	157.1	187.8	295.6	493.1
Latin America	18.4	23.2	16.9	18.5	43.1	9.7	36.1	51.7	42.6	96.6	143.3
Rest of World	45.6	58.5	61.5	74.0	193.6	169.1	190.8	50.4	63.7	84.9	164.2
Percentage Distribution											
Total Gross Exports ^{a/}	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
United States	46.4	40.5	42.2	52.6	60.7	66.4	66.0	73.9	68.7	58.0	58.6
Canada	1.4	1.4	2.8	1.6	2.4	1.2	0.8	1.2	1.1	0.5	0.7
United Kingdom	9.6	8.9	8.1	4.7	2.2	3.8	4.6	2.1	2.9	3.9	1.6
Other Western Europe	9.4	13.0	11.5	8.4	4.5	2.7	3.9	3.0	4.8	10.5	10.6
CARICOM	9.5	10.4	11.3	10.9	6.9	8.9	7.3	7.3	7.5	8.0	7.9
Other Caribbean	10.4	10.3	10.0	8.7	11.6	7.0	7.1	7.6	9.6	11.8	12.7
Latin America	3.8	4.4	3.1	2.7	2.2	0.5	1.6	2.5	2.2	3.9	3.7
Rest of World	9.5	11.1	11.1	10.5	9.5	9.5	8.6	2.4	3.2	3.4	4.2

^{a/} Includes exports of oil under processing agreement; stores and bunkers are included in the data from 1970-1976, but not thereafter.

Source: Central Statistical Office

Table 3.8: TRINIDAD & TOBAGO: DIRECTION OF TRADE -- IMPORTS, 1977-80

	1977	1978	1979	1980
<u>Total Gross Imports</u> ^{a/} (US\$ Million)	977.8	1,187.3	1,498.9	1,986.8
United States	383.6	407.9	545.8	842.0
Canada	62.6	76.5	139.0	125.1
United Kingdom	190.7	247.1	230.4	322.5
Other Western Europe	88.2	157.5	143.0	173.7
CARICOM	58.1	70.0	96.3	111.5
Other Caribbean	5.6	8.5	10.1	15.4
Latin America	51.1	59.2	57.4	122.3
Rest of the World	137.9	160.6	276.9	274.3
	<u>Percentage Distribution</u>			
<u>Total Gross Imports</u> ^{a/}	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>	<u>100.0</u>
United States	39.3	34.4	36.4	42.4
Canada	6.4	6.4	9.3	6.3
United Kingdom	19.5	20.8	15.4	16.2
Other Western Europe	9.0	13.3	9.5	8.7
CARICOM	5.9	5.9	6.4	5.6
Other Caribbean	0.6	0.7	0.7	0.8
Latin America	5.2	5.0	3.8	6.2
Rest of the World	14.1	13.5	18.5	13.8

^{a/} Excludes imports of oil under Processing Agreement.

Source: Central Statistical Office.

Table 3.9: VALUE AND COMMODITY COMPOSITION OF TRADE WITH CARICOM COUNTRIES, 1970-80 ^{a/}

(In millions US dollars)

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
I. Value of Trade with CARICOM Countries											
Total Exports f.o.b.	46.0	54.2	63.5	76.6	140.8	159.5	161.2	145.8	142.7	194.0	302.3
Barbados	8.5	9.6	10.9	12.3	22.4	21.2	23.4	26.5	26.0	44.3	68.9
Jamaica	6.0	10.1	16.7	20.4	44.8	54.4	27.1	25.0	27.0	31.0	63.2
Guyana	16.0	17.2	18.7	25.0	48.2	55.3	69.3	62.3	51.3	72.4	90.9
Other Territories	15.5	17.2	17.2	18.9	25.3	28.6	41.4	32.0	38.4	46.3	79.3
Total Imports c.i.f.	13.0	15.7	21.3	20.9	30.2	41.9	53.7	58.1	69.9	96.3	111.5
Barbados	1.5	2.0	3.6	3.6	4.9	6.0	8.6	10.2	13.7	17.2	26.0
Jamaica	4.5	5.6	8.8	9.7	12.2	16.6	20.9	23.5	25.4	39.2	38.2
Guyana	5.5	7.1	7.3	5.6	10.7	16.6	18.5	16.4	17.2	21.1	23.9
Other Territories	1.5	1.0	1.6	2.0	2.4	2.8	5.7	8.0	13.6	18.8	23.4
II. Commodity Composition of Trade with CARICOM Countries											
Total Exports f.o.b.	46.0	54.2	63.5	76.6	140.8	159.5	161.2	145.8	142.7	194.0	302.3
Food, Beverages, Agricultural Products	9.8	10.7	14.6	13.9	23.0	25.7	30.6	14.6	14.5	18.3	32.6
Petroleum Products	15.4	18.9	21.1	32.4	77.0	86.2	90.1	93.9	91.7	138.7	222.5
Chemicals	5.6	6.7	8.6	9.8	15.9	17.6	15.1	14.3	14.8	14.7	20.1
Manufactured Goods	15.2	17.8	19.2	20.7	24.9	30.1	25.4	23.0	21.7	22.3	27.1
Total Imports c.i.f.	13.0	15.7	21.3	20.9	30.2	41.9	53.7	58.1	69.9	96.3	111.5
Food, Beverages, Agricultural Products	8.1	9.3	11.5	10.0	15.4	22.4	27.2	20.0	27.2	35.2	36.8
Petroleum and Products	-	-	-	-	-	-	-	-	0.3	0.2	0.4
Chemicals	2.2	2.6	3.9	4.0	4.9	6.9	7.6	8.7	8.9	12.8	14.4
Manufactured Goods	2.8	3.8	5.9	6.9	9.9	12.6	19.0	29.4	33.5	48.1	59.9

^{a/} Includes U.P.A. trade and stores and bunkers.

Source: Central Statistical Office.

Table 3.10: TRINIDAD AND TOBAGO: INTERNATIONAL RESERVES, 1971-81

(In millions of US dollars)

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
1. Commercial Banks (net)	-0.4	-11.1	-22.0	-15.3	-21.3	-14.5	-21.0	-36.7	-5.7	-27.5	-36.7
Assets	22.0	8.2	9.9	10.9	11.7	14.0	21.7	21.6	42.5	50.9	51.4
Liabilities	22.4	19.3	31.9	26.2	33.0	28.5	42.7	58.3	48.2	78.4	88.1
2. Central Government	10.9	13.5	8.8	10.5	6.4	8.2	8.2	13.4	13.9	14.3	13.9
3. Central Bank	54.7	40.6	40.2	330.2	744.5	848.0	1,314.1	1,625.0	1,929.3	2,535.9	3,077.0
4. IMF Reserve Tranche	6.6	6.8	-	5.7	18.6	20.2	20.5	24.7	39.2	73.8	88.7
5. SDR Holdings	7.3	7.6	7.3	7.6	7.8	9.3	14.3	20.9	40.9	45.8	58.4
Total International Reserves (net)	79.1	57.4	34.3	338.7	756.0	871.2	1,336.1	1,647.3	2,017.6	2,642.3	3,201.3

Note: Exchange rate conversions used average rate for each year.

Source: Central Bank of Trinidad and Tobago.

TABLE 4.1 TRINIDAD & TOBAGO

SERVICE PAYMENTS, COMMITMENTS, DISBURSEMENTS AND OUTSTANDING AMOUNTS OF EXTERNAL PUBLIC DEBT

PROJECTIONS BASED ON DEBT OUTSTANDING INCLUDING UNDISBURSED AS OF DEC. 31, 1981
DEBT REPAYABLE IN FOREIGN CURRENCY AND GOODS
(IN THOUSANDS OF U.S. DOLLARS)

YEAR	DEBT OUTSTANDING AT BEGINNING OF PERIOD		TRANSACTIONS DURING PERIOD					OTHER CHANGES	
	DISBURSED ONLY	INCLUDING UNDISBURSED	COMMITMENTS	DISBURSEMENTS	SERVICE PAYMENTS			CANCELLATIONS	ADJUSTMENT*
					PRINCIPAL	INTEREST	TOTAL		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
1977	106,407	157,258	150,000	157,645	7,151	7,724	14,875	7,780	-799
1978	256,983	291,528	237,134	160,533	9,695	22,078	31,773	770	8,776
1979	417,489	526,973	261,097	66,846	9,811	44,051	53,862	1,809	-8,165
1980	468,750	768,285	165,357	313,484	175,272	46,888	222,160	638	-773
1981	606,380	756,959	102,312	87,750	25,561	72,243	97,804	16,003	-23,506
1982	658,858	794,201							
* * * * * THE FOLLOWING FIGURES ARE PROJECTED * * * * *									
1982	658,858	794,201	-	24,299	36,994	68,024	105,018	-	-87,093
1983	643,440	670,114	-	7,878	116,148	65,872	182,020	-	-
1984	535,171	553,966	-	7,597	71,856	55,709	127,565	-	-2
1985	470,910	482,108	-	6,025	83,885	47,204	131,089	-	1
1986	393,051	398,224	-	3,529	87,050	35,434	122,484	-	5
1987	309,535	311,179	-	1,358	86,716	26,180	112,896	-	3
1988	224,180	224,466	-	286	66,542	16,816	83,358	-	-
1989	157,924	157,924	-	-	41,365	11,651	53,016	-	-2
1990	116,557	116,557	-	-	86,680	8,048	94,728	-	1
1991	29,878	29,878	-	-	11,232	1,571	12,803	-	1
1992	18,647	18,647	-	-	6,082	1,033	7,115	-	-
1993	12,565	12,565	-	-	5,572	617	6,189	-	2
1994	6,995	6,995	-	-	3,289	263	3,552	-	-2
1995	3,704	3,704	-	-	665	85	750	-	-
1996	3,039	3,039	-	-	515	54	569	-	1

FOOTNOTE: DEBTS EXCLUDED BECAUSE REPAYMENT TERMS UNKNOWN.

YEAR	DEBT OUTSTANDING AT BEGINNING OF PERIOD	DISBURSED ONLY	INCLUDING UNDISBURSED
1981	-	-	8,370
1982	2,721	2,721	87,092

* THIS COLUMN SHOWS THE AMOUNT OF ARITHMETIC IMBALANCE IN THE AMOUNT OUTSTANDING INCLUDING UNDISBURSED FROM ONE YEAR TO THE NEXT. THE MOST COMMON CAUSES OF IMBALANCES ARE CHANGES IN EXCHANGE RATES AND TRANSFER OF DEBTS FROM ONE CATEGORY TO ANOTHER IN THE TABLE.

TABLE 4.1 TRINIDAD & TOBAGO

SERVICE PAYMENTS, COMMITMENTS, DISBURSEMENTS AND OUTSTANDING AMOUNTS OF EXTERNAL PUBLIC DEBT

PROJECTIONS BASED ON DEBT OUTSTANDING INCLUDING UNDISBURSED AS OF DEC. 31, 1981
DEBT REPAYABLE IN FOREIGN CURRENCY AND GOODS
(IN THOUSANDS OF U.S. DOLLARS)

YEAR	TYPE OF CREDITOR		FINANCIAL INSTITUTIONS					OTHER	CHANGES
	DEBT OUTSTANDING AT BEGINNING OF PERIOD		TOTAL TRANSACTIONS DURING PERIOD						
	DISBURSED ONLY	INCLUDING UNDISBURSED	COMMITMENTS	DISBURSEMENTS	SERVICE PAYMENTS			CANCEL-LATIONS	ADJUST-MENT
	(1)	(2)	(3)	(4)	PRINCIPAL	INTEREST	TOTAL	(8)	(9)
1977	11,621	11,621	150,000	150,000	1,961	1,784	3,745	-	-
1978	159,660	159,660	113,550	113,550	840	15,481	16,321	-	9,732
1979	282,102	282,102	121,546	29,104	802	32,623	33,425	-	-6,601
1980	303,803	396,245	165,357	214,764	158,032	29,499	187,531	510	-787
1981	359,750	402,273	92,649	28,368	15,210	50,264	65,474	-	-14,913
1982	363,380	464,799	-	-	-	-	-	-	-
* * * * * THE FOLLOWING FIGURES ARE PROJECTED * * * * *									
1982	363,380	464,799	-	7,654	15,432	43,554	58,986	-	-87,091
1983	352,881	362,276	-	5,365	92,568	42,341	134,909	-	-1
1984	265,678	269,707	-	3,174	48,040	33,772	81,812	-	-
1985	220,812	221,667	-	855	49,738	26,834	76,572	-	-
1986	171,929	171,929	-	-	46,887	17,746	64,633	-	1
1987	125,043	125,043	-	-	46,887	11,514	58,401	-	-
1988	78,156	78,156	-	-	29,969	5,283	35,252	-	-
1989	48,187	48,187	-	-	13,050	3,005	16,055	-	-1
1990	35,136	35,136	-	-	28,499	1,384	30,883	-	1
1991	5,638	5,638	-	-	4,712	192	4,904	-	-
1992	926	926	-	-	463	62	525	-	-
1993	463	463	-	-	463	26	489	-	-

FOOTNOTE: DEBTS EXCLUDED BECAUSE REPAYMENT TERMS UNKNOWN.

TYPE OF CREDITOR FINANCIAL INSTITUTIONS

YEAR	DEBT OUTSTANDING AT BEGINNING OF PERIOD	DISBURSED ONLY	INCLUDING UNDISBURSED
1982	2,721	87,092	

* THIS COLUMN SHOWS THE AMOUNT OF ARITHMETIC IMBALANCE IN THE AMOUNT OUTSTANDING INCLUDING UNDISBURSED FROM ONE YEAR TO THE NEXT. THE MOST COMMON CAUSES OF IMBALANCES ARE CHANGES IN EXCHANGE RATES AND TRANSFER OF DEBTS FROM ONE CATEGORY TO ANOTHER IN THE TABLE.

TABLE 4.1 TRINIDAD & TOBAGO

SERVICE PAYMENTS, COMMITMENTS, DISBURSEMENTS AND OUTSTANDING AMOUNTS OF EXTERNAL PUBLIC DEBT

PROJECTIONS BASED ON DEBT OUTSTANDING INCLUDING UNDISBURSED AS OF DEC. 31, 1981
DEBT REPAYABLE IN FOREIGN CURRENCY AND GOODS
(IN THOUSANDS OF U.S. DOLLARS)

YEAR	TYPE OF CREDITOR		BONDS			OTHER CHANGES				
	DEBT OUTSTANDING AT BEGINNING OF PERIOD	DISBURSED ONLY	INCLUDING UNDISBURSED	COMMITMENTS	DISBURSEMENTS	SERVICE PAYMENTS	CANCEL-LATIONS	ADJUST-MENT		
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	
1977	13,413		13,413	-	-	1,091	726	1,817	-	611
1978	12,933		12,933	40,000	40,000	2,061	724	2,785	-	386
1979	51,258		51,258	-	-	1,106	4,852	5,958	-	568
1980	50,720		50,720	-	-	7,447	5,384	12,831	-	307
1981	43,580		43,580	-	-	451	4,315	4,766	-	-
1982	43,129		43,129	-	-	-	-	-	-	-
* * * * * THE FOLLOWING FIGURES ARE PROJECTED * * * * *										
1982	43,129		43,129	-	-	1,043	4,278	5,321	-	-
1983	42,086		42,086	-	-	1,043	4,247	5,290	-	-
1984	41,043		41,043	-	-	1,043	4,216	5,259	-	-
1985	40,000		40,000	-	-	-	4,200	4,200	-	-
1986	40,000		40,000	-	-	-	4,200	4,200	-	-
1987	40,000		40,000	-	-	-	4,200	4,200	-	-
1988	40,000		40,000	-	-	-	4,200	4,200	-	-
1989	40,000		40,000	-	-	-	4,200	4,200	-	-
1990	40,000		40,000	-	-	40,000	4,200	44,200	-	-

* THIS COLUMN SHOWS THE AMOUNT OF ARITHMETIC IMBALANCE IN THE AMOUNT OUTSTANDING INCLUDING UNDISBURSED FROM ONE YEAR TO THE NEXT. THE MOST COMMON CAUSES OF IMBALANCES ARE CHANGES IN EXCHANGE RATES AND TRANSFER OF DEBTS FROM ONE CATEGORY TO ANOTHER IN THE TABLE.

TABLE 4.1 TRINIDAD & TOBAGO

SERVICE PAYMENTS, COMMITMENTS, DISBURSEMENTS AND OUTSTANDING AMOUNTS OF EXTERNAL PUBLIC DEBT

PROJECTIONS BASED ON DEBT OUTSTANDING INCLUDING UNDISBURSED AS OF DEC. 31, 1981
DEBT REPAYABLE IN FOREIGN CURRENCY AND GOODS
(IN THOUSANDS OF U.S. DOLLARS)

YEAR	TYPE OF CREDITOR		MULTILATERAL LOANS TOTAL			OTHER CHANGES			
	DEBT OUTSTANDING AT BEGINNING OF PERIOD	DISBURSED ONLY	INCLUDING UNDISBURSED	COMMITMENTS	DISBURSEMENTS	TRANSACTIONS DURING PERIOD		CANCEL-LATIONS	ADJUST-MENT *
	(1)	(2)	(3)	(4)	SERVICE PAYMENTS		(7)	(8)	(9)
					PRINCIPAL	INTEREST			
1977	53,153	92,628	-	7,383	2,590	3,892	6,482	7,764	89
1978	58,035	82,363	5,000	6,615	3,962	4,636	8,598	390	42
1979	60,865	83,053	20,000	5,505	4,687	4,982	9,669	1,761	-2,521
1980	61,685	94,084	-	6,065	5,707	5,000	10,707	128	-15
1981	62,028	88,234	-	5,082	5,929	4,740	10,669	824	-6
1982	61,175	81,475	-	-	-	-	-	-	-

* * * * * THE FOLLOWING FIGURES ARE PROJECTED * * * * *

1982	61,175	81,475	-	3,021	4,873	4,263	9,136	-	-
1983	59,323	76,602	-	2,513	6,880	4,098	10,978	-	-
1984	54,956	69,722	-	4,423	7,116	3,821	10,937	-	2
1985	52,265	62,608	-	5,170	7,369	3,659	11,028	-	2
1986	50,068	55,241	-	3,529	7,753	3,478	11,231	-	1
1987	45,845	47,489	-	1,358	8,183	3,138	11,321	-	2
1988	39,022	39,308	-	286	6,843	2,660	9,503	-	1
1989	32,466	32,466	-	-	6,898	2,193	9,091	-	1
1990	25,569	25,569	-	-	5,998	1,720	7,718	-	1
1991	19,572	19,572	-	-	6,161	1,285	7,446	-	1
1992	13,412	13,412	-	-	5,260	889	6,149	-	1
1993	8,153	8,153	-	-	4,750	519	5,269	-	1
1994	3,404	3,404	-	-	2,930	198	3,128	-	-
1995	474	474	-	-	306	28	334	-	1
1996	169	169	-	-	156	6	162	-	-

* THIS COLUMN SHOWS THE AMOUNT OF ARITHMETIC IMBALANCE IN THE AMOUNT OUTSTANDING INCLUDING UNDISBURSED FROM ONE YEAR TO THE NEXT. THE MOST COMMON CAUSES OF IMBALANCES ARE CHANGES IN EXCHANGE RATES AND TRANSFER OF DEBTS FROM ONE CATEGORY TO ANOTHER IN THE TABLE.

TABLE 1.4 TRINIDAD & TOBAGO

SERVICE PAYMENTS, COMMITMENTS, DISBURSEMENTS AND OUTSTANDING AMOUNTS OF EXTERNAL PUBLIC DEBT

PROJECTIONS BASED ON DEBT OUTSTANDING INCLUDING UNDISBURSED AS OF DEC. 31, 1981
DEBT REPAYABLE IN FOREIGN CURRENCY AND GOODS
(IN THOUSANDS OF U.S. DOLLARS)

YEAR	TYPE OF CREDITOR		BILATERAL LOANS					OTHER CHANGES	
	DEBT OUTSTANDING AT BEGINNING OF PERIOD		TOTAL TRANSACTIONS DURING PERIOD						
	DISBURSED ONLY	INCLUDING UNDISBURSED	COMMITMENTS	DISBURSEMENTS	SERVICE PAYMENTS			CANCEL-LATIONS	ADJUST-MENT *
	(1)	(2)	(3)	(4)	PRINCIPAL	INTEREST	TOTAL	(8)	(9)
1977	28,220	39,596	-	262	1,509	1,322	2,831	16	-1,499
1978	26,355	36,572	78,584	368	2,832	1,237	4,069	380	-1,384
1979	23,264	110,560	119,551	32,237	3,216	1,594	4,810	48	389
1980	52,542	227,236	-	92,655	4,086	7,005	11,091	-	-278
1981	141,022	222,872	9,663	54,340	3,971	12,924	16,895	15,179	-8,587
1982	191,174	204,798	-	-	-	-	-	-	-
* * * * * THE FOLLOWING FIGURES ARE PROJECTED * * * * *									
1982	191,174	204,798	-	13,624	15,646	15,929	31,575	-	-2
1983	189,150	189,150	-	-	15,657	15,186	30,843	-	1
1984	173,494	173,494	-	-	15,657	13,800	29,557	-	-4
1985	157,833	157,833	-	-	26,778	12,511	39,289	-	-1
1986	131,054	131,054	-	-	32,410	10,010	42,420	-	3
1987	98,647	98,647	-	-	31,646	7,328	38,974	-	1
1988	67,002	67,002	-	-	29,730	4,673	34,403	-	-1
1989	37,271	37,271	-	-	21,417	2,253	23,670	-	-2
1990	15,852	15,852	-	-	11,183	744	11,927	-	-1
1991	4,668	4,668	-	-	359	94	453	-	-
1992	4,309	4,309	-	-	359	82	441	-	-1
1993	3,949	3,949	-	-	359	72	431	-	1
1994	3,591	3,591	-	-	359	65	424	-	-2
1995	3,230	3,230	-	-	359	57	416	-	-1
1996	2,870	2,870	-	-	359	48	407	-	1

FOOTNOTE: DEBTS EXCLUDED BECAUSE REPAYMENT TERMS UNKNOWN.

YEAR	TYPE OF CREDITOR	BILATERAL LOANS
1981	DEBT OUTSTANDING AT BEGINNING OF PERIOD	-
	DISBURSED ONLY	8,370
	INCLUDING UNDISBURSED	-

* THIS COLUMN SHOWS THE AMOUNT OF ARITHMETIC IMBALANCE IN THE AMOUNT OUTSTANDING INCLUDING UNDISBURSED FROM ONE YEAR TO THE NEXT. THE MOST COMMON CAUSES OF IMBALANCES ARE CHANGES IN EXCHANGE RATES AND TRANSFER OF DEBTS FROM ONE CATEGORY TO ANOTHER IN THE TABLE.

Table 5.1: TRINIDAD AND TOBAGO - CENTRAL GOVERNMENT OPERATIONS ^{a/}, 1977-82

(In millions of TT dollars)

	1977	1978	1979	1980	Provi- sional Estimate 1981	Budget Estimate 1982
Current revenue	2973.4	3052.1	4032.5	6403.9	7058.1	6978.5
Current expenditure	1160.7	1483.0	2247.3	2648.7	7177.8	5073.0
<u>Current account surplus/ deficit</u>	<u>1812.7</u>	<u>1569.1</u>	<u>1785.2</u>	<u>3755.2</u>	<u>3880.3</u>	<u>1905.5</u>
Capital expenditure and net lending	1085.1	1363.1	1914.2	2724.4	3566.0	5178.7
Capital formation	(385.2)	(690.0)	(957.8)	(1274.3)	(1800.6)	(...)
Acquisition of assets	(433.0)	(457.9)	(216.6)	(208.5)	(47.9)	(...)
Transfers	(26.7)	(29.1)	(29.1)	(64.4)	(56.1)	(...)
<u>Overall surplus/deficit (-)</u>	<u>727.6</u>	<u>206.0</u>	<u>-129.0</u>	<u>1030.8</u>	<u>314.3</u>	<u>-3273.2</u>
<u>Financing (net)</u>	<u>-727.6</u>	<u>-206.0</u>	<u>129.0</u>	<u>-1030.8</u>	<u>-314.3</u>	<u>2650.6</u>
<u>External (net) ^{b/}</u>	<u>364.2</u>	<u>256.5</u>	<u>129.2</u>	<u>148.3</u>	<u>27.8</u>	<u>580.0</u>
Disbursement	(375.6)	(268.1)	(141.4)	(555.1)	(72.0)	(...)
Amortization	(-11.4)	(-11.5)	(-12.2)	(-406.8)	(-44.2)	(...)
Domestic (net)	-1091.8	-462.6	-0.2	-1179.1	-342.1	2693.2
Banking system	(-1163.6)	(-545.1)	(-160.8)	(-1199.9)	(-364.0)	(...)
Central bank ^{c/}	(-1186.2)	(-550.9)	(-174.6)	(-1192.1)	(-398.8)	(...)
Commercial banks ^{d/}	(22.6)	(5.8)	(13.8)	(-7.8)	(28.8)	(...)
Non-bank sources	(44.3)	(28.7)	(23.3)	(1.4)	(-2.1)	(...)
National Insurance Board	(2.3)	(-)	(4.4)	(-1.9)	(-4.4)	(...)
Insurance companies	(7.5)	(2.0)	(11.0)	(7.9)	(-3.9)	(...)
Comptroller of Accounts ^{e/}	(14.6)	(19.1)	(4.2)	(-14.2)	(-14.1)	(...)
Other ^{f/}	(19.9)	(7.6)	(3.7)	(9.6)	(20.3)	(...)
Residual	(27.5)	(53.8)	(137.3)	(19.3)	(24.0)	(...)

^{a/} Combined accounts of the Consolidated Fund, the Unemployment Fund, and the Special Funds for Long-Term Projects.

^{b/} Data drawn from the Review of the Economy except for the year 1981, where more recent Central Bank estimates (Annual Report 1982) are used.

^{c/} Change in the net credit position of the government with the Central Bank, as published in the Central Bank's Monthly Statistical Digest.

^{d/} Change in domestic credit extended to the government by the commercial banks, as published in the Central Bank's Monthly Statistical Digest.

^{e/} Change in book value of government securities held by Sinking Funds.

^{f/} Includes other financial intermediaries, trust companies, pension funds, public companies, private companies, and individuals.

Sources: Central Bank of Trinidad and Tobago; and IMF estimates.

Table 5.2: TRINIDAD AND TOBAGO - CENTRAL GOVERNMENT REVENUE ^{a/}, 1977-82

(In millions of TT dollars)

	1977	1978	1979	1980	Provi- sional Estimate 1981	Budget Estimate 1982
<u>Oil Revenue</u>	<u>1782.6</u>	<u>1718.4</u>	<u>2347.5</u>	<u>4130.5</u>	<u>4316.3</u>	<u>4097.9</u>
Corporation tax	1334.9	1267.0	1713.1	3168.4)	3548.8	3383.0
Refining fee	36.2	30.8	28.3	53.5)		5.0
Withholding tax	11.7	14.3	16.2	30.1	35.5	36.0
Royalties	263.1	272.8	416.1	545.0	603.9	571.2
Oil impost	3.2	4.2	5.5	6.1	6.8	7.5
Unemployment levy	133.5	129.3	168.3	327.4	121.3	95.2
<u>Non-oil Revenue</u>	<u>1190.8</u>	<u>1333.7</u>	<u>1685.0</u>	<u>2273.3</u>	<u>2741.8</u>	<u>2910.6</u>
<u>Tax Revenue</u>	<u>950.1</u>	<u>1000.8</u>	<u>1312.9</u>	<u>1772.2</u>	<u>2146.3</u>	<u>2361.4</u>
Taxes on income	489.9	533.7	774.6	1046.6	1333.6	1508.0
Companies	(206.8)	(219.5)	(256.8)	(315.0)	(422.9)	(430.0)
Individuals	(240.8)	(276.0)	(453.2)	(657.2)	(861.2)	(1030.0)
Other ^{b/}	(42.3)	(38.2)	(64.6)	(74.4)	(49.5)	(48.0)
Social security contributions	4.3	5.5	5.5	5.4	4.0	3.8
Taxes on property	9.2	14.6	14.2	14.1	15.0	14.2
Real estate taxes	(5.0)	(8.0)	(8.5)	(8.1)	(8.6)	(9.8)
Estate tax	(4.2)	(6.6)	(5.7)	(6.0)	(6.4)	(4.4)
Taxes on goods and services	154.6	177.9	205.4	253.9	299.7	307.9
Purchase tax	(56.7)	(66.5)	(82.1)	(105.1)	(116.0)	(117.8)
Excise duties	(34.4)	(33.8)	(36.9)	(39.0)	(41.3)	(42.6)
Betting and entertain- ment duty	(9.4)	(12.2)	(13.1)	(14.0)	(15.0)	(16.8)
Motor vehicle tax	(47.4)	(58.4)	(65.4)	(84.8)	(117.0)	(116.4)
Other ^{c/}	(6.6)	(7.0)	(7.9)	(11.0)	(10.4)	(14.3)
Taxes on international trade	279.4	253.7	293.8	426.6	463.6	497.5
Import duties	(213.0)	(253.6)	(293.7)	(426.5)	(463.5)	(497.5)
Export duties	(66.4) ^{d/}	(0.1)	(0.1)	(0.1)	(0.1)	(--)
Other taxes	12.7	15.4	19.4	25.6	30.4	30.0
Stamp duties	(12.7)	(15.4)	(19.4)	(15.6)	(30.4)	(30.0)
<u>Nontax Revenue</u>	<u>240.7</u>	<u>332.9</u>	<u>372.1</u>	<u>501.2</u>	<u>595.5</u>	<u>519.2</u>
Fees and service charges	7.9	9.6	11.8	13.3	13.4	14.1
Property income	211.4	294.3	331.3	429.5	502.3	504.2
Profits of nonfinancial enterprises	(18.0)	(41.7)	(19.8)	(52.7)	(8.7)	(30.0)
National lottery	(6.0)	(7.2)	(6.0)	(14.2)	(17.0)	(15.6)
Rentals	(1.7)	(1.8)	(1.3)	(2.2)	(2.8)	(2.6)
Interest	(90.9)	(170.3)	(194.2)	(247.1)	(281.8)	(241.1)
Central Bank profits	(94.8)	(73.3)	(110.0)	(113.3)	(192.0)	(185.0)
Reimbursements	3.2	4.1	2.4	2.5	9.8	4.3
Operating surpluses of de- partmental enterprises	5.1	6.5	9.5	10.9	8.8	10.9
Other ^{e/}	13.1	18.4	17.1	45.0	61.2	15.7
Of which: capital revenue	(3.5)	(2.4)	(--)	(0.1)	(2.2)	(0.1)
<u>Total Revenue</u>	<u>2973.4</u>	<u>3052.1</u>	<u>4032.5</u>	<u>6403.9</u>	<u>7058.1</u>	<u>6978.5</u>

^{a/} Combined accounts of Consolidated Fund, Unemployment Fund, and Special Funds for Long-Term Projects.

^{b/} Includes non-oil withholding tax, insurance surrender tax, and unemployment levy.

^{c/} Liquor licenses and miscellaneous taxes on services.

^{d/} Arrears payments for sugar export levy.

^{e/} Includes premia on leases, sales of government assets (capital revenue), and other nontax income.

Source: Ministry of Finance and Planning and Fund staff estimates.

Table 5.3: TRINIDAD AND TOBAGO - CENTRAL GOVERNMENT CURRENT EXPENDITURE ^{a/}, 1977-82

(In millions of TT dollars)

	1977	1978	1979	1980	Provi- sional Estimate 1981	Budget Estimate 1982
<u>Goods and services</u>	<u>798.3</u>	<u>1007.0</u>	<u>1338.9</u>	<u>1366.9</u>	<u>1597.1</u>	<u>2749.4</u>
<u>Wages and salaries</u>	<u>583.9</u>	<u>733.1</u>	<u>928.9</u>	<u>1069.8</u>	<u>1134.4</u>	<u>2236.3</u>
Justice, police and prisons	(79.2)	(99.5)	(115.2)	(139.2)	(152.7)	(238.1)
Education	(188.7)	(217.7)	(246.9)	(328.1)	(322.9)	(649.2)
Health	(102.3)	(115.9)	(151.7)	(172.5)	(182.2)	(385.3)
Other	(213.7)	(300.0)	(415.1)	(462.8)	(476.6) ^{b/}	(963.7)
Contribution to social security	14.4	15.3	15.8	24.9	46.7	45.0
Other goods and services ^{c/}	200.0 ^{d/}	258.0 ^{d/}	394.2	272.2	398.0	468.1
<u>Interest payments</u>	<u>42.6</u>	<u>80.3</u>	<u>125.7</u>	<u>125.0</u>	<u>197.3</u>	<u>206.4</u>
Domestic	32.6	35.3	38.4	41.5	51.8	53.2
External	10.0	45.0	87.3	83.5	145.5	153.2
<u>Transfers and subsidies</u>	<u>266.6^{e/}</u>	<u>330.6^{e/}</u>	<u>564.3^{e/}</u>	<u>943.2</u>	<u>1281.4^{g/}</u>	<u>1775.0</u>
Tax refunds	0.2	0.2	10.8	0.6	0.4	0.4
Subsidies	63.2	101.8	193.3	321.8	477.4	531.7
Pension and welfare payments	78.9	124.2	152.1	185.5	279.2	440.4
Nonprofit institutions ^{f/}	12.3	16.2	20.1	48.8	58.2	61.2
Other levels of government	69.9	79.4	166.1	200.9	232.2	265.9
Contribution to inter- national organizations	3.2	7.6	7.0	5.1	5.6	5.3
Other	38.9	1.2	14.9	180.5	228.3 ^{g/}	470.1
Less: Unallocated develop- ment expenditure from Consolidated Fund	--	--	--	--	-144.0	--
<u>Consolidated Fund current expenditure</u>	<u>1107.5</u>	<u>1417.9</u>	<u>2028.9</u>	<u>2435.1</u>	<u>2913.8</u>	<u>4730.8</u>
Plus: Unemployment Fund	53.2	65.1	218.4	213.6	264.0	342.2
<u>Total current expenditure</u>	<u>1160.7</u>	<u>1483.0</u>	<u>2247.3</u>	<u>2648.7</u>	<u>3177.8</u>	<u>5073.0</u>

^{a/} Combined accounts of Consolidated Fund and Unemployment Fund.

^{b/} Excludes TT \$236 million in retroactive payments due but not paid in 1981, unknown portions of which should be attributed to wages and salaries in other categories.

^{c/} Includes noninterest debt charges.

^{d/} Includes some items classified as transfers and subsidies beginning with the 1980 budget outturn.

^{e/} Includes some items classified as other goods and services beginning with the 1980 budget outturn.

^{f/} Data for 1977-79 and 1980-82 are not strictly comparable because of changes in agency classification.

^{g/} Incorporates TT \$67.3 million shortfall of actual expenditures from revised estimates.

Source: Ministry of Finance and Planning.

Table 5.4: Trinidad and Tobago - Central Government Capital Expenditure and Net Lending, by Enterprise ^{a/} 1977-82

	(in millions of T-T\$)					
	1977	1978	1979	1980	Prelim. Estimate 1981	Budget Estimate 1982
<u>Capital expenditure</u>	<u>845.0</u>	<u>1,177.0</u>	<u>1,203.5</u>	<u>1,547.2</u>	<u>1,904.6</u>	<u>... b/</u>
Acquisition of assets	433.0	457.9	216.6	208.5	47.9	(-)
TRINTOC	(-)	(-)	(2.5)	(9.5)	(-)	(-)
National Petroleum Marketing Company	(9.1)	(1.4)	(-)	(-)	(-)	(-)
Fertrin	(n.a.)	(n.a.)	(49.5)	(17.8)	(12.2)	(-)
PLIPDECO	(22.0)	(17.2)	(-)	(-)	(-)	(-)
Telephone Company	(32.9)	(44.8)	(-)	(-)	(-)	(-)
BWIA	(13.8)	(49.0)	(-)	(-)	(-)	(-)
TRINGEN	(20.1)	(1.7)	(-)	(-)	(-)	(-)
ISCOTT	(82.0)	(169.6)	(133.0)	(166.8)	(-)	(-)
PTSC	(22.0)	(-)	(-)	(-)	(-)	(-)
WASA	(54.5)	(112.2)	(-)	(-)	(-)	(-)
Port Authority	(22.3)	(33.0)	(3.7)	(-)	(1.0)	(-)
CARONI	(47.6)	(-)	(-)	(-)	(-)	(-)
Trinidad Cement	(-)	(-)	(-)	(-)	(-)	(-)
Other	(106.8)	(29.0)	(-)	(-)	(-)	(-)
Transfers	26.7	29.1	29.1	64.4	56.1	(-)
Internal	(21.5)	(27.7)	(28.4)	(63.8)	(54.9)	(-)
External	(5.2)	(1.4)	(0.7)	(0.6)	(1.2)	(-)
Capital formation ^{c/}	385.2	690.0	957.8	1,274.3	1,800.6	(-)
<u>Net Lending</u>	<u>240.2</u>	<u>186.1</u>	<u>710.7</u>	<u>1,177.2</u>	<u>1,661.4</u>	<u>... b/</u>
Loans	250.5	232.5	740.0	1,270.3	1,670.8	(-)
TRINGEN	(20.6)	(1.7)	(-)	(-)	(-)	(-)
TRINTOC	(-)	(-)	(-)	(-)	(-)	(-)
PLIPDECO	(-)	(-)	(7.5)	(-)	(-)	(-)
ISCOTT	(-)	(-)	(13.0)	(75.3)	(78.4)	(-)
CARONI	(79.0)	(64.0)	(91.8)	(82.8)	(269.0)	(-)
BWIA	(50.2)	(41.3)	(147.1)	(271.8)	(211.0)	(82.3)
Loans to other statutory authorities	(82.7)	(114.8)	(172.9)	(214.5)	(265.7)	(625.2)
Other	(18.0)	(13.6)	(307.7)	(625.9)	(846.7)	(-)
Repayments	-10.4	-46.4	-29.3	-93.1	-9.4	4.7
<u>Capital expenditure plus net lending</u>	<u>1,085.2</u>	<u>1,363.1</u>	<u>1,914.2</u>	<u>2,724.4</u>	<u>3,566.0</u>	<u>5,178.7</u>

^{a/} Combined operations of the Consolidated Fund, the Unemployment Fund, and the Special Funds for Long-Term Projects.

^{b/} Breakdown of outlays into outlays and loans not available.

^{c/} Includes housing loans.

Source: Ministry of Finance and Planning; Ministry of State Enterprises and IMF estimates.

Table 5.5: TRINIDAD AND TOBAGO - CONSOLIDATED GOVERNMENT OPERATIONS, 1977-82

(In millions of TT dollars)

	1977	1978	1979	1980	1981	Estimate 1982 ^{a/}
I. Consolidated General Government (II-V)						
Total revenue	3,064.5	3,156.7	4,149.4	6,572.7	7,304.0	7,280.0
Total expenditure and net lending	2,267.9	2,875.2	4,185.2	5,400.3	6,790.2	10,355.3
Current expenditure	1,180.7	1,505.5	2,274.3	2,666.4	3,233.8	5,172.2
Transfers to public utilities	(--)	(--)	(--)	(48.1)	(53.1)	(--)
Other	(1,180.7)	(1,505.5)	(2,274.3)	(2,618.3)	(3,180.7)	(--)
Capital expenditure	847.0	1,183.6	1,200.2	1,556.7	1,895.0	5,183.1 ^{b/}
Transfers to public utilities	(120.6)	(184.8)	(195.7)	(295.6)	(227.3)	(--)
Other	(966.6)	(998.8)	1,715.2	(2,438.3)	(3,229.1)	(--)
Net lending	240.2	186.1	710.7	1,177.2	1,661.4	^{b/}
Loans and grants for statutory authorities	(133.5)	(156.1)	(320.0)	(486.3)	(476.7)	(707.5)
Other	(106.7)	(30.0)	(390.7)	(690.6)	(1,184.7)	(--)
Overall surplus or deficit (-)	796.6	281.5	-35.8	1,172.4	513.8	-3,075.3
Financing	-796.6	-281.5	35.8	-1,172.4	-513.8	3,075.3
External	364.2	256.6	129.1	148.3	27.8	580.0
Domestic	-1,160.8	-538.1	-93.3	-1,320.7	-541.6	2,495.3
Banking system	(-1,212.0)	(-590.3)	(-200.7)	(-1,252.8)	(-409.8)	(--)
Other	(51.2)	(52.3)	(107.4)	(-67.9)	(-131.8)	(--)
II. Central Government ^{c/}						
Total revenue	2,973.4	3,052.1	4,032.5	6,403.9	7,058.1	6,978.5
Total expenditure	2,245.9	2,846.1	4,161.5	5,373.1	6,743.8	10,251.7
Current expenditure	1,160.7	1,483.0	2,247.3	2,648.7	3,177.8	5,073.0
Transfers to public utilities	(--)	(--)	(--)	(48.1)	(53.1)	(--)
Payments to other levels of government ^{d/}	(69.9)	(79.4)	(166.1)	(200.9)	(232.3)	(265.9)
Other	(1,090.1)	(1,403.6)	(2,081.2)	(2,600.6)	(3,124.7)	(4,807.1)
Capital expenditure	845.0	1,177.0	1,203.5	1,547.2	1,904.6	5,178.7 ^{b/}
Transfers to public utilities	(120.6)	(184.8)	(195.7)	(295.6)	(227.3)	(--)
Transfers to other levels of government	(6.6)	(9.6)	(10.1)	(16.0)	(20.0)	(34.2)
Other	(717.8)	(982.6)	(997.7)	(1,235.6)	(1,657.3)	(--)
Net lending	240.2	186.1	710.7	1,177.2	1,661.4	-- ^{b/}
Loans to statutory authorities	(133.5)	(156.1)	(320.0)	(486.3)	(476.7)	(707.5)
Other	(106.7)	(30.0)	(390.7)	(690.6)	(1,184.7)	(--)

Table 5.5: TRINIDAD AND TOBAGO - CONSOLIDATED GOVERNMENT OPERATIONS (Continued)

(In millions of TT dollars)

	1977	1978	1979	1980	1981	Estimate 1982 ^{a/}
II. Central Government (Continued)						
<u>Overall surplus or deficit (-)</u>	<u>727.5</u>	<u>206.0</u>	<u>-129.0</u>	<u>1,030.8</u>	<u>314.3</u>	<u>-3,273.2</u>
<u>Financing</u>	<u>-727.5</u>	<u>-206.0</u>	<u>129.0</u>	<u>-1,030.8</u>	<u>-314.3</u>	<u>3,273.2</u>
External	364.2	256.1	129.1	148.3	27.8	580.0
Domestic	-1,091.7	-462.6	-0.1	-1,179.1	-342.1	2,693.2
Banking system	(-1,163.6)	(-545.1)	(-160.6)	(-1,199.9)	(-398.8)	(--)
Nonbank sources	(44.3)	(28.7)	(23.3)	(1.4)	(-2.1)	(--)
Other	(27.6)	(53.8)	(137.2)	(19.4)	(24.0)	(--)
III. National Insurance Board ^{e/}						
<u>Current revenue</u>	<u>95.7</u>	<u>109.6</u>	<u>121.5</u>	<u>180.9</u>	<u>280.2</u>	<u>333.3</u>
Contributions	76.7	83.6	88.0	140.1	234.0	282.9
Of which: Central Government	(14.4)	(15.3)	(15.8)	(24.9)	(46.7)	(45.0) ^{f/}
Investment income	18.9	26.0	33.4	40.8	46.2	50.4
<u>Total expenditure</u>	<u>23.5</u>	<u>33.0</u>	<u>42.8</u>	<u>58.3</u>	<u>97.5</u>	<u>135.9</u>
Current expenditure	21.5	28.6	35.0	50.3	90.6	131.5
Goods and services	(8.9)	(11.3)	(13.8)	(17.3)	(27.3)	(43.3)
Transfers to private sector	(12.6)	(17.4)	(21.2)	(33.0)	(63.3)	(88.2)
Capital expenditure	1.9	4.4	7.8	8.0	6.9	4.4
<u>Overall surplus or deficit (-)</u>	<u>72.2</u>	<u>76.5</u>	<u>78.7</u>	<u>122.6</u>	<u>182.7</u>	<u>197.4</u>
<u>Financing (increase -)</u>	<u>-72.2</u>	<u>-76.5</u>	<u>-78.7</u>	<u>-122.6</u>	<u>-182.7</u>	<u>-197.4</u>
Government securities	1.9	--	-1.8	-3.9	-2.2	(--)
Deposits	-50.2	-54.7	-22.1	-21.9	-58.7	(--)
Mortgages	-15.0	-6.5	-19.3	-46.9	-86.4	(--)
Equities and other	-5.3	-14.5	-15.5	-11.5	-47.2	(--)
Debentures	-2.2	-9.2	-16.7	-26.4	-17.9	(--)
Residual ^{g/}	-1.4	8.4	-3.3	-12.0	-29.7	(--)
IV. Industrial Development Corporation						
<u>Total revenue</u>	<u>13.4</u>	<u>16.6</u>	<u>26.2</u>	<u>25.5</u>	<u>65.0</u>	<u>101.5</u>
Current revenue	6.6	7.7	8.0	11.1	11.5	13.3
Transfers from Central Government	(5.9)	(7.0)	(6.7)	(9.1)	(10.0)	(11.5)
Other	(0.7)	(0.7)	(1.3)	(2.0)	(1.5)	(1.8)
Capital revenue	6.8	8.9	18.2	14.4	53.5	88.2
Transfers from Central Government	(6.8)	(8.9)	(18.2)	(14.4)	(53.5)	(88.2)
<u>Total expenditure</u>	<u>13.4</u>	<u>17.1</u>	<u>15.0</u>	<u>24.5</u>	<u>46.7</u>	<u>99.7</u>
Current expenditure	6.5	6.0	7.9	8.6	9.7	11.5
Capital expenditure	6.9	11.1	7.1	15.9	37.0	88.2

Table 5.5: TRINIDAD AND TOBAGO - CONSOLIDATED GOVERNMENT OPERATIONS (Concluded)

(In millions of TT dollars)

	1977	1978	1979	1980	1981	Estimate 1982 ^{a/}
IV. Industrial Development Corporation (Continued)						
<u>Overall surplus or deficit (-)</u>	--	<u>-0.5</u>	<u>11.2</u>	<u>1.0</u>	<u>18.3</u>	<u>1.8</u>
Domestic financing	--	0.5	-11.2	-1.0	-18.3	-1.8
V. Local Authorities						
<u>Total revenue</u>	<u>94.2</u>	<u>107.3</u>	<u>199.6</u>	<u>227.7</u>	<u>263.1</u>	<u>311.5</u>
<u>Current revenue</u>	<u>87.6</u>	<u>97.7</u>	<u>189.5</u> ^{h/}	<u>211.7</u>	<u>243.1</u> ^{h/}	<u>277.3</u>
Transfers from Central Government	(78.5)	(88.1)	(179.6)	(200.9)	(232.2)	(265.9)
Other	(9.1)	(9.6)	(9.9)	(10.8)	(10.9)	(11.4)
<u>Capital revenue</u>	<u>6.6</u>	<u>9.6</u>	<u>10.1</u>	<u>16.0</u>	<u>20.0</u>	<u>34.2</u>
Transfers from Central Government	(6.6)	(9.6)	(10.1)	(16.0)	(20.0)	(34.2)
<u>Total expenditure</u>	<u>97.4</u>	<u>107.9</u>	<u>196.3</u>	<u>209.7</u>	<u>264.6</u>	<u>312.8</u>
<u>Current expenditure</u>	<u>90.8</u>	<u>98.3</u>	<u>186.2</u>	<u>193.7</u>	<u>244.6</u>	<u>278.6</u>
<u>Capital expenditure</u>	<u>6.6</u>	<u>9.6</u>	<u>10.1</u>	<u>16.0</u>	<u>20.0</u>	<u>34.2</u>
<u>Overall surplus or deficit (-)</u>	<u>-3.2</u>	<u>-0.6</u>	<u>3.3</u>	<u>18.0</u>	<u>-1.5</u>	<u>-1.3</u>
Domestic financing	3.2	0.6	-3.3	-18.0	1.5	1.3

^{a/} Figures for Central Government are budget estimates.

^{b/} Combined capital expenditure and net lending.

^{c/} Combined accounts of the Consolidated Fund, Unemployment Fund, and Special Funds for Long-Term Projects.

^{d/} As given under transfers and subsidies in Table 5.3.

^{e/} Averages of adjacent fiscal years, which end on June 30.

^{f/} Budget estimates.

^{g/} Includes cash.

^{h/} Revised estimates.

Sources: Ministry of Finance and Planning and IMF estimates.

Table 5.6: TRINIDAD AND TOBAGO - OPERATIONS OF SPECIAL FUNDS FOR LONG-TERM PROJECTS, 1974-83

(In millions of TT dollars)

	1974	1975	1976	1977	1978	1979	1980	1981	Budget 1982	a/
Receipts b/	409.7	529.2	552.0	1,618.7	1,190.8	1,555.7	2,426.9	3,184.5	2,671.0	
Food and Agriculture	10.4	21.1	6.2	7.1	2.1	2.8	81.7	32.7	100.0	
Fisheries Development	13.5	11.9	18.8	33.7	2.5	2.5	2.3	2.0	-	
Public Transport	12.4	3.8	34.8	73.2	151.1	15.5	40.2	18.1	-	
Petroleum Development	364.4	293.8	170.1	89.4	153.3	52.9	333.4	409.1	705.0	
Scholarship	2.1	0.1	0.1	0.1	0.1	c/	c/	c/	c/	
Primary School Improvement	0.7	1.1	1.5	3.9	0.2	2.1	2.3	2.5	-	
Building Projects	6.2	0.3	1.7	10.2	0.9	25.0	69.1	190.1	105.0	
Infrastructure Development	-	190.9	58.8	60.6	41.0	11.7	13.9	15.6	70.0	
Central Marketing Agency	-	4.1	1.2	0.7	0.3	d/	d/	d/	d/	
Caribbean Integration	-	2.1	3.4	0.1	0.1	20.7	1.0	301.9	51.0	
Education	-	-	122.7	70.9	3.6	103.5	65.6	117.4	-	
Port Development	-	-	26.7	70.8	2.1	51.1	27.6	21.8	35.0	
Water Resources	-	-	21.4	319.4	67.6	116.4	126.1	49.6	45.0	
Roads	-	-	24.6	159.2	5.0	104.7	288.3	433.7	375.0	
Housing	-	-	2.6	132.6	206.0	61.5	157.0	323.1	285.0	
Sports	-	-	2.6	100.4	5.9	6.0	5.7	14.7	40.0	
Drainage	-	-	4.3	6.0	21.0	21.8	12.3	2.0	38.0	
Telecommunications	-	-	5.1	140.8	4.3	25.3	51.8	92.3	80.0	
Electricity Development	-	-	23.8	36.0	2.9	41.2	41.8	19.3	95.0	
Health	-	-	-	19.6	0.8	21.5	41.8	79.1	-	
National Training	-	-	1.5	0.5	0.3	22.2	29.2	37.4	32.0	
Recruitment and Settlement of Nationals	-	-	-	1.5	0.1	0.1	0.1	0.1	-	
Air Transport	-	-	20.1	123.3	64.9	112.7	208.0	102.0	75.0	
Airport Security	-	-	-	2.0	0.1	e/	e/	e/	e/	
Social and Community Development	-	-	-	7.2	7.0	0.9	8.2	19.3	-	
National Parks Development	-	-	-	15.3	0.9	1.2	1.3	1.5	-	
Cooperative Societies Development	-	-	-	13.2	0.7	0.8	5.8	1.2	-	
Culture	-	-	-	20.3	1.2	1.5	1.7	1.8	-	
Preinvestment	-	-	-	20.3	1.2	1.5	11.8	2.5	-	
Tobago Development	-	-	-	30.1	22.2	3.8	14.4	5.6	-	
Land Acquisition	-	-	-	10.1	0.6	61.2	52.1	53.0	15.0	
Local Government Areas Development	-	-	-	10.1	0.6	0.7	0.7	5.8	5.0	
National Shipping Services	-	-	-	30.1	1.4	2.3	2.5	2.6	-	
Sewerage	-	-	-	-	31.2	2.0	11.3	21.8	-	
Airport	-	-	-	-	21.2	51.8	55.5	9.1	-	
Equipment	-	-	-	-	25.7	62.3	108.4	48.1	35.0	
Library Services	-	-	-	-	10.3	0.8	0.8	0.9	-	
Construction Materials	-	-	-	-	20.8	1.5	1.6	1.9	-	
General Industrial Development	-	-	-	-	20.8	1.3	11.0	36.3	65.0	
International Marketing Organization	-	-	-	-	10.1	0.7	0.7	0.7	-	
Primary School Construction and Equipment	-	-	-	-	25.1	f/	f/	f/	f/	
Private Housing Estate Sites and Services	-	-	-	-	250.6	18.0	19.9	22.7	-	
School Feeding Program	-	-	-	-	2.0	3.3	0.3	0.4	18.0	
Joint Services Staff College	-	-	-	-	1.0	0.1	2.2	0.2	-	
Participation in Commercial Enterprises	-	-	-	-	-	243.3	338.1	407.0	400.0	
International Year of the Child	-	-	-	-	-	10.6	11.0	1.5	-	
University Medical Complex	-	-	-	-	-	15.9	31.6	203.1	-	
National Institute of Higher Education	-	-	-	-	-	100.7	7.6	8.7	-	
Racing Authority	-	-	-	-	-	37.3	26.0	50.0	2.0	
Fire Protection	-	-	-	-	-	101.0	92.3	12.5	-	
CARICOM Disaster Relief	-	-	-	-	-	10.0	10.9	1.7	-	

Table 5.6: TRINIDAD AND TOBAGO - OPERATIONS OF SPECIAL FUNDS FOR LONG-TERM PROJECTS, 1974-83 (Concluded)

(In millions of TT dollars)

	1974	1975	1976	1977	1978	1979	1980	1981	1982
Expenditures	125.2	54.8	394.5	602.9	797.7	1,508.6	2,204.7	2,931.2	4,164.7
Food and Agriculture	0.2	1.6	5.0	3.5	3.4	35.6	57.4	51.3	110.9
Fisheries Development	0.2	5.7	12.6	11.3	12.2	6.7	12.8	-	2.1
Public Transport	-	4.0	34.6	22.0	-	3.4	30.4	26.8	69.0
Petroleum Development	123.1	42.5	126.8	195.9	183.2	221.0	357.1	507.0	801.4
Scholarship	-	-	-	-	-	c/	c/	c/	c/
Primary School Improvement	0.4	0.9	0.7	0.8	0.8	0.5	0.9	1.7	3.3
Building Projects	1.3	-	1.2	0.7	0.3	17.6	56.4	107.8	225.8
Infrastructure Development	-	0.1	48.0	41.5	40.2	99.8	83.7	43.2	106.1
Central Marketing Agency	-	-	-	1.3	-	d/	d/	d/	d/
Caribbean Integration	-	-	2.8	1.2	-	7.8	1.2	198.5	141.5
Education	-	-	66.8	47.1	53.3	66.2	41.4	65.7	131.6
Port Development	-	-	22.2	22.3	33.0	21.9	53.4	31.7	48.0
Water Resources	-	-	17.7	63.5	155.0	187.7	107.4	108.6	108.8
Roads	-	-	14.9	46.5	54.9	134.0	237.4	386.6	592.9
Housing	-	-	1.1	16.0	89.0	118.7	206.5	266.8	467.5
Sports	-	-	1.2	0.1	19.9	8.1	33.1	42.4	68.2
Drainage	-	-	1.5	3.8	3.3	11.7	13.0	19.4	43.0
Telecommunications	-	-	4.7	32.9	44.8	61.8	70.0	81.0	102.1
Electricity Development	-	-	19.0	21.9	19.4	22.2	38.2	41.6	96.2
Health	-	-	-	1.2	2.9	16.4	11.7	24.2	37.8
National Training	-	-	1.0	2.1	3.2	25.0	23.7	36.8	45.0
Recruitment and Settlement of Nationals	-	-	-	-	-	0.1	0.1	0.1	0.2
Air Transport	-	-	12.7	64.0	71.7	104.8	198.4	128.2	104.2
Airport Security	-	-	-	0.7	0.1	e/	e/	e/	e/
Social and Community Development	-	-	-	0.4	1.1	0.7	0.8	1.5	1.7
National Parks Development	-	-	-	-	-	0.2	-	0.2	2.0
Cooperative Societies Development	-	-	-	2.2	0.2	2.3	1.0	-	8.1
Culture	-	-	-	-	-	-	1.4	2.3	2.5
Preinvestment	-	-	-	-	-	1.6	0.8	1.5	3.9
Tobago Development	-	-	-	-	-	0.1	0.1	0.3	0.6
Land Acquisition	-	-	-	-	1.4	26.3	72.0	51.7	40.0
Local Government Areas Development	-	-	-	-	1.5	0.2	1.0	3.5	15.6
National Shipping Services	-	-	-	-	-	-	-	8.0	20.0
Sewerage	-	-	-	-	-	6.6	18.8	22.8	20.3
Airport	-	-	-	-	2.9	6.1	3.9	12.9	52.8
Equipment	-	-	-	-	-	29.9	63.7	85.5	100.9
Library Services	-	-	-	-	-	0.1	0.4	0.2	1.2
Construction Materials	-	-	-	-	-	-	-	-	-
General Industrial Development	-	-	-	-	-	8.5	13.4	39.4	67.8
International Marketing Organization	-	-	-	-	-	0.8	-	-	-
Primary School Construction and Equipment	-	-	-	-	-	f/	f/	f/	f/
Private Housing Estate Sites and Services	-	-	-	-	-	3.4	0.1	1.2	9.0
School Feeding Program	-	-	-	-	-	0.5	0.2	0.5	20.0
Joint Services Staff College	-	-	-	-	-	0.1	0.6	0.5	0.5
Participation in Commercial Enterprises	-	-	-	-	-	225.3	282.1	430.9	420.0
International Year of the Child	-	-	-	-	-	-	-	2.0	-
University Medical Complex	-	-	-	-	-	0.2	44.3	34.2	50.7
National Institute of Higher Education	-	-	-	-	-	-	-	-	-
Racing Authority	-	-	-	-	-	16.3	46.0	47.9	9.4
Fire Protection	-	-	-	-	-	8.4	19.9	14.4	11.5
CARICOM Disaster Relief	-	-	-	-	-	-	-	0.4	0.6
Overall Surplus	284.5	474.4	157.5	1,015.8	393.1	47.1	222.2	253.3	-1,493.7

- a/ Excluding interest earnings as yet undetermined.
- b/ Including capital repayments.
- c/ Merged with National Training Fund in 1979.
- d/ Merged with Food and Agriculture Fund in 1979.
- e/ Merged with Air Transport Fund in 1979.
- f/ Merged with Primary School Fund in 1979.

Source: Ministry of Finance and Planning

Table 5.7: TRINIDAD AND TOBAGO: Consolidated Accounts of Special Funds for Long-Term Projects, 1977-82

(In millions of TT dollars)

	1977	1978	1979	1980	Prelim. Est. 1981	Budget Est. 1982
Receipts	1,617.5	1,243.8	1,534.7	2,343.6	3,183.6	2,847.0
Budget appropriation	1,556.3	1,013.4	1,370.4	2,143.0	2,981.7	2,671.0
Interest income	61.3	140.4	164.3	200.6	201.9	176.0
Expenditure	447.7	743.0	1,118.9	1,914.4	1,779.6	...
Acquisition of assets	382.5	455.4	207.8	209.5	69.8	...
TRINTOC	(--)	(--)	2.5	(9.5)	(--)	(...)
National Petroleum Marketing Co.	(9.1)	(1.4)	(--)	(--)	(--)	(25.0)
FERTRIN	(...)	(...)	(49.5)	(17.8)	(12.2)	(...)
PLIPDECO	(22.0)	(17.2)	(--)	(--)	(10.0)	(10.9)
Telephone Company	(32.9)	(44.8)	(--)	(--)	(--)	(...)
BWIA	(13.8)	(49.0)	(--)	(--)	(--)	(...)
TRINGEN	(20.1)	(1.7)	(--)	(--)	(--)	(...)
ISCOTT	(82.0)	(169.6)	(133.0)	(166.8)	(--)	(...)
PTSC	(22.0)	(--)	(--)	(--)	(--)	(...)
WASA	(54.5)	(112.2)	(--)	(--)	(--)	(...)
Port Authority	(22.3)	(33.0)	(0.3)	(--)	(--)	(...)
Other	(103.8)	(26.5)	(22.5)	(15.4)	(47.6)	(...)
Transfers	5.2	1.4	28.2	64.0	34.2	194.3
Internal	(4.2)	(0.5)	(27.5) ^{a/}	(63.4) ^{a/}	(33.0) ^{a/}	(194.3)
External	(1.0)	(0.9)	(0.7)	10.6	(1.2)	(...)
Capital formation ^{b/}	60.0	286.2	882.9	1,640.9	1,675.6	(...)
Net lending	154.2	17.6	368.6	206.7	1,152.3	...
Loans and advances	155.3	53.5	389.9	290.4	1,153.5	...
External	(--)	(--)	(7.4)	(0.5)	(6.8)	(...)
Internal	(155.3)	(53.5)	(382.5)	(289.9)	(1,146.7)	(...)
TRINGEN	/20.6/	/1.7/	/--/	/--/	/--/	/.../
BWIA	/50.2/	/22.7/	/42.3/	/--/	/128.2/	/.../
PLIPDECO	/--/	/1.1/	/3.5/	/--/	/--/	/.../
ISCOTT	/--/	/--/	/--/	/--/	/70.9/	/.../
Other	/84.5/	/28.0/	/336.7/	/289.9/	/947.6/	/.../
Repayments	-1.1	-36.9	-21.3	-83.7	-1.2	-9.0
Combined expenditure and net lending from Special Funds	601.9	760.6	1,487.5	2,121.1	2,931.9	3,549.4^{c/}
Surplus/deficit (-)	1,015.6	483.2	47.2	222.5	251.7	-702.4

a/ Includes bridge loans and advances to enterprises not carried as loans.

b/ Residual. Includes expenditures for public infrastructure.

c/ Derived from budget estimates.

Sources: Ministry of Finance and Planning; Ministry of State Enterprises; and IMF estimates.

Table 5.8: Trinidad and Tobago - Operations of Unemployment Fund, 1977 - 1982

(In millions of TT dollars)

	1977	1978	1979	1980	1981	Estimate 1982
<u>Receipts</u>	<u>174.0</u>	<u>176.8</u>	<u>230.1</u>	<u>416.3</u>	<u>200.8</u>	<u>147.9</u>
Unemployment levy	165.9	165.5	209.9	381.6	146.5	107.9
Interest Income	8.1	11.3	20.2	34.6	54.3	40.0
<u>Expenditure</u>	<u>68.9</u>	<u>81.9</u>	<u>247.8</u>	<u>231.4</u>	<u>285.6</u>	<u>382.5</u>
Recurrent expenditure	53.2	65.1	218.4	213.6	264.0	342.2
Capital expenditure	15.7	16.8	29.4	17.8	21.6	40.3
<u>Overall surplus or deficit (-)</u>	<u>105.1</u>	<u>94.9</u>	<u>-17.7</u>	<u>184.9</u>	<u>-84.8</u>	<u>-234.6</u>

Source: Ministry of Finance and Planning

Table 5.9: TRINIDAD AND TOBAGO: MAJOR PROJECTS FUNDED FROM SPECIAL FUNDS FOR LONG-TERM DEVELOPMENT, 1980-81

(In millions of TT dollars)

	1980	1981
Agriculture and Fisheries	21.1	12.6
Construction of Rice Mill and Drier	1.4	1.3
Animal Production and Research	6.4	7.8
Sugarcane Feeds Center Project	1.2	1.4
Establishment of Agricultural Settlements		2.1
Offshore Fisheries Project	12.1	
Industry	309.5	302.4
Urea Project		29.4
Methanal Project	2.1	29.1
Expansion of Trinidad Cement	41.6	88.0
Steel Project	233.2	102.0
ISCOTT-Dock Facilities	8.8	7.5
Fertilizer Project (FERTRIN)	17.9	31.3
Aluminum Smelter	4.5	
Development of Industrial Sites and Construction of Factory Shells	1.4	15.1
Energy	39.3	203.3
Flare Gas Project	37.5	160.4
Marine Geophysical Survey		9.9
Mahaica Gas Pipeline Project		7.0
Second Cross Country Natural Gas Pipeline		26.0
Liquid Natural Gas Project	1.8	
Power	98.8	63.7
Point Lisas Power Plant	61.0	26.2
Installation of SMW Generating Plant	1.3	-
Transmission & Distribution Expansion	30.0	32.9
Administration & General	5.9	1.8
Generation - capital works	.5	2.8
Transportation	527.0	511.9
Port Development	48.3	27.9
Roads	251.5	323.9
St. Joseph to Curepe Roundabout	21.5	4.1
Transit Route, Port of Spain to Arima	12.6	7.7
Macurapo Foreshore Freeway	9.7	15.0
Diego Martin Highway	1.4	3.2
Southern Highway	27.7	1.5
Princess Margaret Highway	36.0	29.9
Secondary Roads Improvement	9.3	
Roads for Private Housing Estates	8.0	26.6
Churchill Roosevelt Highway		2.2
Priority Bus Route		1.4
Queen's Park Savannah Road		1.5
Reconstruction of Bridge	9.1	17.9
Road Resurfacing Program	33.2	39.5
Main Roads Improvement Program	9.3	13.0
Agricultural Access Roads	8.4	8.7
Major Improvements on Local Roads	45.1	98.2
Projects under the National Secondary Roads Development Co.		20.2
Scarborough Parkway	10.2	17.1
Construction of Roads in Tobago	10.0	16.2

Table 5.9: TRINIDAD AND TOBAGO: MAJOR PROJECTS FUNDED FROM SPECIAL FUNDS FOR LONG-TERM DEVELOPMENT, 1980-81 (Continued)

(In millions of TT dollars)

	1980	1982
Transportation (Continued)		
Purchase of Airplanes	174.4	128.2
Re-equipment Program	24.0	
Works at Piarco International Airport	.6	.7
Rehabilitation of Runway	1.5	3.3
Construction of Airport Restaurant	.8	2.4
Purchase of Equipment		3.2
Purchase of Buses	25.9	5.0
Purchase of Equipment		4.0
Restoration of Port of Spain Garage & Stores		4.0
San Fernando Garage		3.7
Depot Construction		4.4
Piarco Airport Hangar		1.2
Communication	70.0	81.0
Expansion of Telephone System	70.0	81.0
Education	32.5	56.6
Primary School Construction & Rehabilitation	3.9	6.5
Secondary School Construction & Rehabilitation	28.6	50.1
Housing	112.6	202.9
Point Lisas-Urban Development & Housing Project	19.9	58.0
Construction of Flats at Norvant Road	5.5	19.7
Malabar Housing Projects	22.0	11.3
Trincity Housing Project	16.1	24.0
Valencia Housing Project	-	10.2
Flagstaff Hill Housing Project	6.1	11.0
La Harquita Housing Project	43.0	47.4
Edinburgh Housing Project		19.5
Real Spring Housing Project		1.8
Water and Sewerage	132.7	143.1
Major Water Schemes	91.0	80.3
Improvements and Extensions to Major Water Schemes	4.8	5.8
Local Water Schemes	4.1	2.7
Tobago Water Projects	.9	9.2
Minor Mains-Extension of Existing System	6.7	8.0
Others	-	2.5
Water and Sewerage Building	-	6.0
Drainage Projects	6.4	6.3
Diego Martin River	1.2	1.4
Major Drainage Projects	1.3	1.2
Extraordinary River Clearing	2.4	2.0
Drainage & Irrigation Projects	1.0	.5
Minor Drainage Improvement in Tobago	.5	1.2
Sewerage	18.0	22.3
Improvement to Treatment Works	2.0	1.9
Extension to Sewerage System	.6	1.4
Construction of trunk main in San Fernando	1.2	1.5
Scarborough Sewerage System	7.0	2.5
Feasibility Study & Design of New System	6.0	15.0
Tank Rehabilitation	2.0	

Table 5.9: TRINIDAD AND TOBAGO: MAJOR PROJECTS FUNDED FROM SPECIAL FUNDS FOR LONG-TERM DEVELOPMENT, 1980-81 (Concluded)

(In millions of TT dollars)

	1980	1982
<u>Health</u>	<u>81.0</u>	<u>58.4</u>
Redevelopment of San Fernando Hospital	3.0	7.3
Hospital Equipment	3.5	9.0
Construction of Health Centers	2.5	2.1
World Bank Population Project	2.7	3.8
University Medical Complex (Md.Hope)	44.3	34.2
Health Administration Office	25.0	2.0
<u>Other</u>	<u>141.8</u>	<u>191.1</u>
Equipment for Defense Forces, Ministries and Local Government	63.7	85.5
Construction of Racing Complex	46.0	47.9
Fire Protection	19.9	14.4
Shopping Mall	5.1	
Government Forensic Laboratory	1.9	6.0
North Stand, Queen's Park Savannah		1.3
Financial Complex		24.0
Prison Complex	1.8	4.8
St. James Police Station and Court House	2.0	1.5
CARIRI Laboratory	.5	1.7
Red House, Port of Spain	-	2.7
National Computer Agency	.9	1.3
TOTAL	<u>1,566.2</u>	<u>1,827.0</u>

Source: Draft Estimates of Expenditure, Development Programme and Report on Development Programme.

Table 6.1: TRINIDAD AND TOBAGO - SUMMARY ACCOUNTS OF THE CONSOLIDATED MONETARY SYSTEM, a/
1977-81

	1977	1978	1979	1980	1981
<u>(In millions of TT\$)</u>					
<u>Net international reserves</u>	<u>3201.8</u>	<u>3939.7</u>	<u>4814.1</u>	<u>6299.1</u>	<u>7636.1</u>
<u>Other external assets</u>	<u>339.6</u>	<u>339.6</u>	<u>339.6</u>	<u>331.7</u>	<u>322.1</u>
<u>Net domestic assets</u>	<u>839.9</u>	<u>-825.1</u>	<u>-790.9</u>	<u>-1334.3</u>	<u>-1349.9</u>
<u>Net claims on public sector</u>	<u>-2779.7</u>	<u>-3287.0</u>	<u>-3558.7</u>	<u>-4858.5</u>	<u>-5677.3</u>
Of which: Net Central Government	(-2709.8)	(-3255.8)	(-3412.3)	(-4613.1)	(-4974.5)
<u>Credit to private sector</u>	<u>2125.9</u>	<u>2888.9</u>	<u>3414.5</u>	<u>4255.1</u>	<u>5325.6</u>
Banking system	(1719.0)	(2265.6)	(2668.2)	(3229.4)	(3972.3)
Nonbank financial intermediaries	(406.9)	(623.3)	(746.3)	(1025.7)	(1353.3)
<u>Other assets (net)</u>	<u>-186.1</u>	<u>-427.0</u>	<u>-646.7</u>	<u>-730.9</u>	<u>-998.2</u>
<u>Long-term foreign liabilities</u>	<u>16.4</u>	<u>16.4</u>	<u>16.4</u>	<u>16.4</u>	<u>16.3</u>
<u>Liabilities to private sector</u>	<u>2685.1</u>	<u>3437.8</u>	<u>4346.4</u>	<u>5280.1</u>	<u>6592.0</u>
Banking system	2242.1	2765.8	3570.0	4144.9	4933.4
Nonbank financial intermediaries	443.0	672.0	776.4	1135.2	1658.6
<u>(In millions of TT\$)</u>					
<u>Changes b/</u>					
Net international reserves	50.8	27.5	25.4	34.2	25.3
Net claims on Central Government	-58.8	-20.3	-4.6	-27.6	-6.8
Credit to private sector	29.1	28.4	15.3	19.3	20.3
Liabilities to private sector	28.2	28.0	26.4	21.5	24.8
Banking system	(23.0)	(19.5)	(23.4)	(13.2)	(14.9)
Nonbank financial intermediaries	(5.2)	(8.5)	(3.0)	(8.3)	(9.9)
<u>Memordum item</u>					
<u>Liabilities to the private sector/GDP</u> (at market prices)	34.1	38.5	37.4	34.1	38.6

a/ Consist of the Central Bank, commercial banks and deposit-receiving nonbank financial intermediaries.

b/ In relation to liabilities of the private sector in the beginning the period.

Source: Central Bank of Trinidad and Tobago.

Table 6.2: TRINIDAD AND TOBAGO - SUMMARY ACCOUNTS OF THE CONSOLIDATED BANKING SYSTEM
1977-81

(In millions of TT dollars)

	1977	1978	1979	1980	1981
<u>Banking System</u>					
<u>Net international reserves</u>	3195.7	3934.5	4808.4	6294.0	7631.3
Central Bank	3246.3	4022.9	4823.0	6360.3	7719.3
Commercial Banks	-50.6	-88.4	-14.6	-66.3	-88.0
<u>Other external assets</u>	339.6	339.6	339.6	331.7	322.1
<u>Net domestic assets</u>	-993.3	-1102.9	-1048.7	-1901.6	-2278.1
<u>Net claims on public sector</u>	-2782.5	-3288.9	-3564.9	-4863.8	-5685.2
<u>Net Central Government</u>	-2712.6	-3257.7	-3418.5	-4618.4	-4982.4
Treasury bills	(84.2)	(100.5)	(100.6)	(100.4)	(100.5)
Other credit	(-24.8)	(-53.7)	(-105.1)	(-149.0)	(-192.2)
Other government securities	(77.6)	(79.1)	(97.0)	(134.8)	(113.7)
Deposits	(-2849.6)	(-3383.6)	(-3511.0)	(-4704.6)	(-5004.4)
Net other decentralized agencies	-60.1	-17.0	-83.9	-202.0	-638.4
Net state and local governments	-9.8	-14.2	-62.5	-43.4	-64.4
Official capital and surplus	-197.0	-368.4	-654.8	-851.7	-1193.1
Credit to rest of financial system	41.3	71.9	75.7	79.7	93.7
Credit to private sector	1719.0	1165.6	2668.2	3229.4	3972.3
Nonmonetary international organizations	10.3	9.5	16.7	6.6	6.6
Net unclassified assets	186.6	52.9	339.4	451.5	500.2
Net interbank float	29.0	154.5	71.0	46.7	27.4
<u>SDR allocation</u>	60.8	65.1	92.8	115.9	129.1
<u>Liabilities to rest of financial system</u>	239.1	340.3	436.5	463.3	612.8
<u>Liabilities to private sector</u>	2242.1	2765.8	3570.0	4144.9	4933.4
<u>Money</u>	634.7	811.6	956.9	1153.4	1314.8
Currency in circulation	230.0	294.6	411.2	466.3	532.3
Demand deposits	404.7	517.0	545.7	687.1	782.5
<u>Quasi-money</u>	1468.1	1762.2	2351.1	2630.1	3206.9
Savings	789.5	968.8	1180.7	1335.2	1584.3
Time deposits	678.6	793.4	1170.4	1294.9	1622.6
Private capital and surplus	139.3	192.0	262.0	361.4	411.7

**Table 6.2: TRINIDAD AND TOBAGO - SUMMARY ACCOUNTS OF THE CONSOLIDATED BANKING SYSTEM
1977-81 (Continued)**

(In millions of TT dollars)

	1977	1978	1979	1980	1981
I. Central Bank					
<u>Net international reserves</u>	<u>3246.3</u>	<u>4022.9</u>	<u>4823.0</u>	<u>6360.3</u>	<u>7719.3</u>
<u>Other external assets</u>	<u>339.6</u>	<u>339.6</u>	<u>339.6</u>	<u>331.7</u>	<u>322.1</u>
<u>Net domestic assets</u>	<u>-2861.6</u>	<u>-3602.7</u>	<u>-3845.1</u>	<u>-5241.2</u>	<u>-6319.9</u>
Net claims on public sector	-2866.5	-3402.9	-3583.9	-4938.8	-5737.5
Net Central Government (budget)	-2847.4	-3398.3	-3572.9	-4765.0	-5157.8
Treasury bills	(--)	(--)	(--)	(--)	(0.9)
Other securities at cost	(24.6)	(33.5)	(26.5)	(73.5)	(43.2)
Government use of SDRs	(25.1)	(12.4)	(-5.8)	(6.2)	(-14.1)
Government use of reserve position in IMF	(-55.0)	(-67.8)	(-93.9)	(-167.2)	(-193.3)
Counterpart IMF deposits	(-1.7)	(-2.0)	(-7.8)	(--)	(--)
Government deposits	(-1,471.5)	(-878.4)	(-905.1)	(-1,612.3)	(-1,763.6)
Special deposits	(-1,368.9)	(-2,496.0)	(-2,586.8)	(-3,065.2)	(-3,230.9)
Net other decentralized agencies	-19.1	-4.6	-11.0	-173.8	-579.7
Official capital and surplus	-197.0	-368.4	-654.8	-851.7	-1,193.1
Credit to commercial banks	--	--	--	--	--
Nonmonetary international organizations	10.3	9.5	16.7	6.6	6.6
Net unclassified assets	191.6	159.1	376.9	542.7	614.1
<u>Counterpart unrequited foreign exchange</u>	<u>60.8</u>	<u>65.1</u>	<u>92.8</u>	<u>115.9</u>	<u>129.1</u>
Allocation of SDRs	60.7	65.1	92.8	115.9	129.1
Valuation adjustment Fund accounts	0.1	--	--	--	--
<u>Liabilities to commercial banks</u>	<u>433.5</u>	<u>400.1</u>	<u>813.5</u>	<u>868.6</u>	<u>1,071.1</u>
Currency	46.6	58.3	108.4	95.4	94.4
Demand deposits	386.9	341.8	705.1	773.2	975.7
<u>Liabilities to private sector</u>	<u>230.0</u>	<u>294.6</u>	<u>411.2</u>	<u>466.3</u>	<u>532.3</u>
Currency in circulation	230.0	294.6	411.2	466.3	532.3
<u>Memorandum item</u>					
Currency issue	279.6	355.9	523.5	565.7	631.7

**Table 6.2: TRINIDAD AND TOBAGO - SUMMARY ACCOUNTS OF THE CONSOLIDATED BANKING SYSTEM
1977-81 (Concluded)**

(In millions of TT dollars)

	1977	1978	1979	1980	1981
II. Commercial Banks					
<u>Net international reserves</u>	<u>-50.6</u>	<u>-88.4</u>	<u>-14.6</u>	<u>-66.3</u>	<u>-88.0</u>
<u>Monetary reserves and currency holdings</u>	<u>433.6</u>	<u>400.1</u>	<u>813.7</u>	<u>868.6</u>	<u>1,070.0</u>
Local cash in hand	46.6	58.3	108.4	95.4	94.4
Deposits with Central Bank	387.0	341.8	705.3	773.2	975.6
<u>Net domestic assets</u>	<u>1,868.2</u>	<u>2,499.8</u>	<u>2,796.2</u>	<u>3,339.6</u>	<u>4,031.9</u>
<u>Net claims on public sector</u>	<u>84.0</u>	<u>114.0</u>	<u>19.0</u>	<u>75.0</u>	<u>52.3</u>
Net Central Government (budget)	134.8	140.6	154.4	146.6	175.4
Treasury bills	(84.2)	(100.5)	(100.6)	(100.4)	(99.6)
Loans and advances	(5.1)	(3.7)	(2.4)	(12.0)	(15.2)
Other government securities	(53.0)	(45.6)	(70.5)	(61.3)	(70.5)
Deposits	(-7.5)	(-9.2)	(-19.1)	(-27.1)	(-9.9)
Net other decentralized agencies	-41.0	-12.4	-72.9	-28.2	-58.7
Net state and local government	-9.8	-14.2	-62.5	-43.4	-64.4
Official capital and surplus	--	--	--	--	--
<u>Credit to rest of financial system</u>	<u>41.3</u>	<u>71.9</u>	<u>75.7</u>	<u>79.7</u>	<u>93.7</u>
Private financial institutions	36.9	59.0	72.7	79.3	92.7
Public financial institutions	4.4	12.9	3.0	0.4	1.0
<u>Liabilities to Central Bank</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>	<u>--</u>
<u>Liabilities to rest of financial system</u>	<u>239.1</u>	<u>340.3</u>	<u>436.5</u>	<u>463.3</u>	<u>612.8</u>
Private financial institutions deposits	148.5	186.4	271.6	204.0	453.1
Public financial institutions deposits	90.6	153.9	164.9	159.3	159.7
<u>Liabilities to private sector</u>	<u>2012.1</u>	<u>2471.2</u>	<u>3158.8</u>	<u>3678.6</u>	<u>4401.1</u>
Demand deposits	404.7	517.0	545.7	687.1	782.5
Savings deposits	789.5	968.8	1180.7	1335.2	1584.3
Time deposits	678.6	793.4	1170.4	1294.9	1622.6
Private capital and surplus	139.3	192.0	262.0	361.4	411.7

Source: Central Bank of Trinidad and Tobago and IMF estimates.

**Table 6.3: TRINIDAD AND TOBAGO - ORIGIN, DESTINATION, AND FINANCING OF CREDIT
EXTENDED BY THE BANKING SYSTEM, 1977-81**

(In millions of TT dollars)

	1977	1978	1979	1980	1981
Total credit	-993.3	-1102.9	-1048.7	-1901.6	-2278.0
Origin					
Monetary authorities	-2861.5	-3602.7	-3845.1	-5241.2	-6309.9
Commercial banks	1868.2	2499.8	2796.2	3339.6	4031.9
Destination					
Public sector (net)	-2782.5	-3288.9	-3564.9	-4863.8	-5685.2
Net Central Government	(-2712.6)	(-3257.7)	(-3418.5)	(-4618.4)	(-4982.4)
Net other decentralized agencies	(-60.1)	(-17.0)	(-83.9)	(-202.0)	(-638.4)
Net states and local governments	(-9.8)	(-14.2)	(-62.5)	(-43.4)	(-64.4)
Official capital and surplus	-197.0	-368.4	-654.8	-851.7	-1193.1
Credit to the rest of the financial system	41.3	71.9	75.7	79.7	93.7
Credit to private sector	1719.0	2265.6	2668.2	3229.4	3972.3
Nonmonetary international organizations	10.3	9.5	16.7	6.6	6.6
Net unclassified assets	186.6	52.9	339.4	451.5	500.2
Net interbank float	29.0	154.5	71.0	46.7	27.4
Financing					
Domestic	2481.2	3106.1	4006.5	4608.2	5546.2
Liabilities to private sector	2242.1	2765.8	3570.0	4144.9	4933.4
Money	(634.7)	(811.6)	(956.9)	(1153.4)	(1314.8)
Quasi-money	(1468.1)	(1762.2)	(2351.1)	(2630.1)	(3206.9)
Other	(139.3)	(192.0)	(262.0)	(361.4)	(411.7)
Liabilities to the rest of the financial system	239.1	340.3	436.5	463.3	612.8
Foreign	-3474.5	-4209.0	-5055.2	-6509.8	-7824.3
Net international reserves	-3195.7	-3934.5	-4808.4	-6294.0	-7631.3
Central Bank	(-3246.3)	(-4022.9)	(-4823.0)	(-6360.3)	(-7719.3)
Commercial banks	(50.6)	(88.4)	(14.6)	(66.3)	(88.0)
SDR allocation	60.8	65.1	92.8	115.9	129.1
Other external assets ^{a/}	-339.6	-339.6	-339.6	-331.7	-322.1

^{a/} Loans to CARICOM countries for balance of payments support purposes and other long-term assets.

Source: Table 6.2

Table 6.4: TRINIDAD AND TOBAGO - CHANGES IN THE ORIGIN, DESTINATION, AND FINANCING OF CREDIT EXTENDED BY THE BANKING SYSTEM, 1977-81

	1977	1978	1979	1980	1981
(In millions of TT\$)					
Total credit	-583.0	-109.6	54.2	-852.9	-376.5
Origin					
Monetary authorities	-1096.9	-741.2	-242.4	-1396.1	-1068.7
Commercial banks	513.9	631.6	296.4	543.4	692.4
Destination					
Public sector (net)	-1181.1	-506.4	-276.0	-1298.9	-821.4
Net Central Government	(-1163.6)	(-545.1)	(-160.8)	(-1199.9)	(-364.0)
Net other decentralized agencies	(-18.3)	(43.1)	(-66.9)	(-118.1)	(-436.4)
Net states and local governments	(-0.8)	(-4.4)	(-48.3)	(19.1)	(-21.0)
Official capital and surplus	8.9	-171.4	286.4	-196.9	-341.4
Credit to the rest of the financial system	17.8	30.6	3.8	4.0	14.0
Credit to private sector	496.0	546.6	402.6	561.2	742.9
Nonmonetary international organizations	-1.1	-0.8	7.2	-10.1	--
Net unclassified assets	78.0	-133.7	286.5	112.1	48.7
Net interbank float	-1.5	125.5	-83.5	-24.3	-19.3
Financing					
Domestic	523.6	624.9	900.4	601.7	938.0
Liabilities to private sector	482.7	523.7	804.2	574.9	788.5
Money	(142.9)	(176.9)	(145.3)	(196.5)	(161.4)
Quasi-money	(310.5)	(294.1)	(588.9)	(279.0)	(576.8)
Other	(29.3)	(52.7)	(70.0)	(99.4)	(50.3)
Liabilities to the rest of the financial system	40.9	101.2	96.2	26.8	149.5
Foreign	-1106.6	-734.5	-846.2	-1454.6	-1314.5
Net international reserves	-1063.8	(-738.8)	-873.9	-1485.6	-1337.3
Central Bank	(-1078.5)	(-776.6)	(-800.1)	(-1537.3)	(-1359.0)
Commercial banks	(14.7)	(37.8)	(-73.8)	(51.7)	(21.7)
SDR allocation	2.8	4.3	27.7	23.1	13.2
Other external assets ^{a/}	-45.6	--	--	7.9	9.6
(Percentage change) ^{b/}					
Net international reserves	58.9	33.0	30.6	41.6	32.3
Total credit	-33.1	-4.9	2.0	-23.9	-9.1
Public sector (net)	-67.1	-22.3	-10.0	-36.4	-19.8
Of which: Central Government (net)	(-66.1)	(-24.3)	(-5.8)	(-33.6)	(-8.8)
Private sector	28.2	24.4	14.6	15.7	17.9
Liabilities to the private sector	27.4	23.4	29.1	16.1	19.0

a/ Loans to CARICOM countries for balance of payments support purposes.

b/ In relation to the stock of liabilities to the private sector at the beginning of the period.

Source: Table 6.3

Table 6.5: TRINIDAD AND TOBAGO - DISTRIBUTION OF COMMERCIAL BANK LOANS AND ADVANCES TO THE PRIVATE SECTOR, 1977-81^{a/}

	December 31				
	1977	1978	1979	1980	1981
(In millions of TT\$)					
Total	1630.5	2179.7	2529.7	3041.5	3737.7
Manufacturing	324.9	416.9	410.6	499.4	546.4
Chemicals and fertilizers	(34.9)	(44.3)	(21.4)	(26.5)	(30.1)
Food, beverages, and tobacco	(46.0)	(57.8)	(88.9)	(88.9)	(96.6)
Textiles and footwear	(35.3)	(51.3)	(48.2)	(45.8)	(47.4)
Building products	(35.0)	(50.3)	(57.1)	(70.6)	(77.5)
Other industry	(173.7)	(213.2)	(195.0)	(267.6)	(294.8)
Agriculture	38.2	59.9	51.2	90.9	79.8
Construction	68.6	100.4	248.4	329.0	445.4
Mining and refining	26.8	79.0	103.8	64.7	126.8
Transportation	39.9	56.5	97.2	132.7	186.8
Distributive trades	249.8	318.4	389.1	453.6	539.7
Individuals (nonbusiness loans)	752.0	952.7	977.9	1153.6	1421.6
Professional services	70.8	11.1	144.2	154.9	98.1
Financial institutions	36.5	59.0	72.7	79.3	92.7
Other	23.0	25.8	34.6	83.4	200.4
(As per cent of total)					
Total	100.0	100.0	100.0	100.0	100.0
Manufacturing	19.9	19.2	16.2	16.4	14.6
Chemicals and fertilizers	(2.1)	(2.0)	(0.8)	(0.9)	(0.8)
Food, beverages and tobacco	(2.8)	(2.7)	(3.5)	(2.9)	(2.6)
Textiles and footwear	(2.2)	(2.4)	(1.9)	(1.5)	(1.2)
Building products	(2.1)	(2.3)	(2.3)	(2.3)	(2.1)
Other industry	(10.7)	(9.8)	(7.7)	(8.8)	(7.9)
Agriculture	2.3	2.7	2.0	3.0	2.2
Construction	4.2	4.6	9.8	10.8	11.9
Mining and refining	1.6	3.6	4.1	2.1	3.4
Transportation	2.4	2.6	3.8	4.4	5.0
Distributive trades	15.4	14.6	15.4	14.9	14.4
Individuals (nonbusiness loans)	46.3	43.7	38.7	37.9	38.0
Professional services	4.3	5.1	5.7	5.1	2.6
Financial institutions	2.2	2.7	2.9	2.6	2.5
Other	1.4	1.2	1.4	2.8	5.4

^{a/} Total loans and advances differ from that in Table 6.2 due to a difference in sources.

Source: Central Bank of Trinidad and Tobago.

Table 6.6: TRINIDAD AND TOBAGO - SELECTED INTEREST RATES OF COMMERCIAL BANKS, 1977-82

(In per cent per annum; end of period)

	1977	1978	1979	1980	1981	March	
						1981	1982
Securities Market							
Bank Rate	6.00	6.00	6.00	6.00	6.00	6.00	6.00
Treasury Bills	3.93	3.25	3.10	3.07	3.05	3.03	3.05
Government Bonds							
1-2 years' maturity	6.00	6.00	6.36	6.37	7.37	...	8.00
3-5 years' maturity	6.00- 6.20	6.00- 6.25	6.60- 7.13	6.61- 7.16	8.23	...	8.53
10-20 years' maturity	7.82	7.74	8.62	8.30	8.60	8.30	8.93
Over 20 years' maturity	8.07	8.07	8.36	8.56	9.67	8.56	9.81
Commercial Banks							
Time Deposits							
3-month period	4.00- 7.00	3.50- 7.50	4.00- 9.00	6.00- 9.00	7.50-10.00	7.50-10.00	7.50-10.00
6-month period	4.75- 7.00	5.00- 7.50	5.00- 9.00	7.00- 9.25	7.50-10.00	7.00- 9.50	7.50-10.00
12-month period	6.00- 7.50	6.00- 7.00	6.00- 9.00	7.00- 9.50	7.50-10.00	7.00-10.00	7.50-10.00
Over one year	5.25- 6.50	4.00- 7.00	--	--	--	--	--
Savings Deposits	2.50- 5.00	2.50- 5.00	2.50- 7.00	2.50- 7.00	4.50- 7.00	2.50- 5.00	2.50- 6.00
Prime Lending Rate	7.75- 9.00	8.25-11.0	9.00-10.25	10.50-13.00	11.00-12.00	10.50-12.00	11.00-15.00
Average Lending Rate	9.09	9.94	10.79	11.70	12.28	12.25	...
Average Deposit Rate	4.87	4.75	5.94	6.06	6.60	6.61	...
Treasury Bill Rates Abroad							
United Kingdom	6.37	11.57	15.90	13.10	14.51	11.53	12.49
United States	6.07	9.16	12.08	16.50	10.93	13.48	12.49
Euro-Dollar Rate(London)	6.00	8.73	11.96	14.36	13.75	14.87	15.47

Source: Central Bank of Trinidad and Tobago.

Table 6.7: TRINIDAD AND TOBAGO - SELECTED INTEREST RATES OF NONBANK FINANCIAL INTERMEDIARIES, 1977 - 81

(In per cent per annum; end of period)

	1977	1978	1979	1980	1981
Trust Companies					
Time Deposits					
1-3 years	5.50-10.00	7.50- 8.50	8.00-10.00	8.50-10.00	8.50-11.00
Over 3 years	7.00- 8.62	8.50- 8.75	8.75-10.00	8.75-10.00	8.75-11.00
Mortgage Loans					
Residential	9.00-10.50	10.00-11.00	9.50-12.00	9.00-14.00	11.00-15.00
Commercial	9.50-11.50	10.50-11.50	11.00-13.00	11.00-14.00	13.00-15.00
Finance Companies					
Time Deposits					
Under 1 year	...	5.00-10.00	5.00-10.50	7.00-11.50	9.00-12.00
1-3 years	...	8.50-12.00	9.00-15.00	7.00-15.00	7.00-18.00
Over 3 years	...	10.00	10.00-11.00	7.75-14.00	9.00-15.00
Installment Loans	...	6.00-16.00	6.00-20.00	6.00-20.00	7.00-19.00
Thrift Institutions					
Savings Deposits					
Time Deposits	4.00- 5.00	4.00- 5.00	4.00- 5.00	4.00- 5.00	4.00- 5.00
1-3 years	6.00- 7.00	6.00- 8.00	6.50- 9.00	6.50- 9.00	6.50- 9.00
Over 3 years	7.50- 8.00	7.50- 8.00	7.50- 9.00	8.00- 9.00	7.00- 9.00
Mortgage Loans					
Residential	10.00-12.00	10.00-12.00	11.00-12.00	12.00-13.00	12.00-13.00
Mortgage Finance Companies					
Time Deposits					
1-3 years	7.50- 8.50	7.50- 8.50	9.00- 9.75	9.50-10.00	10.00-10.50
Over 3 years	8.25- 8.75	8.50- 8.75	9.00- 9.75	9.50-10.00	9.50-10.50
Mortgage Loans					
Residential	8.50-10.00	8.00-10.50	8.00-12.50	8.00-14.50	8.00-14.00
Commercial	10.50	10.50-11.00	11.50-13.50	13.50-15.00	14.00-15.00

Sources: Central Bank of Trinidad and Tobago.

Table 7.1: TRINIDAD AND TOBAGO: RETAIL PRICE INDEX, 1976-82
(Annual Average, September 1975=100)^{a/}

	All Items	Food	Meals Out	Drink & Tobacco	Fuel & Light	Housing	Household Supplies	Services	Clothing	Transportation	Education	Medical Goods & Services
Weights	1000	334	20	64	40	93	67	21	180	111	40	30
1976	108.7	105.9	111.5	111.6	101.6	105.9	109.9	106.6	109.8	109.2	114.3	133.4
1977	121.5	113.2	131.2	123.3	103.3	119.5	123.3	117.9	125.9	131.1	141.3	143.9
1978	133.9	123.5	144.0	141.8	104.2	138.6	136.7	139.5	136.4	144.5	159.8	152.5
1979	153.6	140.6	168.0	158.2	105.7	166.6	155.4	163.8	148.4	184.0	183.8	171.5
1980	180.5	167.8	194.4	188.8	118.3	196.0	176.6	200.7	161.8	228.2	227.6	196.5
1981	206.3	195.6	240.9	216.4	122.3	226.0	205.7	225.8	182.1	252.3	263.3	220.1
March 1982	212.2	202.2	245.5	224.3	124.1	229.5	211.3	230.3	186.2	258.9	269.7	231.9

^{a/} The index numbers for March 1982 are averaged for the period April 1981 to March 1982.

Source: Central Statistical Office.

**Table 7.2: TRINIDAD AND TOBAGO: INDEX OF RETAIL PRICES OF BUILDING MATERIALS, 1976-1981
(1968 = 100)**

	Weights	1976	1977	1978	1979	1980	1981 ^{a/}
All Items	1,000.0	293.9	329.0	345.3	370.6	444.8	485.5
Cement, Quarry Products, Ready Mix Concrete & Steel	223.7	266.4	302.6	308.9	304.4	382.1	421.0
Flooring & Walls	305.5	301.4	338.0	363.5	390.1	459.2	525.4
Lumber & Wall Board	100.0	365.2	434.9	460.5	522.8	689.3	726.1
Roofing Materials	77.5	343.8	347.8	332.3	367.0	440.8	428.0
Fittings, Screws and Nails	65.2	316.8	357.2	371.4	412.6	495.6	548.9
Paints	65.0	257.3	270.3	279.8	305.6	345.6	376.0
Plumbing Equipment	103.8	279.6	305.0	323.6	342.4	383.4	417.2
Electrical Equipment	59.3	212.8	253.9	293.3	341.0	360.3	363.5

^{a/} Average of first two quarters.

Source: Central Statistical Office (Economic Indicators)

Table 7.3: TRINIDAD AND TOBAGO: RETAIL, IMPORT, EXPORT AND TERMS OF TRADE, 1974-80

**Price Indices, 1974-80
(1974=100)**

	Retail Price Index^{a/}	Import Price Index	Export Price Index	Terms of Trade
1974	100.0	100.0	100.0	100.0
1975	118.8	114.8	115.6	100.7
1976	129.1	135.3	133.6	98.7
1977	144.3	139.4	145.6	104.4
1978	159.0	145.5	146.4	100.6
1979	182.4	164.9	192.4	116.7
1980	214.4	247.6	307.2	124.1

^{a/} These indices are derived from series provided by the Central Statistical Office but with a different base year. The retail index was estimated by rebasing the sectoral indices and then averaging them with the weights used in the retail price index with base year 1975. A similar method was used for the export and import price indices; in addition, certain sectoral indices were adjusted to more realistically reflect the price movements.

Source: Central Statistical Office and Staff Estimates.

**Table 7.4: TRINIDAD AND TOBAGO: IMPORT AND EXPORT PRICE INDICES, 1975-80
(1974=100)**

	Weights	1975	1976	1977	1978	1979	1980
			<u>Imports</u>				
All Sections (S.I.T.C.)	1000.0	114.8	135.3	139.4	145.5	164.9	247.6
Food	66.8	125.6	125.5	120.9	127.4	151.7	159.8
Beverages and Tobacco	3.5	115.8	139.5	161.1	184.5	208.4	222.9
Raw materials	6.3	107.5	157.9	141.0	179.3	183.2	219.4
Mineral Fuels	738.9	112.0	130.2	132.6	135.9	137.1	230.0
Oils and Fats	6.1	119.9	105.8	126.8	119.1	151.7	170.9
Chemicals	31.5	110.9	172.8	214.7	199.4	199.5	342.8
Manufactured Goods	83.4	125.5	147.1	146.7	162.2	293.5	276.9
Machinery and Transport	46.6	120.1	157.8	176.7	208.8	299.9	225.3
Miscellaneous Manufactures	16.9	121.4	171.7	168.2	208.2	225.3	312.6
Memo: All Sections Excluding Mineral Fuels	261.1	121.6	147.9	155.6	169.8	236.7	291.4
			<u>Exports</u>				
All Sections (S.I.T.C.)	1000.0	115.6	133.6	145.6	146.7	192.4	307.2
Food	38.9	134.1	113.1	105.8	163.1	161.1	498.0
Beverages and Tobacco	3.1	111.9	110.7	126.0	118.5	127.8	179.0
Raw materials	2.2	116.8	134.3	162.5	173.5	86.0	148.7
Mineral Fuels	905.2	114.3	134.6	147.6	144.5	195.5	307.3
Oils and Fats	-	92.1	98.0	-	-	-	-
Chemical	35.3	129.2	128.9	129.1	155.8	148.6	165.2
Manufactured Goods	6.1	119.2	139.1	176.4	234.4	244.5	362.1
Machinery and Transport	2.5	114.8	144.3	147.4	165.8	149.9	178.9
Miscellaneous Manufactures	6.7	113.6	141.9	156.6	170.1	207.7	283.6
Memo: All Sections Excluding Mineral Fuels	94.8	128.0	124.2	126.1	164.2	162.0	306.8

Source: Central Statistical Office

Table 7.5: TRINIDAD AND TOBAGO: INDEX OF MINIMUM WAGE RATES FOR MANUAL WORKERS
By Industrial Sector, 1977-1981
(November 1976=100)

	Weights	November 1977	May 1978	November 1978	May 1979	November 1979	May 1980	November 1980	May 1981
All Industry	10,000	122.3	135.8	153.4	172.4	186.2	212.2	234.9	275.5
Manufacturing									
Sugar	350	112.7	114.7	142.0	164.8	169.5	189.8	194.7	200.2
Other Food, Drink & Tobacco	415	127.4	142.9	157.2	181.5	198.8	223.0	244.5	287.7
Wearing Apparel	420	121.5	139.2	151.4	159.3	170.9	206.5	239.8	306.1
Assembly and Related Industries	557	127.8	141.7	161.2	186.2	196.7	228.2	251.6	302.9
Other Manufacturing Industries	548	120.6	135.6	151.2	166.2	188.5	206.3	232.5	263.2
Petroleum Industries	1,133	111.5	113.4	120.5	147.5	157.1	184.0	193.4	217.8
Electricity, Water and Sewerage	415	111.4	138.0	139.5	164.0	168.9	169.8	181.5	207.4
Building and Construction	496	129.2	141.7	158.9	167.8	178.7	186.0	208.9	239.5
Distribution	1,298	112.9	123.8	130.7	142.1	169.0	212.4	218.5	242.1
Transport, Communication and Storage	425	130.6	131.8	141.2	159.0	186.3	203.9	243.1	267.4
Central and Local Government	3,121	111.4	150.4	153.4	176.6	180.6	194.0	199.8	206.4
Other Services	822	121.7	130.3	137.3	145.7	179.0	225.9	254.3	275.5

Note: Refers to minimum wage rates for specified categories of manual workers on time rates only and covers large nonagricultural establishments.

Source: Central Statistical Office (semiannual survey of wages).

Table 7.6: TRINIDAD & TOBAGO: AVERAGE WEEKLY EARNINGS OF PRODUCTION WORKERS IN MANUFACTURING, 1971-81

(In TT dollars)

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
Food Processing Industries											
Grain and feed mills	59.88	70.27	70.74	87.58	106.44	107.15	127.30	187.69	215.25	261.75	301.94
Fruit and vegetable processing	51.61	59.02	76.42	82.47	68.75	120.88	99.15	133.76	159.80	246.32	277.84
Edible oils and fats	64.66	66.22	78.95	77.33	95.46	107.41	134.59	243.82	298.60	266.30	279.14
All other food processing											
(a) Bakeries	42.66	36.84	43.94	49.20	63.72	64.78	65.81	111.57	128.84	144.39	212.28
(b) Meat and poultry processing	37.64	39.06	46.66	46.12	58.18	79.12	95.05	125.50	134.64	194.54	255.09
(c) Dairy	43.86	56.37	67.00	62.46	94.48	128.04	119.91	168.59	259.90	273.74	309.92
(d) All other	40.95	41.60	45.72	53.70	57.02	75.01	86.67	118.92	132.48	157.47	186.77
Drink and Tobacco											
Tobacco	67.48	73.86	98.96	124.14	161.80	190.56	199.01	275.40	311.19	306.59	312.0
Alcoholic beverages	60.77	61.79	67.97	86.66	95.88	124.89	166.64	225.94	242.04	311.53	384.32
Non-alcoholic beverages	48.28	52.46	56.82	68.27	78.46	90.20	127.85	167.29	176.52	229.48	237.39
Textiles, Knitted Garments and Footwear											
Textiles ^{a/}	36.57	37.88	34.95	40.44	49.71	61.09	68.37	82.54	84.76	102.96	113.69
Knitted garments	36.33	39.42	36.47	50.49	67.22	72.74	73.88	103.52	-	-	-
Non-Knitted garments	30.09	28.26	34.98	35.44	41.29	44.86	53.31	67.37	-	-	-
Footwear	37.97	39.54	41.20	49.27	60.79	60.96	89.46	135.93	130.86	169.59	225.98
Printing, Publishing and Paper Converters											
Newspaper publishers	94.78	88.10	101.34	136.63	145.68	175.58	207.66	201.25	310.90	273.98	233.93
Printers	44.06	46.64	52.79	52.79	70.44	72.68	92.31	105.87	139.93	162.83	181.90
Paper converters	42.29	42.36	54.66	75.30	69.09	99.77	131.16	136.47	207.73	250.93	292.44
Wood Products											
Sawmills	27.19	29.13	33.92	36.52	38.48	54.76	61.34	72.27	91.87	117.02	129.84
Furniture & other wood products	39.53	40.89	48.28	56.27	68.96	74.40	96.21	105.90	115.80	169.51	177.37
Chemical Products											
Industrial gases and industrial chemicals ^{b/}	122.78	133.86	159.54	186.91	244.68	265.50	328.48	406.52	118.30	208.60	242.91
Paints & varnishes	66.88	67.20	70.03	75.62	74.00	104.98	132.94	180.82	-	-	-
Pharmaceuticals, cosmetics & household chemicals	35.06	36.30	38.52	49.27	63.06	72.98	89.63	104.61	135.70	176.80	198.24
Petrochemicals	-	-	-	-	-	-	-	-	424.38	515.02	711.87
Building Materials											
Clay, bricks & blocks	78.18	94.76	101.91	90.71	74.94	131.57	146.21	177.96	254.66	282.91	300.83
Cement, concrete products & other building materials (Includes plastic products for construction)	78.84	79.34	92.38	107.45	121.82	147.40	203.20	238.52	257.72	322.84	354.94
Assembly Type & Related Industries											
Motor vehicles & related industries	58.51	60.56	68.18	86.79	97.30	102.98	139.19	211.28	217.11	290.45	390.63
Household appliances	50.75	61.51	57.84	68.27	77.40	98.94	100.74	130.32	181.20	214.24	212.60
Ship and boat building and repairs	140.61	95.13	93.71	144.90	151.08	182.09	216.89	277.09	305.41	329.64	357.89
Manufacture of Metallic Products											
Metal building materials	50.75	56.52	57.66	60.88	66.58	78.56	116.85	143.21	183.20	200.06	266.74
Metal containers	60.52	58.92	62.63	73.63	84.75	122.11	183.79	173.79	242.02	283.26	319.32
Metal furniture	34.66	48.29	62.18	62.70	83.64	95.70	123.38	146.47	143.38	196.65	219.42
All others	57.93	47.87	58.71	59.98	82.50	107.67	121.00	143.21	-	-	-
Miscellaneous Manufacturing Industries (Includes jewellery, plastic and leather goods, glass, bottles, etc.)											
	55.55	56.01	68.51	70.56	84.07	109.47	139.44	181.0	139.08	167.28	188.71
Oil	-	-	-	-	174.74	237.84	275.75	290.24	414.20	475.30	562.81
Sugar	-	-	-	-	60.13	128.02	147.85	168.21	205.15	271.92	372.38

^{a/} After 1978 includes garments.

^{b/} After 1978 includes paints and varnishes.

P - Preliminary

Note: Annual data are averages of Quarterly data.

Source: Central Statistical Office (Economic Indicators).

Table 7.7: TRINIDAD & TOBAGO: AVERAGE WEEKLY EARNINGS OF ALL EMPLOYEES IN MANUFACTURING, 1971-81

(In TT dollars)

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
Food Processing Industries											
Grain and feed mills	74.70	96.50	93.26	106.50	129.69	134.98	156.80	214.85	245.93	288.54	329.70
Fruit and vegetable processing	64.14	76.87	92.90	99.68	87.41	134.91	139.38	165.18	197.22	285.16	330.22
Edible oils and fats	86.40	96.18	106.60	104.24	132.63	149.54	176.48	275.96	335.63	343.40	382.65
All other food processing											
(a) Bakeries	47.97	41.48	48.38	60.07	75.35	88.08	93.41	133.09	151.96	181.26	240.75
(b) Meat and poultry processing	57.98	49.04	58.50	49.35	57.32	90.88	108.71	139.51	173.34	242.08	304.17
(c) Dairy	91.44	114.31	98.10	117.29	138.47	148.01	199.80	224.44	318.36	370.68	414.12
(d) All other	66.44	73.01	81.37	85.97	96.25	110.25	136.81	171.83	104.42	238.77	286.91
Drink and Tobacco											
Tobacco	103.91	109.63	131.91	155.63	184.78	189.72	229.82	305.42	355.66	399.04	427.32
Alcoholic beverages	74.62	78.03	86.34	109.63	110.22	141.66	164.55	234.38	264.89	334.98	426.80
Non-alcoholic beverages	66.54	75.04	82.42	91.68	102.84	127.01	180.99	206.90	227.94	247.21	260.38
Textiles, Knitted Garments and Footwear											
Textiles ^{a/}	41.70	44.68	42.04	49.38	67.62	80.07	95.54	109.45	100.11	120.58	141.94
Knitted garments	42.38	49.36	49.97	50.75	69.81	78.08	79.87	105.97	-	-	-
Non-knitted garments	35.76	33.32	37.77	43.68	47.66	50.82	66.85	81.09	-	-	-
Footwear	41.16	49.58	53.25	58.41	72.58	73.55	94.93	138.58	146.01	180.72	251.26
Printing, Publishing and Paper Converters											
Newspaper publishers	91.88	92.85	101.45	120.68	137.96	159.34	201.50	221.86	267.93	266.01	305.14
Printers	43.35	51.32	55.09	58.14	73.28	77.91	96.75	114.86	145.63	184.36	206.24
Paper converters	54.24	53.66	69.43	93.69	89.39	120.78	152.83	166.85	226.55	272.40	321.20
Wood Products											
Sawmills	26.40	28.40	32.29	35.94	39.50	55.79	63.33	76.96	98.08	124.37	137.35
Furniture & other wood products	45.33	46.45	55.96	63.17	78.19	85.40	104.30	122.07	136.21	189.98	206.96
Chemical Products											
Industrial gases & industrial chemicals ^{b/}	110.99	125.66	139.26	166.11	225.86	251.95	322.12	380.18	278.48	343.50	369.97
Paints & varnishes	93.46	100.63	113.29	130.97	157.34	179.99	196.30	233.68	-	-	-
Pharmaceuticals, cosmetics & household chemicals	50.10	54.15	60.92	72.19	93.19	104.80	130.97	150.86	208.45	266.10	303.86
Petrochemicals	-	-	-	-	-	-	-	-	457.49	549.84	747.53
Building Materials											
Clay, bricks & blocks	101.52	100.57	109.24	99.91	100.72	136.14	160.14	195.88	266.03	303.70	336.44
Cement, concrete products & other building materials (Includes plastic products for construction)	94.77	97.54	116.09	135.06	148.86	172.99	232.68	282.97	289.06	366.29	401.97
Assembly Type & Related Industries											
Motor vehicles & related industries	74.12	76.53	88.25	108.14	126.60	130.42	164.68	239.81	252.75	323.54	420.84
Household appliances	61.78	73.10	70.08	84.12	99.25	113.10	120.38	166.74	228.74	265.01	271.10
Ship and boat building and repairs	147.53	106.47	110.44	158.45	165.38	205.53	251.00	313.44	347.33	370.71	417.54
Manufacture of Metallic Products											
Metal building materials	50.14	69.12	74.14	79.34	92.26	101.64	144.56	178.32	213.54	249.72	308.20
Metal containers	79.71	79.20	86.18	101.07	120.92	169.03	244.64	219.86	294.84	355.60	400.18
Metal furniture	42.80	58.57	74.20	76.98	104.36	124.34	139.79	175.54	163.22	221.69	262.69
All others	64.80	50.10	58.98	60.96	82.02	101.90	142.90	172.32	-	-	-
Miscellaneous Manufacturing Industries (Includes jewellery, plastic and leather goods, glass, bottles, etc.)											
	63.07	64.08	69.24	79.40	87.20	108.84	152.22	200.6	183.31	216.14	243.83
Oil	-	-	-	-	218.20	278.21	324.28	358.58	509.99	575.32	670.81
Sugar	-	-	-	-	107.91	141.16	162.56	172.46	217.45	300.01	391.65

^{a/} After 1978 includes garments.

^{b/} After 1978 includes paints and varnishes.

P = Preliminary

Note: Annual data are averages of Quarterly data.

Source: Central Statistical Office (Economic Indicators).

Table 7.8: TRINIDAD AND TOBAGO - WORK STOPPAGES, 1975-81

	<u>1975</u>	<u>1976</u>	<u>1977</u>	<u>1978</u>	<u>1979</u>	<u>1980</u>	<u>1981</u>
Number of Stoppages	88	44	16	38	42	27	14
Number of Workers Involved('000)	35.7	26.7	5.4	10.9	9.5	7.5	2.6
Total Number of Mandays Lost('000)	777.4	158.2	106.1	112.7	157.2	118.8	47.8

Source: Ministry of Labor, Social Security, and Cooperatives.

Table 7.9: TRINIDAD AND TOBAGO - LEVELS AND CHANGES IN PRODUCTIVITY OF LABOR (ALL EMPLOYEES), 1977-81
(1977 = 100)

	1979			1980				1981				1977-81	1979-81 ^{c/}
	Annual Average Index (1)	Absolute variation from all industry (excl.oil and sugar) (2)	Absolute variation from all industry (incl.oil and sugar) (3)	Annual Average Index (4)	Absolute variation from all industry (excl.oil and sugar) (5)	Absolute variation from all industry (incl.oil and sugar) (6)	Average Percentage Change 1979-80 (7)	Annual Average Index (8)	Absolute variation from all industry (excl.oil and sugar) (9)	Absolute variation from all industry (incl.oil and sugar) (10)	Average Percentage Change 1980-81 ^{b/} (11)	Average Annual Growth Rate % (12)	Annual Growth Rate % (13)
Food Processing Industries	107.4	-2.2	7.4	107.4	-8.3	2.5	0.0	115.9	6.0	18.9	11.9	3.8	3.9
Drink and Tobacco	92.4	-17.2	-7.6	112.8	-2.9	7.9	22.1	102.3	-7.6	5.3	-14.7	0.6	5.2
Textiles, Garments & Footwear	104.2	-5.4	4.2	116.9	1.2	12.0	12.2	114.5	4.6	17.5	-7.2	3.4	4.8
Printing, Publishing & Paper Converters	117.5	7.9	17.5	122.0	6.3	17.1	3.8	141.4	31.5	44.4	14.4	9.0	9.7
Wood and Related Products	120.8	11.2	20.8	136.0	20.3	31.1	12.6	103.2	-6.7	6.2	-12.5	0.8	-7.6
Chemical & Non-Metallic Products	123.8	14.2	23.8	125.6	9.9	20.7	1.5	91.9	-18.0	-5.1	-30.9	-2.1	-13.8
Assembly-type and Related Industries	107.3	-2.3	7.3	118.4	2.7	13.5	10.3	114.8	4.9	17.8	2.1	3.5	3.4
Miscellaneous Manufacturing Industries	112.6	3.0	12.6	96.0	-19.7	-8.9	-14.7	112.3	2.4	15.3	18.1	2.9	-0.1
Electricity	91.3	-18.3	-8.7	91.0	-24.7	-13.9	0.32	98.4	-15.5	0.4	6.0	-0.4	3.8
ALL INDUSTRY INDEX (excl. oil & sugar)	109.6	0.0	9.6	115.7	0.0	10.8	5.6	109.9	0.0	12.9	-4.8	2.4	0.1
Oil Refining	91.5	-18.1	-8.5	99.4	-16.3	-5.5	8.6	84.0	-25.9	-13.0	-19.8	-4.3	-4.2
Sugar	87.6	-22.0	-12.4	63.2	-52.5	-41.7	-27.9	66.0	-43.9	-31.0	-8.7	-9.9	-13.2
ALL INDUSTRY INDEX (incl. oil & sugar)	100.0	-9.6	0.0	104.9	-10.8	0.0	4.9	97.0	-12.9	0.0	-8.6	-0.8	-1.5

^{a/} 2nd Quarter, 1981.

^{b/} % Change, 2nd Quarter 1980 - 2nd Quarter 1981.

^{c/} 2nd Quarter 1979 - 2nd Quarter 1981

Source: Central Statistical Office

Table 7.10: COMPARATIVE WAGE DATA, TRINIDAD, JAMAICA AND BARBADOS, 1979-1980
(Average Weekly Earnings in Large Establishments)

(expressed in US\$).a/

Economic Sector	1979			1980		
	Trinidad	Jamaica	Barbados	Trinidad	Jamaica	Barbados
Food Processing Industries						
Bakeries	63.40	40.50	75.80	75.60	51.60	84.20
Other food processing	112.10	58.60	63.40	132.90	64.00	63.40
Sugar	90.70	44.10		125.10	45.60	
Beverages and Tobacco						
Beverages	104.0	84.50		124.30	105.20	
Tobacco	148.30	45.10		166.40	47.40	
Wearing Apparel	41.70	26.60	32.80	50.30	31.50	42.60
Footwear	60.90	38.80		75.40	40.80	
Wood and Wood Products	47.10	49.20		62.50	46.40	
Chemicals and Chemical Products	146.90	69.30		179.10	79.60	
Non-Metallic Minerals	117.10	64.50		143.30	78.50	
Base Metals and Metal Products	91.50	53.70		111.50	68.80	
Other Manufacturing	76.40	43.20		90.10	52.10	
Mining						
Oil	240.20			271.00		
Bauxite & Alumina		139.90			143.80	

a/ Wages converted to US\$ equivalent using average exchange rate for the period.

Source: Central Statistical Office (Trinidad), Statistical Abstract (Jamaica), and Barbados Economic Reports.

Table 8.1: TRINIDAD AND TOBAGO - PRINCIPAL AGRICULTURAL DOMESTIC EXPORTS BY QUANTITY AND VALUE, 1970-80

(values of '000 of TT\$; volume in '000 of kg.)

	1970		1971		1972		1973	
	<u>Value</u>	<u>Volume</u>	<u>Value</u>	<u>Volume</u>	<u>Value</u>	<u>Volume</u>	<u>Value</u>	<u>Volume</u>
Total Agricultural Exports	71,043		69,861		80,815		72,256	
Molluscs (fresh & frozen)	4,270	2,452	1,100	541	381	109	2,961	1,387
Oranges (sweet)	263	1,560	230	1,204	222	1,278	113	453
Grapefruits (fresh)	170	869	73	315	214	727	23	95
Other Fruits (fresh)	200	285	301	420	315	450	339	452
Grapefruit (canned)	700	1,155	764	1,334	389	710	285	490
Orange Juice (canned)	1,425	3,543	839	2,077	1,078	2,570	60	118
Lime Juice (filtered)	182	519	135	424	101	346	62	174
Vegetables n.e.s. (fresh)	362	472	431	546	411	475	476	500
Peas and Beans (canned)	285	298	330	321	603	510	463	372
Sugar	42,637	179,733	44,631	176,203	57,013	191,133	44,357	148,551
Coffee Beans	2,709	2,023	5,285	3,467	3,242	2,295	3,571	2,056
Raw Molasses	3,241	79,826	2,878	72,432	2,241	56,300	5,871	54,807
Cocoa Beans	9,550	6,007	4,633	3,617	6,184	4,957	5,765	3,429
Mixed Animal Feeds	1,000	4,659	1,843	7,193	1,853	7,065	1,047	3,553
Other Prepared Animal Feeds	103	1,305	192	1,755	214	1,770	174	616
Other	2,687	-	5,248	-	5,474	-	6,246	-

Table 8.1: TRINIDAD AND TOBAGO - PRINCIPAL AGRICULTURAL DOMESTIC EXPORTS BY QUANTITY AND VALUE, 1970-80 (Continued)

(value in '000 of TT\$; volume in '000 of kg.)

	1974		1975		1976	
	Value	Volume	Value	Volume	Value	Volume
Total Agricultural Exports	137,278		201,833		158,770	
Molluscs (fresh & frozen)	1,082	284	885	384	994	417
Oranges (sweet)	385	938	328	658	476	849
Grapefruits (fresh)	35	122	103	343	161	490
Other Fruits (fresh)	325	348	349	292	393	391
Grapefruit (canned)	1,390	1,755	204	235	193	210
Grapefruit Juice (canned)	597	1,179	706	1,313	1,071	1,437
Orange Juice (canned)	1,146	2,138	1,021	1,451	1,693	1,795
Lime Juice (filtered)	161	337	244	406	115	152
Vegetables (fresh)	654	643	924	908	732	614
Peas and Beans (canned)	1,126	669	1,078	644	1,019	504
Sugar	106,968	176,246	165,971	109,985	116,553	157,723
Coffee Beans	1,565	805	5,915	3,132	6,626	1,788
Raw Molasses	5,423	33,681	2,288	25,421	7,892	56,005
Cocoa Beans	9,727	3,803	13,545	4,761	10,068	2,982
Mixed Animal Feeds	2,057	5,637	1,781	4,362	2,478	4,629
Other Prepared Animal Feeds	26	87	6	37	60	159
Other	4,609		6,483		8,248	

Table 8.1: TRINIDAD AND TOBAGO - PRINCIPAL AGRICULTURAL DOMESTIC EXPORTS BY QUANTITY AND VALUE, 1970-80 (Concluded)

(value in '000 of TT\$; volume in '000 of kg.)

	1977		1978		1979		1980	
	Value	Volume	Value	Volume	Value	Volume	Value	Volume
Total Agricultural Exports	135,021		113,173		114,553		96,933	
Molluscs (fresh & frozen)	766	342	974	196	1,084	181	2,052	340
Oranges (sweet)	161	200	72	84	381	227	153	194
Grapefruit (fresh)	180	324	248	354	325	213	335	276
Other Fruits (fresh)	686	668	499	491	376	291	419	421
Grapefruit (canned)	58	37	-	-	-	-	-	-
Grapefruit Juice (canned)	283	235	852	440	317	148	653	344
Orange Juice (canned)	1,131	694	1,879	945	1,128	602	2,712	1,237
Lime Juice (filtered)	105	134	114	142	13	12	-	-
Vegetables (fresh)	1,015	808	773	539	671	467	722	413
Peas and Beans (canned)	612	318	634	287	689	265	1,416	517
Sugar	83,185	139,508	53,472	89,204	71,976	87,789	66,987	63,828
Coffee Beans	9,573	1,608	11,280	1,157	11,689	1,763	4,020	495
Raw Molasses	3,196	30,768	4,557	38,066	3,839	13,361	441	1,457
Cocoa Beans	20,817	3,167	26,701	3,228	21,772	2,658	16,983	2,060
Mixed Animal Feeds	1,314	2,177	581	983	292	323	40	61
Other Prepared Animal Feeds	92	169	35	68	1	4	-	-
Other	11,847	-	10,500	-	-	-	-	-

Source: Central Statistical Office

Table 8.2: TRINIDAD AND TOBAGO - PRODUCTION AND DISTRIBUTION OF SUGARCANE AND SUGAR, 1970-81

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
Area Cropped ('000 acres)	...	...	...	94.8	90.8	82.1	90.8	88.9	88.1	88.4	75.3	68.5
Production (000 tons)												
Cane Harvested	2,569	2,312	2,535	1,975	1,943	1,709	2,229	1,986	1,735	1,683	1,475	1,278
From Estates	(1,571)	(1,392)	(1,624)	(1,325)	(1,250)	(1,098)	(1,393)	(1,253)	(1,092)	(1,074)	(911)	(787)
From Farmers	(998)	(90)	(911)	(650)	(693)	(611)	(836)	(733)	(643)	(609)	(564)	(491)
Sugar Produced	216	213	229	184	183	160	200	173	145	140	111	91
Tons of Cane per ton of Sugar	11.89	10.85	11.07	10.75	10.60	10.68	11.12	11.47	11.99	11.98	13.30	14.03
Yield of Cane(tons per acre) ^{a/}	29.41	25.21	28.65	20.84	21.41	20.81	24.54	22.33	19.70	19.03	19.59	18.65
Distribution (Million TT\$)												
Export Sales - Molasses	3.2	2.9	2.2	5.9	5.4	2.3	7.9	3.2	4.6	3.8	.4	...
Sugar	42.6	44.6	57.0	44.4	107.0	166.0	116.6	83.2	53.5	72.0	67.0	65.0
Domestic Sales - Molasses	0.3	0.5	0.8	1.4	2.5	3.9	9.2	10.0	...	...	...	...
Sugar	10.5	10.8	12.6	12.0	20.7	21.4	19.6	20.3	...	...	...	...

^{a/} Estate only.

Source: Central Statistical Office

Table 8.3: TRINIDAD & TOBAGO - PRODUCTION AND DISPOSAL OF SUGAR, 1970-80

('000 tons)

	Raws	Washed Greys	Estate Whites	Yellows	Granulated	Total Production	Available Supply (Production and Stocks)	Domestic Exports	Local Consumption	Closing ^{a/} Stocks
1970	150.5	34.0	1.7	14.9	15.1	216.1	218.6	174.7	40.6	4.0
1971	150.6	33.9	1.1	12.8	14.8	213.2	217.2	173.8	41.3	3.0
1972	166.3	32.4	1.0	12.5	16.6	228.8	231.8	187.8	40.6	5.2
1973	129.7	30.4	0.7	10.0	12.8	183.6	188.8	146.2	39.9	0.3
1974	127.9	34.0	0.1	9.0	13.3	184.3	184.6	141.4	37.7	4.8
1975	118.6	30.0	-	3.4	10.8	162.6	167.5	110.6	40.8	16.5
1976	153.0	27.7	-	3.5	19.3	203.6	220.1	157.7	47.2	15.0
1977	128.1	26.1	-	3.8	17.9	176.0	191.1	141.7	43.7	4.5
1978	109.9	19.3	-	1.7	13.6	147.0	151.5	89.2	45.2	4.3
1979	94.4	28.6	-	2.7	17.3	143.0	151.8	87.8	44.8	8.8
1980	70.7	25.6	-	2.3	13.5	112.1	204.9	64.0	38.5	19.3

^{a/} The figures shown have been adjusted to reflect the actual physical stocks on hand at the end of this year.

Source: Central Statistical Office (Quarterly Agricultural Report).

Table 8.4: TRINIDAD & TOBAGO - DELIVERIES AND DISPOSAL OF COCOA BEANS, 1970-81

	Deliveries to Principal Exporters (000 kg)	Exports of Domestic Produce (000 kg) ('000TT\$)		Other Disposals (000 kg)	Stocks at End of Period (000 kg)	Average Exports ^a / Price (TT\$/kg)
1970	6,226	6,020	9,550	57	563	1.59
1971	3,775	3,625	4,635	41	672	1.28
1972	7,558	4,967	6,184	39	497	1.25
1973	3,169	3,436	5,765	58	172	1.68
1974	4,170	3,811	9,727	15	515	2.55
1975	5,240	4,761	13,545	114	879	2.84
1976	3,249	2,981	10,068	105	1,042	3.38
1977	3,345	3,168	20,817	146	1,073	6.57
1978	3,398	3,228	26,700	176	1,069	8.27
1979	2,628	2,658	21,771	178	861	8.19
1980	2,380	2,158	17,873	173	909	8.28
1981	5,000	2,900	17,520	-	-	6.04

^a/ These are simple averages obtained by dividing the f.o.b. values of exports by the corresponding quantities.

Source: Central Statistical Office (Quarterly Agricultural Report).

Table 8.5: TRINIDAD & TOBAGO - DELIVERIES AND DISPOSAL OF COFFEE BEANS, 1970-81

	<u>Deliveries</u> <u>to Principal</u> <u>Exporters</u>	<u>Exports of</u> <u>Domestic Produce</u>		<u>Other</u> <u>Disposals</u>	<u>Stocks at end</u> <u>of Period</u>	<u>Average</u> <u>Export a/</u> <u>Price</u>
	(000 kg)	(000 kg)	('000 TT\$)	(000 kg)	(000 kg)	(TT\$/kg)
1970	2,307	2,027	2,709	515	183	1.34
1971	3,902	3,475	5,285	547	64	1.52
1972	3,307	2,299	3,242	969	103	1.41
1973	2,722	2,060	3,571	736	29	1.73
1974	1,944	806	1,564	1,030	136	1.94
1975	4,024	3,138	5,915	770	251	1.88
1976	2,671	1,788	6,626	745	411	3.71
1977	2,918	1,608	9,573	1,401	320	5.95
1978	2,500	1,157	11,267	1,190	475	9.74
1979	2,497	1,686	11,689	911	375	6.93
1980	2,239	865	7,081	1,409	341	8.19
1981	3,300	1,500	12,720	-	-	8.48

a/ These are simple averages obtained by dividing the f.o.b. values of exports by the corresponding quantities.

Source: Central Statistical Office (Quarterly Agricultural Report).

Table 8.6: TRINIDAD & TOBAGO - DELIVERIES AND DISPOSAL OF CITRUS PRODUCTS, 1970-80

	Deliveries to Principal Packer ^{a/}				Principal Exports of Domestic Produce ^{b/}					Total value of domestic exports of citrus products ^{c/} ('000 TT\$)	
	Wholefruit		Grapefruit		Wholefruit		Juices		Grapefruit preserved		
	Oranges	Estimated weight	Crates	Estimated weight	Oranges	Grapefruit	Oranges	Grapefruit	Orange and grapefruit mixed		
	Crates (no.)	(000 kg)	(no.)	(000 kg)	.....(000 kg).....		.....(000 liters)		(000 kg)		
1970	260,616	10,661	502,087	18,258	1,564	870	2,361	2,631	23	1,160	3,834
1971	163,248	6,678	363,224	13,208	1,207	316	1,427	1,938	-	1,337	2,858
1972	239,967	9,817	513,844	18,231	1,280	729	1,761	1,865	-	711	2,787
1973	13,620	557	90,052	3,275	454	95	85	762	4	491	928
1974	247,891	10,141	467,941	17,002	940	122	1,500	858	15	1,759	3,570
1975	65,756	2,684	172,665	6,265	658	343	1,200	1,077	32	235	2,408
1976	152,759	6,236	241,957	8,780	849	490	1,632	1,214	-	210	3,641
1977	18,203	743	73,608	2,671	200	323	796	264	-	37	1,852
1978	54,203	2,213	154,368	5,602	84	355	892	377	23	-	3,124
1979	73,472	2,999	108,527	3,939	227	213	1,371	219	1	-	4,165
1980	64,067	2,616	111,583	4,049	188	276	1,628	316	6	-	4,854

a/ Amount of fruit delivered to principal packers either for local consumption, for processing or for export.

b/ Amount of fruit or juice actually exported from all local shippers including C.C.G.A. and brought to account on Customers export documents during period.

c/ Total Value of all Domestic Exports of Citrus Fruits and Products excluding limes and lime products, oranges other than sweet and tangerines and mandarin.

Source: Central Statistical Office (Quarterly Agricultural Report).

Table B.7: TRINIDAD & TOBAGO - PRODUCTION, IMPORTS AND EXPORTS OF COPRA AND COPRA PRODUCTS, 1970-80^{a/}

	Supply of Copra and Raw Oils				Manufactured (finished) Produce										
	Copra		Raw Oil		Edible (cooking) Oil				Lard compound, margarine and butter substitute		Laundry Soap			Toilet Soap	
	Estimated domestic production	Imports	Local production	Imports	Local ^{b/} production	Imports	Domestic exports	Local production	Domestic exports	Local production	Imports	Domestic exports	Local production	Imports	Domestic exports
.....(tons).....		.....(000 lit.).....		.....(000 lit.).....											
1970	11,015	2,025	7,698.7	1,528.0	8,031.8	1,419.4	1,230.5	5,036.7	1,163.2	4,205.6	28.5	905.3	1,849.9	25.5	1,129.1
1971	12,253	727	7,300.5	2,694.9	8,330.8	1,239.2	338.8	4,948.4	1,127.6	3,839.8	10.1	964.9	1,648.9	26.4	1,120.4
1972	12,346	455	7,520.4	2,154.4	7,900.8	1,678.3	64.4	5,536.5	1,014.6	3,591.5	8.7	742.8	1,834.3	28.2	1,122.1
1973	11,614	-	7,450.8	2,525.4	7,740.0	503.0	157.5	6,373.2	1,623.1	4,025.2	11.1	961.8	1,932.3	9.3	1,026.2
1974	6,574	-	3,900.8	3,982.6	5,070.8	613.9	.8	7,416.2	1,147.1	3,836.5	2.5	1,270.3	1,541.6	1.5	704.3
1975	8,907	-	6,591.2	3,814.0	8,145.0	123.6	82.7	6,921.9	1,415.1	4,291.5	-	1,445.1	2,121.9	14.2	985.5
1976	9,106	35	6,488.9	10,239.8	9,312.8	840.1	391.4	7,595.5	1,370.0	3,889.1	-	1,532.9	2,167.2	4.3	796.9
1977	9,008	-	7,117.6	5,322.0	8,652.3	1,831.6	553.7	6,790.5	951.0	2,992.4	16.8	512.3	1,490.3	209.6	694.9
1978	7,367	182	5,914.5	4,654.7	7,315.3	7,932.2	197.5	7,556.3	610.3	2,546.4	38.4	265.5	1,874.5	196.0	752.4
1979	6,838	-	6,088.0	428.8	8,103.5	5,300.6	224.6	5,711.0	515.8	1,787.0	-	301.0	1,507.0	40.9	563.2
1980	4,417	-	2,978.8	470.3	9,161.6	7,800.0	77.6	5,519.0	140.5	1,398.0	-	37.4	1,309.0	36.1	239.4

^{a/} Where either Imports or Domestic exports are not shown they are all nil or negligible for these items.

^{b/} Locally produced edible (cooking) oil consists partly of refined coconut oil in pure form or mixed with imported edible oils.

Source: Central Statistical Office (Quarterly Agricultural Report).

Table 8.8: TRINIDAD & TOBAGO - SUPPLY^{a/} OF MEAT (EXCLUDING POULTRY), 1970-81

('000 kg.)

	Total			Beef and Veal			Pork			Mutton ^{b/}		
	Total	Local ^{c/} Produc- tion	Imports	Total	Local ^{c/} Produc- tion	Imports	Total	Local ^{c/} Produc- tion	Imports	Total	Local ^{c/} Produc- tion	Imports
1970	8,241	3,646	4,594	4,706	1,516	3,190	2,771	2,093	678	764	37	727
1971	7,497	3,250	4,247	4,418	1,590	2,828	2,471	1,636	835	606	23	583
1972	8,064	3,291	4,773	4,851	1,471	3,379	2,467	1,771	696	745	48	697
1973	7,640	4,031	3,610	4,215	1,562	2,653	2,900	2,420	480	525	49	476
1974	6,813	3,500	3,313	3,713	1,468	2,245	2,382	1,979	403	719	54	665
1975	8,673	2,852	5,821	5,818	1,228	4,590	2,157	1,571	586	698	53	645
1976	10,961	3,757	7,204	7,451	1,296	6,155	2,595	2,382	212	914	78	836
1977	10,746	3,999	6,746	6,861	1,312	5,549	2,905	2,615	290	980	72	908
1978	14,514	3,673	10,841	10,213	1,436	8,777	2,915	2,157	758	1,386	80	1,306
1979	11,869	4,480	7,389	7,996	1,969	6,027	2,864	2,417	447	1,009	94	915
1980	12,117	3,880	8,237	7,684	2,013	5,671	2,970	1,791	1,179	1,467	79	1,388
1981 ^P	...	...	...	...	1,745	...	...	1,614	...	...	77	...

^{a/} Supply = Production + Imports (Exports are negligible).

^{b/} Includes Goat, Kid, Sheep and Lamb.

^{c/} Local production includes only meat passing through municipal and government-controlled abattoirs and excludes private slaughterings.

P = Preliminary

Source: Central Statistical Office (Quarterly Agricultural Report).

Table 8.9: TRINIDAD & TOBAGO - SALES OF BROILERS, VOLUME, VALUE AND UNIT PRICE, 1970-81

	Broilers Sold ^{a/}								Value of sales ex-farm ^{b/}				Price per pound of broilers sold ^{c/}		
	Birds				Live Weight				Total	Whole-sale	Retail	Slaugh-tered	Whole-sale	Retail	Slaugh-tered
	Total	Whole-sale	Retail	Slaugh-tered	Total	Whole-sale	Retail	Slaugh-tered								.....('000 TT$).....	.....(TT$/kg).....
.....(000 Birds).....	.....(000 kgs).....	.....(000 kgs).....	.....(000 kgs).....	.....(000 kgs).....	.....(000 kgs).....	.....(000 kgs).....	.....(000 kgs).....	.....(000 TT\$).....	.....(000 TT\$).....	.....(000 TT\$).....	.....(000 TT\$).....	.....(TT\$/kg).....	.....(TT\$/kg).....	.....(TT\$/kg).....	
1970	11,503	8,473	1,210	1,820	18,211	13,865	1,921	2,425	23,600	16,000	2,800	4,900	1.19	1.46	1.70
1971	11,595	8,369	958	2,268	19,311	14,072	1,663	3,576	25,603	17,791	2,352	5,460	1.26	1.41	1.52
1972	10,884	8,641	963	1,280	17,943	14,231	1,604	2,108	23,649	17,747	2,371	3,531	1.26	1.48	1.66
1973	10,532	9,520	444	565	18,175	16,411	802	962	32,317	28,847	1,528	2,142	1.76	1.85	2.23
1974	11,162	9,672	477	1,014	19,531	17,001	811	1,718	40,862	34,365	1,918	4,579	2.03	2.36	2.67
1975	15,555	12,673	512	2,370	27,039	22,303	979	3,756	60,388	47,375	2,364	10,649	2.12	2.41	2.84
1976	16,151	13,031	240	2,876	27,091	22,386	442	4,263	65,194	52,439	1,182	11,571	2.34	2.67	2.71
1977	19,888	14,445	282	5,161	33,029	25,001	504	7,525	80,542	58,656	1,364	20,522	2.35	2.71	2.73
1978	20,341	16,320	272	3,749	33,663	27,351	496	5,815	82,692	64,605	1,354	16,734	2.36	2.73	2.88
1979	16,092	13,583	397	2,111	26,745	22,640	774	3,332	50,877	39,094	2,223	9,559	2.37	2.87	2.87
1980	14,087	13,585	343	159	23,464	22,436	718	310	60,741	57,185	2,312	1,244	2.75	3.22	4.03
1981 ^P	14,535	...	...	...	...	...	...	...	...	...	...	...	...	...	...

a/ Includes sales or deliveries to the processing plants.

b/ Average price multiplied by live-weight quantity.

c/ Average of actual prices reported by farms.

P - Preliminary

Source: Central Statistical Office (Quarterly Agricultural Report).

Table 8.10: TRINIDAD & TOBAGO - SUPPLY OF TABLE EGGS, 1970-81

	Imports		Production		Exports		Available Supply ^{a/}	
	Quantity (000 Doz.)	Value (\$000)	Quantity (000 Doz.)	Estimated value of production ^{b/} (\$000)	Quantity (000 Doz.)	Value (\$000)	Quantity (000 Doz.)	Estimated Value (\$000)
1970	2	3	4,506	4,461	120	127	4,388	4,337
1971	1	4	4,903	4,658	126	117	4,778	4,545
1972	1	3	4,354	4,528	102	125	4,253	4,406
1973	60	110	3,938	5,662	82	115	3,916	5,657
1974	-	1	3,573	6,753	75	151	3,498	6,602
1975	56	110	4,068	8,598	63	152	4,061	8,556
1976	-	-	3,901	9,051	53	133	3,848	8,918
1977	15	35	4,997	11,492	52	176	4,960	11,351
1978	43	93	5,866	14,829	43	176	5,866	14,747
1979	6	15	4,751	11,560	41	136	4,716	11,440
1980	24	57	3,487	8,784	31	129	3,480	9,492
1981 ^P	...	...	...	...	...	...	3,357	...

a/ Supply = Imports + Production - Exports. Supply does not take account of "back-yard production".

b/ Production is valued at the average unit price per dozen eggs sold inclusive of wholesale and retail sales.

P = Preliminary

Source: Central Statistical Office (Quarterly Agricultural Report).

Table 8.11: TRINIDAD AND TOBAGO - PRODUCTION AND DISPOSAL OF FRESH MILK, 1970-81

(000 lit.)

	State Lands Development Project Farms	Govern- ment Farms	Large Commer- cial Farms	Small Farms ^{a/}	Total	Sold Wholesale	Sold Retail	Other Disposals
1970	3,770.2	530.7	1,542.0	199.9	6,042.8	5,139.7	296.7	606.4
1971	5,116.9	376.2	1,259.3	207.4	6,959.9	6,291.1	277.1	732.8
1972	5,927.3	240.0	2,247.2	163.1	8,578.0	7,118.1	261.5	1,198.0
1973	3,950.8	445.1	1,119.2	508.7	6,024.2	5,148.0	343.7	532.2
1974	4,054.5	190.0	995.5	821.0	6,060.9	5,356.2	191.9	512.9
1975	3,940.0	1,015.1	1,076.5	1,709.7	7,741.3	6,275.7	235.0	1,230.6
1976	3,283.5	530.0	931.9	1,573.4	6,319.3	5,456.1	221.8	641.4
1977	2,666.4	666.7	845.3	1,690.0	5,868.3	4,896.7	235.6	736.2
1978	3,202.7	536.0	778.8	1,409.3	5,926.7	5,012.7	240.0	674.2
1979	3,838.4	459.9	668.6	1,285.8	6,252.6	5,268.9	185.5	808.1
1980	3,339.2	484.9	643.8	1,023.7	5,491.6	4,761.7	159.9	570.0
1981	3,471.7	1,616.5	1,095.7	898.1	7,082.0	6,189.5	169.9	722.6

^{a/} Data relate to sales of small farms selling to principal processors.

Source: Central Statistical Office (Quarterly Agricultural Report).

Table 8.12: TRINIDAD & TOBAGO - PRODUCTION, IMPORTS AND DISPOSAL OF ANHYDROUS AMMONIA, 1970-81
(metric tons)

	Opening Stock	Production	Imports ^{a/}	Exports ^{b/}	Processing ^{c/}	Direct Sales	Closing Stock
1970	28,522	424,461	19,012	404,857	49,672	356	17,128
1971	17,128	408,385	16,829	371,548	47,574	193	23,027
1972	23,027	428,402	47,776	419,080	59,768	249	20,109
1973	20,109	259,367	27,037	219,903	66,486	118	20,006
1974	20,006	221,398	25,084	193,094	63,216	155	10,021
1975	10,023	211,724	7,711	149,278	59,458	92	20,630
1976	20,630	197,698	45,811	185,311	60,856	90	17,881
1977	17,881	199,363	46,299	194,588	57,385	150	11,420
1978 ^{e/}	15,676	484,839	60,990	463,419	64,931	98	33,059
1979	33,059	471,051	95,641	523,664	60,612	120	15,353
1980	15,353	559,093	81,703	579,240	58,623	93	14,134
1981	14,134	438,081	85,984	486,878	30,294	1,270	19,757

^{a/} Imports represent "borrowings" from parent company.

^{b/} Exports include "repayments" to parent company.

^{c/} Processed into sulphate of ammonia and urea.

^{d/} Direct sales are ex-factory sales on the local market.

^{e/} Effective from 1st quarter 1978 the data has been revised to include an additional firm involved in Anhydrous Ammonia operations.

Source: Central Statistical Office (Survey of Agro-Chemicals).

Table 8.13: TRINIDAD & TOBAGO - PRODUCTION AND DISPOSAL OF UREA, 1970- 81
(metric tons)

	Opening Stock	Production	Exports	Direct ^{a/} Sales	Closing Stock
1970	3,017	57,991	58,707	136	2,164
1971	2,164	56,387	55,985	93	2,472
1972	2,472	66,157	66,688	239	1,702
1973	1,702	75,011	71,084	217	5,411
1974	5,411	71,633	74,310	356	2,378
1975	2,379	64,500	61,844	147	4,888
1976	4,888	67,362	67,803	330	4,117
1977	4,117	66,570	67,629	544	2,513
1978	2,513	71,735	70,275	603	3,307
1979	3,370	63,429	63,300	902	2,599
1980	2,599	56,691	53,950	688	4,641
1981	4,641	29,750	27,845	726	5,820

^{a/} Direct sales are ex-factory sales on the local market.

Source: Central Statistical Office (Survey of Agro-Chemicals).

Table 8.14: TRINIDAD & TOBAGO - AGRICULTURAL DEVELOPMENT BANK - NUMBER AND AMOUNT OF LOANS APPROVED TO INDIVIDUALS BY COUNTY, 1971-80

	Trinidad & Tobago		St. George		Caroni		Nariva/Mayaro		St. Andrew/ St. David		Victoria		St. Patrick		Tobago	
	(No.)	(\$000)	(No.)	(\$000)	(No.)	(\$000)	(No.)	(\$000)	(No.)	(\$000)	(No.)	(\$000)	(No.)	(\$000)	(No.)	(\$000)
1971	194	2,376.2	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1972	652	8,161.5	143	3,778.6	60	1,929.9	30	172.4	95	598.2	133	634.6	87	582.4	104	465.3
1973	960	3,806.3	154	1,130.3	64	491.1	47	115.8	136	816.7	312	621.9	116	401.6	131	229.0
1974	709	6,424.8	147	2,388.2	54	1,043.8	26	255.0	87	978.0	191	733.1	118	754.3	86	272.3
1975	564	8,085.6	127	4,284.7	36	471.4	26	236.6	98	1,466.7	108	820.7	58	451.9	111	353.6
1976	700	19,164.9	165	9,120.7	46	1,707.7	38	510.6	163	2,790.5	113	2,513.9	69	1,245.9	106	1,275.5
1977	979	37,704.4	297	21,549.9	79	3,090.2	43	608.5	198	6,986.0	145	1,703.1	98	2,431.4	119	1,335.0
1978	1,277	57,300.1	276	26,145.7	150	7,837.6	70	1,184.2	226	9,334.2	255	7,089.6	172	3,836.0	128	1,872.7
1979	1,254	79,083.9	239	31,156.7	128	9,233.2	63	3,127.9	251	16,017.7	270	7,808.3	205	6,761.2	98	4,979.0
1980	1,186	85,157.3	277	29,274.0	174	12,779.4	81	4,280.1	277	20,694.7	170	7,761.0	115	8,014.2	92	2,353.9

Source: Central Statistical Office (Quarterly Agricultural Report).

Table 8.15: TRINIDAD & TOBAGO - AGRICULTURAL DEVELOPMENT BANK--VALUE AND PERCENTAGE OF LOANS APPROVED TO INDIVIDUALS BY TERM TYPE^{a/}, 1971-80

	Total		Short Term		Medium Term		Long Term	
	(\$000)	(%)	(\$000)	(%)	(\$000)	(%)	(\$000)	(%)
1971	2,376.2	100.0	283.8	11.9	1,287.2	54.2	805.3	33.9
1972	8,161.5	100.0	333.4	4.1	6,983.3	85.5	844.9	10.4
1973	3,806.3	100.0	979.1	25.7	2,775.8	72.9	51.5	1.4
1974	6,424.8	100.0	1,181.0	18.4	4,498.9	70.0	744.9	11.6
1975	8,085.6	100.0	1,144.4	14.2	6,825.3	84.4	115.9	1.4
1976	19,164.9	100.0	1,408.8	7.4	14,123.9	73.7	3,632.2	18.9
1977	37,704.4	100.0	869.9	2.3	17,056.3	45.2	19,777.9	52.4
1978	57,300.1	100.0	2,168.3	3.8	21,767.8	38.0	33,364.0	58.2
1979	79,083.9	100.0	426.4	0.5	29,843.5	37.7	48,814.0	61.7
1980	85,157.3	100.0	411.4	0.5	21,985.2	25.8	62,760.5	73.7

^{a/} Short term - up to 18 months.
 Medium term - 19 months to 10 years.
 Long term - more than 10 years.

Source: Central Statistical Office (Quarterly Agricultural Report).

Table 9.1: TRINIDAD & TOBAGO - PRODUCTION OF SELECTED COMMODITIES 1970-81

Commodity/Unit	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981 ^P
Sugar (000 tons)	216	213	229	184	184	160	200	173	145	140	111	91
Rum (000 proof gals.)	1,726	1,887	2,474	2,444	4,341	3,837	4,099	4,226	4,665	3,212	4,927	...
Beer and Stout (000 litres)	3,877	4,296	4,596	5,230	4,546	24,739	30,172	30,445	24,717	30,007	34,679	...
Edible Oil (000 litres)	2,122	2,201	2,087	2,045	1,340	8,145	9,313	8,652	7,315	8,104	...	...
Lard Substitute (000 kgs)	3,333	3,494	3,685	3,774	4,799	1,955	2,477	2,195	2,739	2,607	...	...
Cigarettes (000 kgs.)	1,835	1,786	1,791	2,010	1,775	952	1,031	1,003	1,017	889	...	...
Margarine & Butter Substitute (000 kgs)	7,617	7,674	8,621	10,236	11,550	4,968	5,119	4,604	4,821	4,822	...	...
Fertilizers (000 tons)	611	569	629	459	411	381	373	374	696	666	758	592
Limestone (000 cu. yd.)	260	170	656	624	632	608	700 ^P	750	...	...	...	...
Gravel & Sand (000 cu. yds.)	358	226	804	357	368	408	609	650	...	...	...	...
Cement (000 tons)	266	252	282	249	238	255	238	213	220	214	183	139
Bricks & Blocks (million)	20.6	22.8	27.5	25.8	25.0	20.1	20.9	25.6	25.4	27.4	29.3	27.3
Motor Vehicles (000)	6.3	7.0	11.0	9.0	6.0	8.0	11.6	14.3	16.2	15.2	11.9	13.4
Radio & Television Sets (000)	19.5	17.5	29.7	33.5	25.1	27.2	30.4	28.5	22.1	18.5	21.1	21.2
Gas Cookers (000)	11.6	21.9	24.0	15.4	11.1	15.0	18.6	27.0	22.3	15.3	23.4	15.3
Refrigerators (000)	9.0	15.6	20.4	20.7	23.6	24.1	27.8	23.0	25.0	21.1	27.6	14.9

P = Preliminary

Source: Central Statistical Office

Table 9.2: TRINIDAD AND TOBAGO: VALUE ADDED IN MANUFACTURING (1970-1981)
(Million Current TT\$)

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
All Manufacturing	359.8	360.3	415.6	434.3	607.7	724.8	814.5	955.9	1053.2	1535.3	2002.0	2059.4
Petroleum Refining	163.8	160.4	182.6	195.3	290.2	305.7	339.3	383.6	380.5	714.2	981.2	992.3
Petrochemicals	31.9	27.9	30.5	25.1	47.6	44.5	34.4	38.6	49.9	40.6	80.2	43.8
Sugar Refining	12.1	12.5	19.6	11.7	24.6	66.3	45.0	23.7	10.1	20.0	28.7	26.6
Food, Beverages and Tobacco (excluding sugar)	48.9	43.2	42.6	49.1	74.7	84.1	101.0	161.1	181.5	219.0	257.8	284.2
Textiles, Garments and Footwear	14.3	14.3	16.2	17.6	23.7	25.3	37.4	48.7	67.5	70.8	90.9	97.1
Printing, Publishing and Paper Converters	11.0	13.7	15.6	18.5	20.6	26.3	29.3	47.6	55.3	60.8	76.6	80.6
Wood and Related Products	7.7	8.0	8.7	13.5	16.8	22.6	28.1	38.0	46.8	59.9	72.2	63.5
Chemicals and Nonmetallic Products	22.9	24.8	32.5	31.2	33.5	38.4	54.2	75.8	83.3	96.5	132.9	138.5
Assembly Type and Related Industries	39.6	46.1	56.0	59.6	61.5	89.8	114.0	119.0	149.7	216.8	243.5	283.2
Other	7.6	9.4	11.3	12.7	14.5	21.8	31.8	19.8	28.6	36.7	38.0	49.6

Source: Central Statistics Office

Table 9.3: TRINIDAD & TOBAGO - ELECTRICITY GENERATION AND DISTRIBUTION BY PUBLIC UTILITIES AND PRIVATE GENERATING PLANTS, 1970-80 ^{a/}

	Installed Capacity of Generating Plant		Total Generated		Distribution of Electricity generated by Public Utilities ^{c/}							
	Public Utilities	Private Plants	Public Utilities	Private Plants ^{b/}	Domestic Use		Commercial Use		Industrial Use		Street Lighting	Total Loss In Transmission
	MW		kw/h 000		Consumers No.	kw/h 000	Consumers No.	kw/h 000	Consumers No.	kw/h 000	kw/h 000	kw/h 000
1970	284.3	50	907,575	294,805	138,957	137,255	16,704	71,274	751	543,690	7,756	147,600
1971	284.3	50	955,778	270,295	142,774	159,553	17,119	83,608	888	568,677	8,144	135,796
1972	274.3	50	1,074,716	232,711	147,891	178,953	17,531	90,129	956	646,552	8,439	150,642
1973	269.3	n.a.	1,017,281	192,661	151,808	199,195	17,861	96,722	993	627,613	9,231	143,591
1974	349.3	n.a.	1,120,989	n.a.	156,622	213,150	17,958	99,609	1,051	658,494	9,641	146,321
1975	349.3	n.a.	1,124,236	83,059	162,752	234,510	18,305	104,152	1,103	599,786	10,088	175,765
1976	389.8	n.a.	1,286,567	124,707	169,155	267,115	17,764	115,974	1,202	650,694	11,220	231,500
1977	475.8	n.a.	1,430,715	145,295	174,705	310,934	18,936	129,226	1,275	766,196	11,119	213,238
1978	512.4	...	1,527,644	147,043	181,915	374,830	19,718	150,716	1,381	791,333	11,531	201,287
1979	496.7	...	1,679,863	137,894	187,592	416,471	20,350	161,301	1,465	835,207	11,569	291,240
1980	625.5	...	1,892,923	...	195,811	477,237	20,934	182,101	1,525	933,462	11,784	288,337

^{a/} Figures relate to three public utilities

^{b/} The total generated by private plants is utilized for industrial purposes

^{c/} Includes current purchased from private enterprise. Total distribution therefore exceeds total generation by the amount purchased

Source: Central Statistical Office, T & Tec.

Table 10.1: TRINIDAD & TOBAGO - PRODUCTION, REFINING AND DISTRIBUTION OF PETROLEUM, 1970-81

	Unit	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
Production													
Total Footage Drilled	'000 ft.	663	939	842	955	910	840	920	925	895	797	671	786
Number of Completed Wells		135	220	195	209	198	187	225	239	215	184	185	206
Average Depth of Completed Wells		4,911	4,269	4,317	4,567	4,596	4,490	4,088	3,872	3,868	4,252	3,557	3,740
Total No. of Producing Wells (Annual Average)		4,748	3,029	928	2,894	2,978	2,767	2,996	3,149	3,275	3,398	3,351	3,407
Total No. of Idle Wells (End of Period)		4,098	4,375	4,459	4,734	4,845	5,050	5,086	5,150	5,291	5,180	5,172	5,173
Total Crude Oil Production	mil bbl.	51.0	47.1	51.2	60.7	68.1	78.8	77.7	83.6	83.8	78.2	77.6	69.1
Daily Average per Well	bbl.	37.3	35.2	47.1	57.2	62.5	78.1	70.8	73.0	70.1	63.1	63.3	55.6
Refining and Distribution													
Input into Refineries	mil bbl.	154.9	145.5	144.3	141.7	130.8	73.9	117.6	99.7	85.9	82.9	78.3	63.3
Domestic Crude	"	(41.6)	(38.7)	(37.1)	(38.1)	(35.3)	(15.3)	(32.9)	(30.8)	(29.1)	(31.3)	(23.0)	(24.7)
Imported Crude	"	(113.3)	(106.9)	(107.1)	(103.6)	(95.5)	(58.1)	(84.8)	(68.9)	(56.8)	(51.6)	(55.3)	(38.6)
Output of Refineries	mil bbl.	150.1	141.4	138.7	135.4	127.1	84.5	113.3	99.5	83.6	78.5	82.6	60.7
Exports of Main Products	"	(146.2)	(137.0)	(135.7)	(132.4)	(121.4)	(91.4)	(103.5)	(82.2)	(72.6)	(66.8)	(67.4)	(53.0)
Domestic Consumption	"	(3.6)	(3.5)	(3.7)	(5.3)	(4.8)	(4.9)	(4.5)	(2.3)	(...)	(5.6)	(5.9)	(...)
Changes in Stocks	"	(0.3)	(0.9)	(-0.7)	(-2.3)	(0.9)	(-11.8)	(5.3)	(15.0)	(...)	(6.1)	(9.3)	(...)

Source: Ministry of Petroleum and Mines and Central Statistical Office.

Table 10.2: TRINIDAD & TOBAGO - SOURCE AND METHOD OF OIL PRODUCTION, 1970-81

	Source of Production						Method of Production											
	Total production 000 bbls.	Marine production 000 bbls.	Marine as % of total	Land production 000 bbls.			Flowing			Plunger			Pumping			Gas/Lift		
				Total	Crown	Private	Average No. of wells	Production 000 bbls. %		Average No. of wells	Production 000 bbls. %		Average No. of wells	Production 000 bbls. %		Average No. of wells	Production 000 bbls. %	
1970	51,046	25,692	50.3	25,354	21,903	3,451	929	27,388	53.6	248	594	1.2	2,008	7,180	14.1	1,563	15,884	31.1
1971	47,149	22,933	48.6	24,216	20,995	3,221	559	23,334	49.4	109	505	1.1	1,373	9,467	20.1	988	13,843	29.3
1972	51,212	29,280	57.0	21,930	18,937	2,994	525	28,212	54.9	80	459	1.0	1,440	10,782	21.1	883	11,758	23.1
1973	60,670	40,504	66.6	20,166	17,251	2,916	506	37,753	62.2	53	301	0.6	1,551	12,070	20.0	784	10,545	17.2
1974	68,136	49,346	72.4	18,790	15,731	3,059	500	45,084	66.1	36	160	0.2	1,699	12,588	18.5	743	10,313	15.1
1975	78,830	63,525	80.6	15,305	12,701	2,604	430	57,563	73.0	24	83	0.1	1,646	11,372	14.4	667	9,812	12.5
1976	77,672	61,320	78.9	16,352	13,384	2,968	438	52,668	67.8	4	2	-	1,852	13,475	17.4	702	11,527	14.8
1977	83,618	67,135	80.3	16,483	13,475	3,008	430	52,450	62.7	4	1	-	2,021	13,642	16.3	697	17,526	21.0
1978	83,777	67,188	80.2	16,586	13,508	3,078	506	50,221	59.9	-	-	-	2,149	14,036	16.8	620	19,520	23.3
1979	78,249	61,115	78.1	17,134	14,284	2,850	516	40,576	51.9	-	-	-	2,284	14,442	18.4	599	23,231	29.7
1980	77,612	60,510	78.0	17,102	14,367	2,735	396	36,165	46.6	-	-	-	2,321	14,883	19.2	633	26,564	34.2
1981	69,114	53,317	77.1	15,797	13,292	2,505	392	26,013	37.6	-	-	-	2,386	14,009	20.3	630	29,092	42.1

Source: Central Statistical Office.

Table 10.3: TRINIDAD & TOBAGO - PRODUCTION, DISPOSAL AND IMPORTS OF CRUDE OIL, 1970 - 81
('000 bbls.)

	Production	Exports	Imports ^{a/}	Total ^{b/} Available for Refining	Refinery Throughput	Changes in Stocks
1970	51,043	8,669	113,265	155,639	154,860	779
1971	47,144	6,998	106,869	147,015	145,548	1,467
1972	51,201	14,091	107,150	144,259	144,274	-15
1973	60,665	23,615	103,624	140,674	141,687	-1,013
1974	68,131	31,870	95,472	131,733	130,820	913
1975	78,830	48,307	58,144	88,458	73,917	14,541
1976	77,672	44,408	84,684	117,948	117,595	353
1977	83,618	49,422	68,911	103,109	98,817	4,292
1978	83,777	54,008	56,817	86,587	85,882	705
1979	78,249	46,282	51,631	83,598	82,864	734
1980	77,612	46,075	55,310	86,848	84,624	2,224
1981	69,114	43,908	38,609	63,815	63,344	471

^{a/} Consists of Under Processing Agreement (U.P.A.) and non-U.P.A. crude oil imports.

^{b/} Production - Exports + Imports.

Note: Total Production is slightly different than the figures in table 10.4 due to rounding.

Source: Ministry of Petroleum and Mines.

Table 10.4: TRINIDAD & TOBAGO - PRODUCTION OF CRUDE OIL BY COMPANY, 1971-81

('000 bbls.)

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
<u>Crude Oil Production</u>											
Amoco Trinidad Oil Co. Ltd.	-	9,280.1	20,583.8	29,508.9	45,506.3	42,997.1	49,451.2	50,277.1	44,041.9	43,917.7	37,763.8
Trinidad Northern Areas Ltd. ^{a/}	21,999.9	18,823.6	18,893.6	19,003.4	17,494.8	17,491.9	16,888.5	16,198.9	16,144.9	14,516.1	13,646.3
Texaco Trinidad Inc.	13,763.2	11,295.3	9,984.9	8,899.6	6,763.4	7,706.5	7,195.5	6,552.4	6,801.7	6,837.2	5,978.8
Trinidad-Tesoro Petroleum Co. Ltd.	7,517.7	8,099.7	8,168.3	7,881.2	6,493.6	6,785.3	6,939.0	7,448.1	7,837.0	9,100.8	8,869.1
Shell Trinidad, Ltd.	3,288.4	3,180.6	2,581.2	1,654.1 ^{b/}	-	-	-	-	-	-	-
TRINTOC	-	-	-	786.7 ^{b/}	2,436.6	2,565.9	3,019.9	3,181.3	3,309.3	3,132.0	2,761.0
Premier Consolidated Oilfields, Ltd.	189.7	174.3	151.5	137.4	135.3	125.0	123.9	119.7	114.7	109.1	95.2
Tricentrol, Ltd. ^{c/}	388.8	357.2	302.0	259.7	-	-	-	-	-	-	-
Total Production	47,147.7	51,210.8	60,665.3	68,131.0	78,830.0	77,671.7	83,618.0	83,777.5	78,249.5	77,612.9	69,114.2
growth rate of production (%)	-7.6	8.6	18.5	12.3	15.7	-1.5	7.7	0.2	-6.6	-0.8	-11.0
<u>Casting Head Petroleum Spirits (C.H.F.S.) Production</u>											
Trinidad-Tesoro Petroleum Co. Ltd.	141.3	137.2	59.8	50.3	62.4	50.4	61.1	60.2	47.9	37.1	38.7

^{a/} Trinidad Northern Areas, Ltd. (T.N.A.) is owned by Trinidad-Tesoro, TRINTOC & Texaco with equal shares.

^{b/} Shell's Production up to August 30. After that date the company was taken over by the government and became TRINTOC.

^{c/} After 1974, production is included under Texaco.

Source: Ministry of Petroleum and Mines.

Table 10.5: TRINIDAD & TOBAGO - IMPORTS OF CRUDE OIL BY COUNTRY OF ORIGIN, 1971-81
('000 bbls.)

	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
Saudi Arabia	31,380.4	27,368.4	48,178.6	41,935.2	31,822.6	40,171.0	35,509.9	31,951.6	37,536.9	40,283.1	27,914.8
Indonesia	4,414.9	25,321.4	15,876.7	25,698.9	19,008.1	21,262.8	13,586.6	17,321.6	7,463.7	11,405.8	10,383.3
Iran	7,350.8	580.1	3,587.3	13,467.2	5,896.2	17,661.5	12,135.3	1,242.9	-	-	-
Venezuela	24,431.1	14,157.4	11,477.8	3,852.5	366.4	667.3	506.6	951.2	-	-	-
Ecuador	-	607.2	15,673.6	9,817.8	-	1,902.7	-	-	-	-	-
Nigeria	8,222.8	13,125.9	4,706.3	366.9	613.3	-	-	-	43.8	-	40.0
Other	31,068.6	25,979.4	4,123.5	333.4	437.5	3,018.9	7,172.8	5,449.9	7,166.5	795.6	271.5
Total Imports	106,368.6	107,149.8	103,623.8	95,471.9	58,144.1	84,684.2	68,911.2	56,917.2	52,210.9	52,484.5	38,609.6
Growth Rate of Imports (%)	-5.6	0.3	-3.3	-7.9	-39.1	45.7	-18.6	-17.4	-8.3	0.5	-26.4

Source: Ministry of Petroleum and Mines.

Table 10.6: TRINIDAD & TOBAGO - REFINING THROUGHPUT, REFINERY OUTPUT AND EXPORTS OF REFINED PRODUCTS, 1970-81
(¹000 bbls.)

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
<u>Refinery Throughput</u>												
Texaco Trinidad Inc.	129,344.6	120,923.3	119,600.5	117,401.4	110,142.1	56,827.5	97,456.2	79,607.5	67,111.2	64,008.8	59,915.0	48,879.5
TRINTOC	25,502.6	24,611.0	24,658.5	24,269.5	20,663.7	17,075.3	20,127.6	20,120.1	18,760.2	18,847.9	18,419.0	14,456.6
Trinidad-Tesoro Petrol. Co. Ltd.	13.1	13.6	14.5	15.9	13.8	13.9	11.1	8.9	10.3	7.8	8.9	7.5
<u>Total Refinery Throughput</u>	<u>154,860.3</u>	<u>145,548.0</u>	<u>144,273.5</u>	<u>141,686.8</u>	<u>130,819.6</u>	<u>73,916.7</u>	<u>117,595.0</u>	<u>99,736.5</u>	<u>85,881.8</u>	<u>82,864.5</u>	<u>78,343.0</u>	<u>63,343.7</u>
Growth Rate (%)	0.5	-6.0	-0.9	-1.8	-7.7	-43.5	59.1	-15.2	-13.9	-3.5	-5.5	-19.2
<u>Refinery Output</u>												
	<u>150,114.3</u>	<u>141,370.2</u>	<u>138,738.8</u>	<u>135,404.4</u>	<u>127,107.9</u>	<u>84,516.7</u>	<u>113,304.5</u>	<u>99,472.2</u>	<u>83,034.1</u>	<u>79,580.2</u>	<u>82,520.9</u>	<u>60,663.3</u>
<u>Exports of Refined Products</u>												
	146,193.5	136,995.2	135,651.4	132,384.4	121,426.9	91,406.8	103,488.5	82,248.6	72,596.1	66,822.7	67,418.5	52,991.9
Growth Rate (%)	3.6	-6.3	-1.0	-2.4	-8.3	-24.7	13.2	-20.5	-11.7	-7.9	1.0	-21.4

Source: Ministry of Petroleum and Mines.

Table 10.7: TRINIDAD & TOBAGO - PRODUCTION AND DISPOSAL OF NATURAL GAS, 1970-81

(mill. cu. ft.)

	Total production	Gas used ^{a/} as fuel	Gas replaced in formation	Gas not ^{b/} collected and losses	Gas vented ^{c/} as surplus with and without use	Converted to petrochemical and C.H.P.S.	Gas treated for liquid recovery
1970	121,059	56,490	19,017	10,442	24,913	10,197	17,235
1971	109,813	55,865	12,112	10,663	22,130	9,043	18,260
1972	104,338	57,131	9,231	7,973	20,050	9,953	19,406
1973	113,500	54,699	6,382	8,893	33,572	9,685	11,422
1974	128,294	50,706	5,706	9,630	54,131	8,121	8,133
1975	126,490	46,644	2,029	9,437	61,471	7,100	4,397
1976	137,958	52,931	1,698	11,195	64,902	7,232	4,389
1977	149,589	62,975	333	10,133	68,378	7,770	4,875
1978	157,920	69,210	114	11,426	61,954	15,216	4,303
1979	169,740	71,991	17	13,948	68,289	15,495	3,534
1980	197,811	80,623	4	14,604	86,671	15,909	3,135
1981	195,701	87,979	-	15,688	79,925	12,109	2,768

^{a/} Includes gas consumed by Oil Companies as fuel as well as gas sold to non-oil companies.

^{b/} Includes gas produced at atmospheric pressure at well heads which would be uneconomic to collect.

^{c/} This represents the difference between average and peak demand for fuels on the oilfields and occurs at widely scattered and varying points. It is generally not possible to utilize.

C.H.P.S. = Casting Head Petroleum Spirits - a fuel used for blending.

Source: Central Statistical Office

Table 16.8: TRINIDAD & TOBAGO - SALES OF NATURAL GAS, 1972-81

(mill. cu.ft.)

Purchaser	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981
Gas Marketed to Non-Oil Companies										
Trinidad and Tobago Electricity Commission (Port of Spain)	8,622.5	8,960.1	8,783.0	14,359.1	14,319.7	18,862.5	18,333.2	20,890.3	23,794.2	30,712.0
Trinidad Nitrogen Ltd. (Tringen)	-	-	-	-	-	4,241.4	15,449.4	16,077.4	15,959.1	15,298.0
Federation Chemicals Ltd.	17,624.4	18,022.2	16,182.5	14,409.7	14,680.4	16,806.3	16,167.6	15,263.8	15,714.7	9,416.0
Fertilisers of Trinidad & Tobago Ltd. (Fertrin)	-	-	-	-	-	-	-	-	-	6,313.0
Trinidad Cement Ltd.	1,988.9	1,970.7	1,733.3	1,853.7	1,551.1	1,494.0	1,559.0	1,749.3	1,348.5	1,086.3
Iron & Steel Corp. of Trinidad & Tobago (ISCOTT)	-	-	-	-	-	-	-	-	469.0	2,888.1
*Trinidad & Tobago Electricity Commission (Penal)	3,725.9	3,513.2	3,867.5	1,636.9	1,104.5	23.7	1,998.8	818.0	572.1	322.3
Other	878.4	1,032.8	1,165.9	1,153.9	1,930.7	1,249.7	1,570.0	1,715.3	2,050.1	2,081.9
Total	32,840.2	33,499.0	31,732.1	33,413.3	33,586.4	42,677.6	55,078.0	56,516.1	59,907.7	68,117.6
Inter-Oil-Company Sales										
Texaco Trinidad Inc.	17,597.8	15,307.9	14,700.6	11,806.4	14,901.1	16,362.1	17,437.4	19,935.9	26,551.5	16,646.8
Trinidad-Tesoro Petroleum Co.	5,737.1	6,630.7	5,705.0	4,899.1	4,848.6	4,425.1	3,889.0	4,297.8	3,827.1	3,207.5
TRINTOC	3,363.7	3,244.5	3,829.1	3,868.3	4,006.1	3,589.6	3,768.1	4,288.2	3,925.7	3,248.8
Premier Consolidated Oilfields Ltd.	43.9	30.6	24.8	30.4	6.7	-	-	-	-	-
Total	26,742.5	25,213.6	24,259.5	20,604.2	23,762.5	24,376.8	25,094.5	28,521.9	34,304.3	23,103.1
Total Sales	59,582.7	58,712.7	55,991.7	54,017.5	57,348.9	67,054.4	80,172.5	85,038.0	94,212.0	91,220.7

* This represents natural gas sold by TRINTOC to T & TEC at Penal.

Source: Ministry of Petroleum and Mines.

Table 10.9. TRINIDAD & TOBAGO - PRODUCTION AND DISPOSAL OF ASPHALT,
1970 - 80

(tons)

	Total production	Removed and used locally	Removed for export	Exports ^{a/}
1970	128,319	47,596	80,723	55,194
1971	121,903	36,160	85,743	45,861
1972	113,627	42,359	71,427	44,778
1973	107,800	37,980	69,820	47,029
1974	81,574	23,723	57,851	43,982
1975	79,443	31,631	47,812	30,447
1976	64,596	25,450	39,146	27,691
1977	43,596	21,429	22,167	15,139
1978	58,228	23,529	34,699	1,589
1979	59,720	16,209	43,511	8,923
1980	46,311	14,222	32,089	6,167

a/ Exports represent mainly dried asphalt; this accounts for the discrepancy between the asphalt for exports and the exports.

Source: Central Statistical Office.

**Table 10.10: TRINIDAD & TOBAGO - ROYALTY
ASSESSMENT PRICE, 1970-80**

	TT\$bb1.
1970	5.50
1971	5.76
1972	5.57
1973	6.00
1974	22.18
1975	20.89
1976	25.91
1977	26.10
1978	29.40
1979	56.00
1980	63.10

Source: Ministry of Petroleum & Mines.

Table 11.1: TRINIDAD & TOBAGO - ARRIVALS AND DEPARTURES BY AIR AND SEA, 1970-80

('000)

	Arrivals a/				Departures b/		
	Air	Sea	Total	Of which temporary halt passengers	Air	Sea	Total
1970	283.6	95.7	379.2	179.2	211.9	5.5	217.4
1971	305.9	87.7	393.6	168.3	227.8	5.0	232.8
1972	330.3	71.3	401.5	164.0	239.7	4.9	244.6
1973	366.6	96.7	463.3	207.8	262.0	3.1	265.1
1974	368.2	49.9	418.1	155.9	266.3	2.5	268.8
1975	394.0	49.1	443.2	171.1	277.3	.7	278.0
1976	421.5	51.8	473.4	167.7	304.3	.3	304.6
1977	462.8	68.2	531.0	198.7	332.1	.3	332.4
1978	486.1	53.7	539.8	186.3	358.0	.1	358.1
1979	550.3	20.5	570.9	165.2	411.7	.05	411.7
1980	554.3	21.9	576.1	169.3	416.0	.06	416.1

a/ Figures include "Refused leave to land".

b/ Figures include "Refused leave to land", but exclude "Temporary halt passengers".

Source: Central Statistical Office

Table 11.2: TRINIDAD & TOBAGO - TOTAL ARRIVALS BY CATEGORY, 1970-80
('000)

	Visitors <u>a/</u>	Business Visitors <u>b/</u>	Immigrants	Students <u>c/</u>	Returning Residents <u>c/</u>	Intransit passengers	Temporary halt passengers	Refused leave to land	Total
1970	76.0	15.0	.3	-	78.4	30.1	179.2	.2	379.2
1971	94.6	20.5	.3	-	81.3	28.3	168.3	.4	393.6
1972	97.6	20.1	.3	-	83.7	35.5	164.0	.4	401.5
1973	110.2	19.1	.2	-	88.1	37.5	207.8	.4	463.3
1974	106.2	23.0	.1	2.5	89.6	39.8	155.9	1.0	418.1
1975	111.1	22.2	.2	2.3	101.5	33.8	171.1	1.0	443.2
1976	130.0	26.2	.5	2.0	102.5	43.6	173.9	1.5	479.6
1977	139.0	28.3	.6	2.2	113.7	47.3	198.7	1.3	531.0
1978	147.7	28.4	1.0	1.8	122.9	49.6	186.3	2.3	539.8
1979	155.2	34.9	1.3	2.3	160.8	49.6	169.3	2.8	576.1
1980	154.7	42.2	1.7	1.9	191.5	41.2	125.1	2.9	561.2

a/ Figures include non-resident students.

b/ This category is different than the category "visitors".

c/ Figures include resident students, up to 1973; from 1974 they are published separately.

Source: Central Statistical Office

Table 11.3: TRINIDAD & TOBAGO - TOTAL DEPARTURES BY CATEGORY, 1970-80
('000)

	Visitors	Emigrants	Students	Departing residents	Intransit passengers	Temporary halt passengers	Refused leave to land	Total
1970	88.0	7.8	4.7	88.3	28.4	179.2	.2	396.6
1971	110.8	5.3	2.9	80.9	32.5	168.3	.4	401.1
1972	110.3	4.3	.8	92.0	36.7	164.0	.4	408.6
1973	120.6	4.7	.3	102.7	36.4	207.8	.4	472.9
1974	118.8	5.2	.8	106.3	36.6	155.9	1.0	424.7
1975	110.0	6.1	.0	135.1	26.0	171.1	1.0	449.2
1976	134.9	4.3	1.0	125.0	37.9	173.9	1.5	482.6
1977	150.3	4.5	1.2	133.0	42.1	198.7	1.3	531.0
1978	174.7	3.9	1.0	128.7	47.5	186.3	2.3	550.4
1979	180.2	4.2	1.3	178.7	48.9	169.3	2.8	585.4
1980	186.8	4.2	.4	205.4	40.8	125.1	2.9	565.7

Source: Central Statistical Office

Table 11.4: TRINIDAD AND TOBAGO: VISITORS AND GROSS TRAVEL RECEIPTS, 1970-80

	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980
I. Visitors											
1. Stopover Visitors ^{a/} ('000)	76.0	94.6	97.6	110.2	106.2	111.1	129.4	139.0	147.7	155.2	154.7
growth rate (%)		24.5	3.2	12.9	-3.6	4.6	16.5	7.4	6.3	5.1	-3
2. Business Visitors ('000)	15.0	20.5	20.1	19.1	23.0	22.2	26.2	28.3	28.4	34.9	42.2
growth rate (%)		36.7	-2.0	-5.0	20.4	-3.5	18.0	8.0	0.0	22.9	20.9
3. In transit & Temporary Halt Passengers ('000)	209.3	196.6	199.5	245.3	195.7	204.9	211.3	246.0	235.8	218.9	166.2
growth rate (%)		-6.1	1.5	23.0	-20.2	4.7	3.1	16.4	-4.1	-7.2	-24.1
All Visitors ('000)	<u>300.3</u>	<u>311.7</u>	<u>317.2</u>	<u>374.6</u>	<u>324.9</u>	<u>338.2</u>	<u>366.9</u>	<u>413.3</u>	<u>411.9</u>	<u>409.0</u>	<u>363.1</u>
growth rate (%)		3.8	1.8	18.1	-13.3	4.1	8.5	11.8	-3	-7	-11.2
II. Gross Receipts ^{b/} (mill. TT\$)	<u>43.3</u>	<u>58.4</u>	<u>60.4</u>	<u>75.9</u>	<u>104.5</u>	<u>156.2</u>	<u>178.7</u>	<u>218.9</u>	<u>262.1</u>	<u>287.3</u>	<u>362.6</u>
growth rate (%)		34.9	3.4	25.7	37.7	49.5	14.4	22.5	19.7	9.6	26.2

a/ Figures include nonresident students.

b/ From the Balance of Payments; excludes credits from students.

Source: Central Statistical Office.

