SPECIAL PUBLICATIONS

From Growth to Prosperity

Policy Perspectives for Trinidad and Tobago

Liliana Rojas-Suárez Carlos Elías Editors

INTER-AMERICAN DEVELOPMENT BANK

This page intentionally left blank

Policy Perspectives for Trinidad and Tobago From Growth to Prosperity

Liliana Rojas-Suárez Carlos Elías *Editors*

The Inter-American Development Bank's Special Publications on Development are prepared as part of the Bank's ongoing efforts to assess economic, political, and social conditions in the countries of Latin America and the Caribbean. To make the information they contain available as quickly as possible, they are produced on an expedited publication schedule, without formal editing, and have not necessarily been subjected to the rigorous review procedures applied to the Bank's peer-reviewed publications. As such, the information and opinions presented in these publications are entirely those of the author(s), and no endorsement by the Inter-American Development Bank, its Board of Executive Directors, or the countries they represent is expressed or implied.

No. 1

Inter-American Development Bank

©2006 Inter-American Development Bank 1300 New York Avenue, N.W. Washington, D.C. 20577

Copyright © by the Inter-American Development Bank. All rights reserved. No part of this book may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying, recording, or by information storage or retrieval system, without permission from the IDB.

Produced by the IDB Office of External Relations

To order this book, contact: IDB Bookstore Tel: (202) 623-1753 Fax: (202) 623-1709 E-mail: idb-books@iadb.org www.iadb.org/pub

The views and opinions expressed in this publication are those of the authors and do not necessarily reflect the official position of the Inter-American Development Bank.

Cataloging-in-Publication data provided by the Inter-American Development Bank Felipe Herrera Library

Policy perspectives for Trinidad and Tobago : from growth to prosperity / Liliana Rojas-Suárez, Carlos Elías (editors).

p. cm. Includes bibliographical references ISBN: 159782030X

Competition—Trinidad and Tobago. 2. Trinidad and Tobago—Economic policy.
 Trinidad and Tobago—Commercial policy. 4. Fiscal policy—Trinidad and Tobago.
 Competition, International. I. Rojas-Suárez, Liliana. II. Elías, Carlos. III. Inter-American Development Bank.

338.6048 P452--dc22

LCCN: 2006927265

TABLE OF CONTENTS

List of Tablesiv
List of Figuresv
Foreword
INTRODUCTION
Carlos Elías, Fidel Jaramillo, and Liliana Rojas-Suárez
Chapter 1
Designing Fiscal Policy to Achieve Development
Daniel Artana, Juan Luis Bour, and Fernando Navajas
Chapter 2
Policies for Poverty Reduction
Ralph Henry, Edwin St. Catherine, Dennis Brown,
Ann Rajack-Talley, and Wendell Thomas
Chapter 3
Policies for Labor Market Institutions111
René Cortázar
Chapter 4
Deepening and Diversifying International Trade133
Anneke Jessen and Christopher Vignoles
Chapter 5
Building Competitive Advantages
Michael Fairbanks, David Rabkin, Marcela Escobari, and Camila Rodriguez
Annex:
Institutional Initiatives to Promote Private-Sector Business
Rolph Balgobin and Deryck Omar

LIST OF TABLES

- I-1: Comparison of Real GDP Growth for Selected Countries
- I-2: Governance Indicators and Relation to Real GDP Per Capita
- I-3: Institutional Indicators and Relation to Real GDP Per Capita
- I-4: MDG Indicators and Relation to Real GDP Per Capita
- I-5: Comparison of Social Indicators for Selected Countries
- I-6: Relation of World Bank Governance Index to MDG Indicators
- 1-1: GDP Shares in Trinidad and Tobago's Economy
- 1-2: Country Comparisons of Average Debt Ratios, 2000-2004
- 1-3: Trinidad and Tobago Fiscal Operations, 1996-2004
- 1-4: Correlation Coefficients for Selected Commodities
- 1-5: Public Debt in Selected Emerging Economies
- 1-6: Composition of Public-Sector Debt
- 1-7: Primary Surplus Required to Maintain Public Debt Constant at 47 Percent of GDP
- 1-8: Trade-Offs of Instruments to Capture Rent of Exhaustible Resources
- 1-9: Estimated Energy Tax Revenues and Fiscal Revenue Energy Wealth
- 1-10: Trinidad and Tobago Performance: Budget Institutions Questionnaire
- 2-1: Comparative Estimates of Poverty in the Commonwealth Caribbean
- 2-2: Comparative Indicators for Selected Countries, 2002
- 2-3: Poverty Estimates for Selected Groups, 1997–1998
- 2-4: Comparative Disparity Ratios
- 2-5: Poverty Gap and the FGT2 Index by County, 1997–1998
- 2-6: Ethnicity of Household Head by Quintile
- 2-7: Ethnicity of Household Head by Quintile
- 2-8: Gender and Socioeconomic Status, 1997-1998
- 2-9: Employment Status by Quintile and Gender, 1997–1998
- 2-10: Employment Status by Gender across Quintiles, 1997–1998
- 2-11: Unemployed by Age Group and Socioeconomic Status, 1997–1998
- 2-12: Distribution of Unemployed by County, 1997–1998
- 2-13: Occupational Distribution by Quintile, 1997–1998
- 2-14: Industry Distribution by Quintile, 1997–1998
- 2-15: Distribution of Worker Type by Quintile, 1997–1998
- 2-16: Educational Attainment by Quintile, 1997–1998
- 2-17: Distribution of Household Heads by Age and Socioeconomic Status, 1997-1998
- 2-18: Distribution of Household Heads by Employment Status, 1997–1998
- 2-19: Dwelling Type by Quintile
- 2-20: Household Water Supply by Quintile, 1997–1998
- 2-21: Mean Expenditure on Selected Items by Quintile, 1997–1998

- 2-22: Variables as Defined by Micro Data 2-23: Model Results 2-24: Development and Preventive Programs, 2003 2-25: Supportive and Remedial Programs, 2003 2-26: Summary of Programs by Targeted Clientele, 2003 3-1: Growth, Employment, and Unemployment, 1994–2002 3-2: Inflation and Wage Growth, 1994–2002 3-3: Evaluating the Recommendations: Potential Effect and Difficulty in Implementation 4-1: Top 20 Exports to the World and CARICOM, 2001-2003 4-2a: Comparative Advantage in Exports to the World, 1990–1993 to 2000–2003 4-2b: Comparative Advantage in Exports to CARICOM, 1990-1993 to 2000-2003 4-3: RCA Trends by Destination, 1990-1993 to 2000-2003 4-4: Trinidad and Tobago's Share in CARICOM Countries' Imports 4-5: CARICOM: CET and National Applied Tariffs, 2003 AI-1: Exports to World and Selected Partners, 1990-2004 AI-2: Imports from World and Selected Partners, 1990-2004 AI-3: International Competitiveness of Exports, 1998-2003 AI-4: Global RCA versus U.S., Latin America, and EU, 1990-1993 to 2000-2003 AI-5: Intra-regional RCA versus CARICOM, 1990–1993 to 2000–2003 AII-1: Trinidad and Tobago Trade Agreements 5-1: Higher Forms of Capital: Policy Recommendations AI-1: Growth Competitiveness Index, World Economic Forum 2002 AI-2: Trinidad and Tobago-National Competitiveness Balance Sheet: Growth Competitiveness Index
- AI-3: Microeconomic Competitiveness Index, World Economic Forum 2002
- AI-4: Trinidad and Tobago–National Competitiveness Balance Sheet: Microeconomic Competitiveness Index
- AI-5: Business Environment Ratings
- AII-1: Assessment of Private-Sector Development Institutions

LIST OF FIGURES

- I-1: Simulating Future Paths of Real GDP Per Capita
- I-2a: Inflation and Real GDP Per Capita
- I-2b: Net Debt/Fiscal Revenues and Real GDP Per Capita
- I-3: Commodity Dependence and Real GDP Per Capita
- I-4: Income Inequality and Real GDP Per Capita
- I-5: Poverty and Real GDP Per Capita
- I-6: Contribution of Energy and Non-energy Sectors to Real GDP Growth, 1992–2004

- I-7: Fiscal Balance of the Central Government
- AI-1: Real GDP Growth for Selected Countries
- 1-1: Net Debt Ratios for Selected Countries
- 1-2: Central Government Fiscal Balance
- 1-3: Evolution of Public Expenditure and Non-oil Revenues
- 1-4: Real Exchange Rates
- 1-5: Public Debt Scenarios
- 1-6: Evolution of Oil Revenues and WTI Prices
- 1-7: Index of Budgetary Institutions
- 2-1: Gini Coefficient for Selected Years
- 2-2: Distribution of Poor, by Age Group
- 2-3: Distribution of Poor, as Percentage of County Population
- 2-4: Distribution of Indigent Population, by County
- 2-5: Testing for Model Validity
- 4-1: Merchandise Trade, 1990-2004
- 4-2: Merchandise Exports by Destination, 1990-2004
- 4-3: Sector Composition of Exports, 1990-2003
- 4-4: Competitiveness of Top 30 Exports, 1998-2003
- 4-5: Services Exports by Area, 1990–2003
- 4-6: Growth in Visitor Arrivals, 1995–2004
- 4-7: Merchandise Exports to Latin America, 1990-2004
- 5-1: Gross Domestic Product and Oil Prices, 1970-2001
- 5-2: Budget Balance and Oil Prices, 1989-2002
- 5-3: Seven Forms of Capital
- 5-4: Policy Response to Price and Resource-Led Shocks, 1970-2002
- 5-5: Persistent Oil-Price Dependence
- 5-6a: External Debt Index, 1970–2002
- 5-6b: Pattern of Macroeconomic Management, 1970-2002
- 5-7: Relationship between Cluster Bands and Wealth, 1992
- 5-8: Five-Step Change Process
- 5-9: Annual Yacht Arrivals, 1990-2002
- 5-10a: Expenditure Per Boat in Regatta, 2001
- 5-10b: Comparison of Expenditure Per Boat, 2001
- 5-11: Trinidad and Tobago's Air Conditioner Exports to the U.S., 1995–2002
- 5-12: Oil Sector's Contribution to GDP, 1994–2002
- 5-13: Non-oil Sector's Contribution to GDP, 1994–2002
- 5-14a: Exports Related to Natural Resources, 1992–2000
- 5-14b: Processing of Natural-Resources Products, 1992–2000
- 5-15: Export Distribution by Cluster, 2000
- 5-16: Distribution of Trade Exports, 2002

Foreword

It is a great pleasure to introduce this IDB report - the first in a new Caribbean Series to be produced by Regional Operations Department 3. The report presents the main results of work sponsored by the IDB to analyze the development challenges facing Trinidad and Tobago (T&T). This effort served to inform the preparation of the IDB Country Strategy with T&T.

The topics covered in the chapters of the report were presented and discussed in a conference organized by the IDB in Port of Spain on July 13th, 2004. Prime Minister Patrick Manning opened the conference, which was designed to contribute to the ongoing national dialogue on development alternatives for Trinidad and Tobago. It provided an opportunity for a thorough exchange of views among stakeholders regarding critical issues and policy perspectives the country must consider in order to meet its longer term goals, and many of the comments and suggestions received during the conference have been included in the report.

T&T, richly endowed with oil and gas resources, is a country that enjoys many strengths and advantages, including a relatively high per-capita income, a sound macroeconomic framework and a long tradition of institutional stability. Yet after more than a decade of economic growth and despite encouraging prospects for the future, the T&T economy remains overly dependent on the oil and gas sector, the public sector lacks capacity, and pockets of poverty persist.

How can the country promote sustainable and equitable development, and thus reduce poverty? The Government of Trinidad and Tobago, in consensus with major stakeholders, has confronted this question in its Vision 2020 - an ambitious program that calls for Trinidad and Tobago to achieve developed-country status by the year 2020. As the country sets out to meet this longer term goal, it must begin to tackle some pressing development challenges in the short to medium term, including economic diversification through private sector development, modernization of the public sector and improved social services.

In this context, we believe the timing of this report to be most opportune. In many ways, Trinidad and Tobago is moving rapidly on the path to becoming a developed country. Yet this will require a sustained effort over time. To achieve sustainable growth and to benefit its citizens more equitably, the country must continue to grapple with major issues. This report sheds light on some of the most pressing ones.

We would like to acknowledge the leadership of Mr. Ciro De Falco, former Manager of Regional Operations Department 3, throughout this initiative. Mr. De Falco's steady support and insight at the inception of this in-depth analytical work have been critical as a means to enhance the Bank's understanding of country issues and improve country focus as well as contribute to the national dialogue.

Also vital to the successful completion of this work were the dedicated efforts of Hon. Camille Robinson-Regis and Victoria Mendez-Charles, Minister and former Permanent Secretary of the Ministry of Planning and Development respectively, who led the Government's team in discussions.

Our gratitude also extends to many other people, both in Trinidad and Tobago and at the IDB, who made this work possible. In particular, we note the contribution of Fidel Jaramillo, Regional Economic Advisor of RE3, who provides guidance and oversight for the Caribbean Series initiative. Dora Currea and Neville Beharie, the current and former Chief of Country Division 6, William Robinson, IDB Representative in T&T, and Clark Sand, T&T Country Coordinator, provided feedback and support. We would like to thank Liliana Rojas-Suárez and Carlos Elías for coordinating the preparation of the studies, Norma Adams for editing the report, and Francesca Castellani, Maria Jordan, and Michael Hennessey for proofreading and editing. Finally, we owe a special note of appreciation to the authors of the chapters and annex presented in this report, for their dedication and willingness to engage in constructive dialogue throughout the course of the project.

Alicia S. Ritchie Manager, Regional Operations Department 3 Inter-American Development Bank

Introduction

Carlos Elías, Fidel Jaramillo, and Liliana Rojas-Suárez

ver the last decade, Trinidad and Tobago's economic performance has been impressive. Since late 1993, extraordinary real growth of about 80 percent has resulted from implementing sound policies that have enabled the exploitation of significant oil and gas reserves. As a result, the country has emerged as the key supplier of liquefied natural gas (LNG) to the U.S. market, and leads the world in the production of ammonia, methanol, and other gas-related products.

Recently, Trinidad and Tobago initiated Vision 2020, a policy strategy that aims to achieve developed-country status by the year 2020. The strategy's stated goal is to *create an economic and social environment that will allow all citizens of Trinidad and Tobago to enjoy a quality of life based on the highest standards of modern human development in such areas as education, health, housing, and personal security. Achieving this goal will require accelerated economic growth and strategic public- and private-sector investment of oil and gas revenues.*

At the same time, Trinidad and Tobago needs a new set of policies to consolidate its current position and ensure its competitiveness in a more integrated world. For example, the country's private sector has succeeded in taking advantage of the Caribbean Community (CARICOM) Common External Tariff (CET) and non-tariff barriers, and exports to CARICOM member countries have increased significantly. However, the opportunities and risks of opening to a global market are far greater than those at the regional level; to succeed, the country must modernize its economy.

The Global Context: What Is the Development Gap?

Comparing Trinidad and Tobago's socioeconomic performance against that of countries of a similar or greater degree of development can provide a baseline from which to identify the development gap that the country's authorities face in designing their policies. From this analysis, it is clear that the country must focus on institutional strengthening to reach its goal of sustained growth and high real income per capita.

Achieving the social goals of Vision 2020 requires a sustainable rate of economic growth.¹ Since 1994, Trinidad and Tobago has delivered continuous growth averaging about

¹ This conclusion was reached by participants at two conferences organized by the Inter-American Development Bank (IDB)—one held in Washington, D.C. (February 2004) and the other in Port of Spain (July 2004)—which discussed the studies presented in this book.

7 percent per year, a record unbeaten in Latin America and the Caribbean (LAC). However, most of this growth can be attributed to developments in the oil and gas sector. The non-energy sector, by contrast, has displayed low growth and high unemployment.

Thus, the quest for long-term, sustainable growth must consider diversification beyond the energy sector because oil and gas are non-renewable resources. A key challenge to achieving developed-country status is how to build an economy today that can sustain economic growth after finite oil and gas resources are exhausted. In this context, a key aspect is economic stability, which translates into avoiding the recurrence of sharp booms and busts in economic cycles.

Understanding Economic Cycles

Two main features distinguish the economic cycles of developed countries from those of developing ones (Cashin 2004). First, in developed countries, economic cycles tend to have less amplitude; that is, the peaks and troughs are less pronounced than those in developing countries. Economic cycles characterized by severe booms and busts in rates of economic growth are detrimental to development because the social programs designed to reduce poverty, which are implemented during the booms, are usually cut back, or even eliminated, during busts. Second, in developed countries, economic recoveries come soon after the economic slowdown period is over. In contrast, the economic cycles of such developing countries as Trinidad and Tobago have pronounced, unusually long recovery periods.²

In addition to Trinidad and Tobago, the Vision 2020 sample³ for analysis includes benchmark countries (those whose social indicators and quality of life Trinidad and Tobago aims to reach) and comparable countries (those with a similar level of economic development as measured by real GDP per capita adjusted by purchasing power parity [PPP]). Benchmark countries are Iceland, Ireland, Norway, and Singapore; and comparable ones are Chile, Costa Rica, Malaysia, and Mauritius.

Table I-1 shows a comparison of economic growth cycles between Trinidad and Tobago and its benchmark and comparator countries for the period 1970–2004.⁴ Among the

² An economic cycle is formed by one period of expansion and one of contraction, where an expansion is defined as a sequence of years with positive rates of real GDP growth, and a contraction is a sequence of years with negative real GDP growth. For the purpose of computing statistics, a zero rate of GDP growth is considered a contraction (Table 1).

³ Vision 2020 started with a gap analysis that resulted in the selection of eight countries. The countries selected exhibit, among other characteristics, either: high human development, extended periods of economic stability, high levels of technological development and innovation, and economies driven by natural resource exploitation. For the purpose of the analysis presented in this chapter, the authors considered it appropriate to simplify the selection criteria and cluster the eight countries selected by Vision 2020 in two sets: benchmark and comparable.

⁴ The term *business growth cycle* is not used here since it implies the identification of periods of above- and below-trend rates of growth, which, in turn, require the use of statistical analysis that is beyond the scope of this chapter.

Country	Average Growth	Maximum	Minimum	Standard Deviation	Average Duration of Contraction*
1970–2004					
Trinidad and Tobago	2.8	13.2	-9.2	4.96	4.5
Benchmark					
Iceland	3.9	13.1	-3.3	3.50	1
Ireland	5.2	11.6	-0.3	2.83	1
Norway	3.4	6.8	-0.1	1.74	1
Singapore	7.6	13.8	-2.0	4.01	1
Comparator					
Chile	4.0	12.3	-13.4	5.78	1.5
Costa Rica	4.5	9.2	-7.3	3.46	2
Malaysia	6.8	11.7	-7.4	4.01	1
Mauritius	5.3	16.6	-10.1	4.20	1
1990–2004					
Trinidad and Tobago	4.4	13.2	-1.6	3.69	2
Benchmark					
Iceland	2.4	5.7	-3.3	2.82	1
Ireland	6.7	11.6	1.9	3.07	—
Norway	3.1	5.3	0.4	1.45	—
Singapore	6.5	12.3	-2.0	4.27	1
Comparator					
Chile	5.6	12.3	-0.8	3.32	1
Costa Rica	4.7	9.2	0.9	2.74	—
Malaysia	6.5	10.0	-7.4	4.69	1
Mauritius	5.1	9.2	1.8	1.75	—

Table I-1. Comparison of Real GDP Growth for Selected Countries

Source: International Financial Statistics (IMF, 2005).

* (---) indicates that no contraction occurred during the period.

countries sampled for the period of analysis overall, Trinidad and Tobago displayed one of the highest peaks in rates of economic growth (13.2 percent in 2003) and one of the lowest troughs (–9.2 percent in 1983) (Figure AI-1). Among the emerging markets, only Chile and Mauritius experienced a sharper trough during that period,⁵ while none of the developed countries did. Chile, Mauritius, and Trinidad and Tobago also experienced the highest volatility in economic growth (as measured by the standard deviation) among the countries sampled. However, the most worrisome indicator is how many years, on average, economic growth remained negative. The average duration of a contraction in Trinidad

⁵ In Chile, severe contractions were associated with the balance-of-payments crises of the mid-1970s and early 1980s.

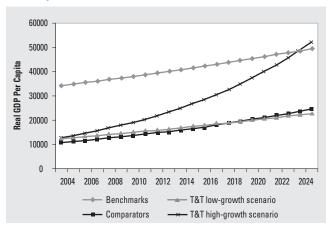
and Tobago was the highest among the countries sampled. The main reason was that, after the oil crisis of the early 1980s, it took the country seven years to return to positive growth, compared to two years for Chile over the same period.

When only the period 1990–2004 is considered, indicators of economic growth cycles for Trinidad and Tobago improve. During that period, the country not only improved its performance in terms of average economic growth; economic contractions were also less pronounced. Even so, economic growth remained volatile. Only Malaysia and Singapore—the two sample countries affected by the 1997 East Asia Crisis—displayed a larger standard deviation of real GDP growth. In addition, in the early 1990s, Trinidad and Tobago had two years of negative output growth before it became positive again. In contrast, the other countries that experienced a contraction during the 1990s and early 2000s—Chile, Iceland, Malaysia, and Singapore—had only one year of negative economic growth.

Thus, Trinidad and Tobago faces an important challenge: building resistance to unanticipated shocks to avoid the deep and lengthy troughs that have characterized earlier episodes of growth contraction. Reaching developed-country status does not mean that contractions will not occur; however, periods of negative growth must be shorter and less pronounced. The two most advanced countries in the sample—Ireland and Norway—are also those characterized by prolonged economic stability and absence of sharp troughs during economic cycles (Figure AI-1).

A simple simulation exercise underscores the importance of high, sustainable growth if Trinidad and Tobago's per capita GDP is to converge significantly with that of the benchmark countries. Figure I-1 presents two alternative scenarios. In the first, if Trinidad and Tobago were to maintain the average growth rate attained during the 1994-2004 period (7.1 percent), convergence would occur at about the time set by Vision 2020.⁶ In the second

Figure I-1. Simulating Future Paths of Real GDP Per Capita



Source: IMF, World Economic Outlook Database (September, 2005). *Note*: Purchasing-Power-Parity Adjustment (PPP) is intended to reflect real prices across countries in a more adequate manner (i.e., reflect the real acquisitive power of the citizens). In this simulation, the adjustment is done in the year 2004. In subsequent years, the implicit assumption is that the real exchange rates among the countries involved remain unchanged.

⁶ In constructing the two scenarios presented in Figure I-1, it was necessary to assume growth rates of population and economic activity for Trinidad and Tobago, benchmark countries, and comparator countries. Populations were

scenario, where the country is assumed to grow at only 3.0 percent, failure to sustain high rates of growth would delay convergence long after 2020. Interestingly, the country could maintain levels of real GDP per capita similar to its comparators, but would not close the gap with benchmark countries' standard of living within the next two decades.

The two sections that follow compare Trinidad and Tobago with developed countries in two areas complementary to high GDP per capita: 1) institutions and 2) social development. In each case, the discussion attempts to identify the development gap between Trinidad and Tobago and developed countries.

Quality of Institutional Strength: Where Is Trinidad and Tobago?

The indicators presented in Tables I-2 and I-3 and Figures I-2 and I-3 illustrate the level of effort required of Trinidad and Tobago to attain the high levels of per-capita income and sound economic policies and strong institutions that developed countries exhibit. Tables I-2 and I-3 relate real GDP per capita to eight commonly used, institutional indicators for the 1990–2003 period,⁷ while Figures I-2 and I-3 relate it to two policy indicators⁸ and one endowment indicator.⁹ Although their selection is somewhat arbitrary, these indicators, taken together, provide important information about the country's relative position against the countries selected by Vision 2020, among many other countries.

The institutional indicators presented in Tables I-2 and I-3 are divided into two categories. Table I-2 shows five indicators of the quality of governance, as identified by Kaufmann, Kraay and Mastruzzi (2005): 1) voice and accountability (measures the extent to which citizens can choose their governments, as well as other political rights and civil liberties, including freedom of the press), 2) political stability and absence of violence (indicates the likelihood of violent threats to or changes in government, including terrorism), 3) government effectiveness (measures the quality of public-service delivery and competence of the bureaucracy), 4) rule of law (assesses the quality of contract enforcement, police, and courts, as well as the likelihood of crime and violence), and 5) control of corruption (measures the exercise of public power for private gain, including petty and grand corruption and state capture). For all five indicators, a larger value means better quality of governance.

assumed to grow at rates of 0.16, 0.82, and 1.47 percent, respectively, according to the 2005–20 growth estimates of the United Nations (World Population Prospects: The 2004 Revision Population Database). For benchmark countries, economic growth was assumed at 2.6 percent (the growth rate of advanced economies during the 1990–2006 period (World Economic Outlook, 2005). For comparator countries, the assumed rate was the average growth they achieved over the same period.

⁷ The eight indicators are voice and accountability, political stability and absence of violence, rule of law, control of corruption, government effectiveness, judicial independence, efficiency of legal framework, and transparency of government policymaking.

⁸ Inflation rates and ratio of net government debt to fiscal revenues.

⁹ Dependence on commodities.

					Indic	Indicator*						
			Poli	Political Stability and								
	Voic Accour	Voice and Accountability	Absel Viol	Absence of Violence	Gover Effecti	Government Effectiveness	RL of I	Rule of Law	Control of Corruption	Control of Corruption	Avera Indic	Average of Indicators
Country/Type or Relation	1996	2004	1996	2004	1996	2004	1996	2004	1996	2004	1996	2004
Trinidad and Tobago	0.77	0.49	0.66	0.04	0.09	0.47	0.36	0.17	0.33	0.02	0.44	0.30
Benchmark	1.27	1.03	1.33	1.50	1.99	1.97	1.92	1.85	1.95	2.15	1.66	1.69
Comparator	0.78	0.69	0.94	0.79	0.78	0.84	0.86	0.77	0.76	0.71	0.82	0.76
Difference with benchmark countries	0.51	0.54	0.66	1.46	1.90	1.50	1.57	1.68	1.62	2.13	1.22	1.39
Difference with comparator countries	0.01	0.21	0.28	0.75	0.69	0.37	0.51	0.61	0.43	0.69	0.38	0.46
Correlation with GDP per capita	0	0.68	0.0	0.68	0.8	0.88	0.	0.88	0.	0.89	0.	0.86
Sources: World Development Indicators (World Bank, 2005); Kaufmann, Kray, and Mastruzzi (2005).	nk, 2005); Ka	ufmann, Kray, a	nd Mastruzzi (2005). constant 2000	ilc¢. ppph.	ttmoot to the	lic rot sourcit	contribution comp	IN older			iji ocio

-eiit siyi Note: Real FUM: Per capitals the average of the values for the periou 1950–2005, expressed in constants coro 0.5, cance level. When calculating correlations, governance indicators are the average value for the period 1996–2004.

* Scores range from –2.5 to 2.5.

Copyright © by the Inter-American Development Bank. All rights reserved. For more information visit our website: www.iadb.org/pub

As has been pointed out in the literature and shown in Tables I-2 and I-3, there is a positive relationship between the countries' quality of governance and real per-capita GDP (Easterly and Levine 2002).¹⁰ This relationship holds for all governance indicators. Table I-2, which presents governance indicators for 1996 and 2004, reveals two important features of Trinidad and Tobago. First, based on 2004 data, the country performed worse relative to both benchmark and comparator countries, as indicated by the lower score reported for the average of indicators. In particular, its performance

		Indicator*	
Country/Type or Relation	Judicial Independence	Efficiency of of Legal Framework	Transparency of Government Policymaking
Trinidad and Tobago	4.8	4.2	3.7
Benchmark	5.9	5.9	5.3
Comparator	4.7	4.5	4.5
Difference with benchmark countries	1.1	1.7	1.6
Difference with comparator countries	-0.1	0.3	0.8
Correlation with GDP per capita	0.7	0.7	0.6

Table I-3. Institutional Indicators and Relation toReal GDP Per Capita

Sources: World Development Indicators (World Bank, 2005); Global Competitiveness Report (World Economic Forum, 2004).

Note: Real GDP per capita is the average of the values for the period 1990–2003, expressed in constant 2000 US\$; PPP adjustment makes figures for all countries comparable. All correlations are significant at a 1-percent significance level. Observations are for the 2004–05 period.

* Performance scale = 1 (worse) to 7 (better).

on control of corruption raises concern; by 2004, the gap with benchmark countries was the largest among all governance indicators. Trinidad and Tobago's unfavorable position in governance relative to comparator countries might signal potential long-term difficulties. If key governance indicators do not improve, the country might be unable to maintain a real per-capita GDP within a range similar to that of its comparators. On the positive side, it must be noted that Trinidad and Tobago's performance in terms of voice and accountability did not differ from that of its comparator countries.¹¹

Second, as Table I-2 shows, Trinidad and Tobago's average performance on governance indicators was worse in 2004 than in 1996, falling from 0.44 to 0.30. Control of corruption and political stability and absence of violence are the indicators that deteriorated the most. Efforts must be made to improve performance on voice and accountability (the indicator deteriorated slightly) since Vision 2020 relies on a consensus-building process. Higher standards of voice and accountability would allow for adequate participation of various sectors across society to achieve common goals.

¹⁰ In calculating the correlation between governance indicators and GDP per capita, the authors have used the average value for the 1996–2004 period in order to use all available information (Table I-2).

¹¹ Trinidad and Tobago's performance on this indicator even surpassed that of Malaysia and Singapore.

Table I-3 complements the information on governance provided in Table I-2 by adding three indicators: 1) judicial independence, 2) efficiency of legal framework, and 3) transparency of government policymaking. Judicial independence assesses the extent to which the country's judiciary is independent from political influences of government members, citizens, or firms (a higher value indicates greater independence). Efficiency of legal framework takes a low value if the framework for private businesses to settle disputes is inefficient and subject to manipulation. Transparency of government policymaking measures the extent to which government informs firms in the country clearly and transparently of changes in policies and regulations.

In contrast to the governance indicators in Table I-2, the institutional indicators in Table I-3 are, in general, similar to those of comparator countries (and even slightly better for the judicial independence indicator [4.8 versus 4.7]). As expected, however, Trinidad and Tobago must still bridge a large institutional gap if it is to attain developed-country status (as measured by the difference in scores between Trinidad and Tobago and benchmark countries).

With respect to key policy indicators, Trinidad and Tobago displays the expected negative relationship between real GDP per-capita growth and average inflation. As Figure I-2a shows, over the past decade, average inflation has remained below the rates of comparator countries and close to those of benchmark countries. With regard to the ratio of net debt to fiscal revenue,¹² Trinidad and Tobago scores unfavorably relative to certain comparator countries and all benchmark countries (Figure I-2b).¹³ When analyzing this ratio, one must consider the dependence of fiscal revenue on developments in the energy sector. In the context of the recent sharp increase in oil prices, the country's ratio of net debt to fiscal revenue is decreasing.¹⁴ Nonetheless, fiscal revenue dependence on energy developments leaves no room for complacency, as improvements in the debt-to-revenue ratios could be temporary. For example, an unexpected adverse shock to the price of oil could cause a sudden and significant deterioration of the ratio.

Another policy indicator, often cited as a determinant of long-term growth and development, is the country's dependence on commodity exports (Figure I-3).¹⁵ Countries such as Ecuador and Venezuela show an inverse relationship between growth of real GDP per capita

¹²Net debt is defined as gross debt minus international reserves and deposits of the public sector; see Artana, Bour, and Navajas (chapter 1, this volume).

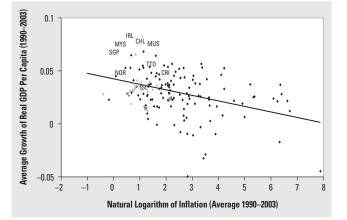
¹³ High ratios can be detrimental to long-term growth since an adverse shock to fiscal revenues might result in a proportionally larger transfer of fiscal resources to service debt obligations at the expense of social investments and programs. For a more detailed discussion, see Pattillo, Poirson, and Ricci (2004) and the references therein.

¹⁴As of this writing, data indicated that the ratio would fall to below 20 percent in 2005.

¹⁵ Export concentration makes a country vulnerable to terms of trade shocks. When the price of the export commodity is high, large inflows of external revenues generate an appreciation of the real exchange rate (RER), inducing a

and commodity dependence. Trinidad and Tobago is also among the set of countries with the highest concentration of exports. However, Iceland and Norway (among benchmark countries) and Chile (among comparator countries) have even higher ratios of commodity dependence. How has Norway, in particular, maintained developed-country status, despite its high dependence on oil exports? This apparent paradox emphasizes the need for Trinidad and Tobago to exploit its natural-resource endowments intelligently. As Artana, Bour, and Navajas discuss in chapter 1, adequate management of commodity booms is at the core of the answer. In addition, export diversification beyond oil and gas products can help the country reduce its vulnerability to terms of trade shocks. Hence, policies are needed to adequately manage the price cycles of the export

Figure I-2a. Inflation and Real GDP Per Capita*



Source: World Bank, World Development Indicators (2005).

* Real GDP per capita is expressed in constant 2000 US\$. Purchasing-Power-Parity (PPP) adjustment makes figures for all countries comparable.

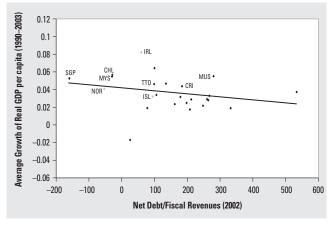


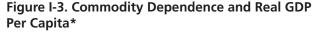
Figure I-2b. Net Debt/Fiscal Revenues and Real GDP Per Capita*

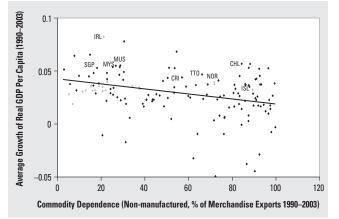
Source: World Bank, World Development Indicators (2005) and IMF, Article IV for each country (taken from Arteta et al.).

* Real GDP per capita is expressed in constant 2000 US\$. Purchasing-Power-Parity (PPP) adjustment makes figures for all countries comparable.

loss of competitiveness in the non-commodity tradable sector, thereby discouraging export diversification. When an adverse shock, in the form of a sharp reduction in the price of the export good, materializes, the country experiences a sharp decrease in financial resources and a serious deterioration in balance of payments. Pressures on balance of payments, in turn, pressure the exchange rate and fiscal accounts. If imbalances are severe, a crisis might ensue, usually involving the domestic financial system. Resolving a severe crisis takes a major toll on short- and long-term economic growth since existing programs aimed at improving all forms of capital—especially human capital—might need to be curtailed as part of the adjustment program. commodity and foster broad diversification of exports.¹⁶

In sum, Trinidad and Tobago must focus on institutional strengthening if it is to achieve its goal of sustained growth and high real income per capita. Although the development gap is still large, the country is well-positioned to achieve convergence with benchmark countries (Figure I-1). In terms of policy, high sensitivity of the ratio of debt-to-fiscal revenues to energy-sector developments constitutes an important





Source: World Bank, World Development Indicators (2005). *Real GDP per capita is expressed in constant 2000 US\$. Purchasing-Power-Parity (PPP) adjustment makes figures for all countries comparable.

limitation for long-term growth. While Trinidad and Tobago is one of the few emerging market economies to have achieved investment grade, this is insufficient to attain developedcountry status. Finally, as discussed above, sharp boom-bust cycles, which are detrimental to sustained growth, have largely resulted from energy-sector developments. Therefore, the country has recognized the need for a well-managed strategy to utilize oil revenues.

Social Development: Where Is Trinidad and Tobago?

In chapter 2, Henry, St. Catherine, Brown, Rajack-Talley, and Thomas show that preliminary analyses of poverty trends and inequality in Trinidad and Tobago point to an overall improvement in both indicators. However, there is also evidence that relatively high levels of poverty, so-called pockets of poverty, remain entrenched in particular areas of the country. At the same time, the level of public spending is high;¹⁷ therefore, there is room for rationalizing spending with the objective of improving the efficiency, coverage, and impact of public social services. Preliminary estimates show that the cost of reducing, or even eliminating, poverty—the resources necessary to increase income of the poor above the poverty

¹⁶ See Jessen and Vignoles (chapter 4, this volume); see also Birdsall and Rojas-Suárez (2004), who regard higher export ratios and export diversification as one of the three pillars for development finance.

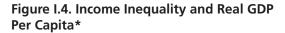
¹⁷ The Government's more than 120 social programs, which account for 10 percent of expenditures, are not properly targeted for lack of information. A cabinet subcommittee, chaired by the prime minister, is considering the rationalization of social-service delivery programs.

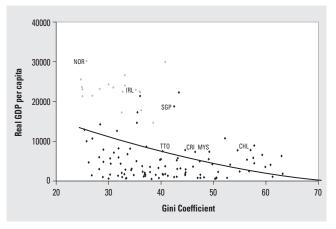
line—may not be too high. If these estimates are correct, then an extraordinary effort of reassigning public spending could strongly affect poverty reduction. Trinidad and Tobago will meet the Millennium Development Goal (MDG) of 50 percent poverty reduction by 2015 and most other MDGs. Indeed, the country intends to identify more aggressive targets, especially for poverty reduction. A brief consideration of key MDG indicators, as well as other indicators of poverty and inequality, can contribute to a better understanding of the challenges Trinidad and Tobago faces and the targets it must meet in the coming years.

Figure I-4 shows the negative relationship between the Gini coefficient,¹⁸ a common indicator of income inequality, and average real GDP per capita for a large sample of countries.¹⁹ The non-linear relationship between these two indicators can be represented by a curve with decreasing slope as inequality increases. Trinidad and Tobago's position along this curve indicates two interesting features. First, the country's income inequality indicator is far better than that of any of its comparator countries and is relatively close to the Gini coefficient in several benchmark countries (although far from that of Norway). Second, relatively small improvements in income distribution could be associated with important benefits to long-term economic growth because the slope of the fitted curve increases faster at lower levels of inequality. Thus, policy efforts yielding a more equitable income distribution might

also be conducive to higher real GDP per capita.

One can also consider Trinidad and Tobago's position relative to key MDG indicators. Table I-4 presents the relationship between three of these indicators and real GDP per capita. It also compares how the country fares relative to benchmark and comparator countries in the areas of health, education, and access to technology. Although the number of indicators (among the many





Source: World Bank, World Development Indicators (2005).

* Real GDP per capita is expressed in constant 2000 US\$. Purchasing-Power-Parity (PPP) adjustment makes figures for all countries comparable. The Gini Coefficient is the average of the available observations for the period 1990–2003.

¹⁸ The Gini coefficient measures the extent to which income distribution among individuals or households within an economy deviates from a perfectly equal distribution. A Gini index of zero represents perfect equality, while an index of 100 implies total inequality.

¹⁹ Birdsall (2001) establishes a causal relationship between these two indicators by arguing that inequality inhibits growth.

			MDG In	dicator		
	(under 5	tality 5 years) ¹	Enroll	/ School ment ²	(per 1,00	ne Lines 0 people) ³
Country/Type or Relation	1990	2003	1990	2003	1990	2003
Trinidad and Tobago	24	20	91	87	141	250
Benchmark	8	5	97	98	410	579
Comparator	21	11	91	91	77	235
Difference with benchmark countries	-16	-15	6	12	269	329
Difference with comparator countries	-4	-9	0	5	-64	-15
Correlation with GDP per capita	—().6	0	.5	0	.9

Table I-4. MDG Indicators and Relation to Real GDP Per Capita

Source: http://www.un.org/millenniumgoals/

Note: Real GDP per capita is the average of the values for the period 1990–2003, expressed in constant 2000 US\$; PPP adjustment makes figures for all countries comparable. All correlations are significant at a 1-percent significance level.

¹ Per 1,000 live births.

² Ratio of children of official school age who are enrolled to population of the corresponding official school age.

³ Fixed-line and mobile-phone subscribers.

considered in the MDGs) is small, when combined with poverty headcount as a percentage of the population (Figure I-5), important conclusions can be drawn.

First, there is a clear inverse relationship between social indicators (high mortality rates, low levels of scholarship, and low access to technology) and real GDP per capita (Table I-4).²⁰ Second, prospects are good for Trinidad and Tobago meeting the MDGs related to providing basic social services. The mortality rate of children under five years old is moving toward that of developed countries, enrollment in primary school is high (although still below developed-country levels), and access to telephone lines is similar to that of comparator countries. Third, Trinidad and Tobago needs to strengthen efforts to sustain these advances. As Table I-4 shows, the indicators have improved since 1990, but a minor setback occurred in schooling.²¹

Information in Figure I-5 reinforces the conclusions. There is a clear negative relation between real GDP per capita and poverty, and Trinidad and Tobago is in an excellent position to eliminate extreme poverty. In fact, as of 2005, the percentage of people with incomes of a dollar a day (adjusted for PPP) is small and should continue to steadily decrease as the country grows.

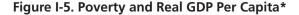
In Trinidad and Tobago, it is well recognized that achieving development status in terms of the relevant issues in health and education goes well beyond achieving high levels

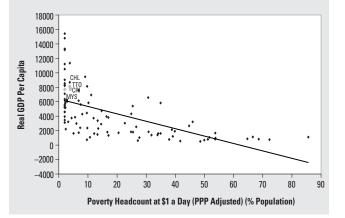
²⁰The positive correlation between real GDP per capita and the education and technology indicators occurs because an increase in the value of the indicator implies improvement in social conditions.

²¹ For certain MDG indicators, the gap with developed countries is still significant; for example, although not shown in Table I-4, Trinidad and Tobago has about 250 lines per 1,000 people, compared to Norway's more than 650 lines per 1,000 people.

of primary school enrollment or low levels of infant mortality. In addition to the MDG indicators, other indicators are needed to assess the country's progress toward meeting its ambitious social goals of increasing high-quality education at all levels, life expectancy, access to quality health services in adulthood and old age, labor force skills, and general access to communications technology.

Beyond the MDGs, Trinidad and Tobago still has





Source: World Bank, World Development Indicators (2005).

* Real GDP per capita is expressed in constant 2000 US\$. Purchasing-Power-Parity (PPP) adjustment makes figures for all countries comparable. MDG indicators are averages of the available observations for the period 1990–2003.

a long way to go to achieve social indicators comparable with those of developed countries (Table I-5).²² For example, the percentage of the labor force with tertiary education reaches more than 26 percent in industrialized economies, compared to only 6 percent in Trinidad and Tobago. Likewise, youth unemployment in the developed countries sampled is 6–16 percent, while the ratio reaches more than 30 percent in Trinidad and Tobago. Chapter 2 presents current social-development efforts of the Government of Trinidad and Tobago, including a discussion and analysis of programs already in place.

Moreover, in light of Vision 2020's stated goals for Trinidad and Tobago, an issue that deserves special attention is crime, both common and organized. In this aspect, Trinidad and Tobago ranks unusually low among countries with similar incomes and the above-described indicators. According to the business costs of crime and violence indicator, Trinidad and Tobago ranks 87 in a sample of 104 countries, with a score of 2.8, compared to the worldwide mean score of 4.4; likewise, according to the organized crime indicator, the country ranks 89, with a score of 3.4, compared to the worldwide mean score of 4.8.²³ The imbalance is striking. Though these indicators aim at measuring business-related costs, it is reasonable

²² Although three of the social indicators in Table 5—personal computers, Internet users, and youth unemployment—are used for the MDGs, this table aims to present Trinidad and Tobago's position relative to achieving developed-country status, not the MDG targets.

²³ Both indicators are measured on a scale of 1 to 7, with higher scores indicating a lower incidence of crime. The first indicator measures the degree to which the incidence of common crime and violence (e.g., street muggings or firms looted) imposes costs on businesses, while the second gauges the extent to which organized crime (e.g., mafia-oriented racketeering or extortion) imposes costs on businesses; see *Global Competitiveness Report* (World Economic Forum, 2004).

	Internet Users (per	Labor Force with Tertiary Education	Secondary Education	Personal Computers (per	Life Expectancy at	Youth Unemployment (% total labor	Health Expenditure per capita
Country	1,000 people) ¹	(% of total)	Net Enrollment ²	1,000 people) ¹	Birth (years)	force, ages 15–24)	(US\$)
Trinidad and Tobago	9.2	6.0	70.3	36.6	72.0	30.9	228.2
Benchmark Countries							
Iceland	63.0	27.4	85.0	248.9	78.8	7.0	2,699.6
Ireland	25.2	27.1	83.3	229.7	76.2	15.9	1,743.2
Norway	34.4	26.3	93.6	337.6	78.0	11.6	3,224.8
Singapore	43.7	33.0	n.a.	283.2	76.6	5.6	857.4
Comparator Countries							
Chile	21.9	12.8	61.5	51.0	75.2	14.5	279.6
Costa Rica	15.8	13.0	42.4	127.6	77.2	10.5	341.6
Malaysia	28.6	n.a.	69.3	63.8	71.9	n.a.	125.8
Mauritius	9.7	2.5	67.7	56.1	70.7	n.a.	108.0
Source: http://www.un.org/millenniumgoals/	illenniumgoals/						

Table I-5. Comparison of Social Indicators for Selected Countries

² The number of pupils enrolled in the theoretical age group for secondary education, expressed as a percentage of the total population in that age group. ¹ MDG indicator.

Copyright © by the Inter-American Development Bank. All rights reserved. For more information visit our website: www.iadb.org/pub

		MDG In	dicator	
Relation	Mortality Rate (under 5 years) ¹	Primary School Enrollment ²	Poverty Headcount Ratio (at US\$ per day, PPP adjusted)	Telephone Lines (per 1,000 people) ³
Correlation with World Bank Governance Index	-0.65	0.54	-0.34	0.85

Table I-6. Relation of World Bank Governance Index to MDG Indicators

Source: http://www.un.org/millenniumgoals/

Note: The governance index is the average of six indicators: voice and accountability, political stability, government effectiveness, rule of law, control of corruption, and regulatory quality. All correlations are significant at a 1-percent significance level. Observations are averages for the 1996–2004 period (Kaufmann, Kray, and Mastruzzi; 2005).

¹ Per 1,000 live births.

² Ratio of children of official school age who are enrolled to the population of the corresponding official school age.

³ Fixed-line and mobile-phone subscribers.

to assume that this problem bears on the rest of society. Clearly, if Trinidad and Tobago wants to provide its population a developed-country quality of life, eliminating crime and violence must be an issue of the highest priority.

Do better institutions contribute to improved social services? Not surprisingly, the answer is positive. Table I-6 displays the correlations between a governance index and four social indicators (Table I-4 and Figure I-5). Unquestionably, improved functioning of governance rules, regulations, and procedures can significantly improve social services and, therefore, reduce poverty. Interestingly, among components of the governance index, government effectiveness is the indicator with the strongest statistical relation with advancing social-development goals.

Thus, institutions matter not only for achieving sustained growth, as discussed above, but for furthering social development. In Trinidad and Tobago, however, institutional quality is generally below that of comparator countries and far below that of benchmark countries. Thus, public-sector reform is essential to achieving the Vision 2020 objective.

Overcoming Constraints of a Dual Economy

Trinidad and Tobago has long been characterized as a dual economy; the contrast between the energy and non-energy sectors is large. By 2004, the energy sector accounted for about 42 percent of GDP;²⁴ however, it employed only about 3 percent of the labor force (Box I-1).²⁵ In addition, the energy sector self-finances its operations, while a significant proportion of

²⁴ Trinidad and Tobago is the most important world provider of ammonia and methanol and the largest U.S. supplier of liquefied petroleum gas (LPG).

²⁵ The energy sector is generally capital intensive; only during plant construction does it become labor intensive.

Box I-1. Snapshot of the Oil and Gas Sector

In Trinidad and Tobago, the energy sector represents about two-fifths of the economy and about one-third of the Government's fiscal revenues, with gas production about four times that of oil. The annual value of gas production is about US\$ 4.8 billion, compared to US\$ 1.4 billion for oil. More importantly, the country is evolving into a key supplier of energy to U.S. and Spanish markets. Investment in this sector is large, representing 6–8 percent of GDP or about 25–30 percent of total investment. During the last few years, investment has concentrated on gas extraction and its conversion into liquefied natural gas (LNG).

The U.S. Energy Information Administration estimates gas reserves at 19,674 to 23,450 trillion cubic feet (about 0.5 percent of world reserves) and oil reserves at about 0.7 billion barrels (about 0.06 percent of world reserves). Energy-related wealth (proven and potential reserves) represents 136–235 percent of GDP. At current extraction rates, reserves guarantee another 20 years of production.

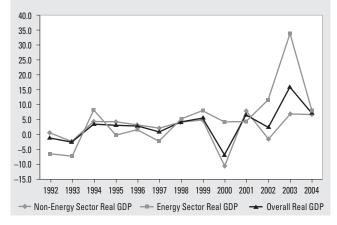
the non-energy sector depends on Government transfers and subsidies. Moreover, the energy sector accounts for more than 80 percent of exported goods. Finally, as a consequence of these features, the recent behavior of major macroeconomic aggregates is dominated by developments in the energy sector, while weaknesses in the above-mentioned social indicators reflect events in the non-energy sector.

Figure I-6 exemplifies the increasing strength in the country's energy sector and weakness in its non-energy sector. From 1998 to 2002, the energy sector grew twice as fast as did the rest of the economy. Moreover, despite the country's relatively long involvement in the energy sector, local provision of energy goods and services has remained low. While the growth rate of real GDP in the energy sector has shown a positive trend since the late

1990s—albeit with sharp fluctuations—non-energy sector growth has remained flat over the period.

The other key macroeconomic indicator largely dependent on energy-sector behavior is fiscal balance. Figure I-7 contrasts the Trinidad and Tobago Government's fiscal balances when the energy sector's contribution is included or excluded. Since the late 1990s, the Government's fiscal position has mostly been in surplus, and has improved

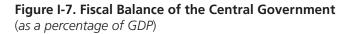


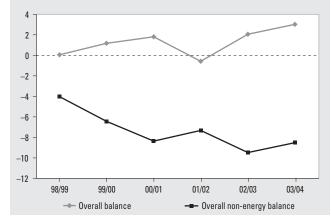


Source: IMF, Article IV reports, various years.

since 2002. These overall results are largely the consequence of increasing fiscal revenues from the energy sector as a percentage of GDP, since the ratio of revenues to GDP from the non-energy sector has decreased and the ratio of overall expenditures to GDP has remained stable over the period.

When the energy sector's contribution to fiscal accounts is excluded and only the overall non-energy balance is considered, the picture





Source: IMF, Article IV reports, various years.

changes dramatically (Figure I-7); fiscal balances turn negative, averaging about 7.5 percent. As stated above, these outcomes reflect the non-energy sector's significant dependence on Government outlays.

Why Does the Dual Economy Persist?

Why has Trinidad and Tobago's oil wealth not spilled over to a large segment of its population? Why have the large energy resources not created the impetus for a dynamic economy? The answer has a flow and a stock component.

The flow component of the explanation, so-called Dutch disease, states that, in economies abundant in natural resources, large increases in their international price or sharp increases in the volume exported (e.g., caused by new discoveries) precipitate an appreciation in the RER, which adversely affects the non-energy tradable sector. Exports are concentrated in the abundant resource and its related industries, while other sectors—which could keep the economy moving during periods of sharp decline in the resource price—lack the impetus to develop as engines of growth. This explanation well fits the case of Trinidad and Tobago, where most exports have remained within the energy sector; that is, oil and gas and their derivative petrochemical and LNG industries remain within the same sector.

In chapter 1, Artana, Bour and Navajas explain that Dutch disease cannot be eliminated, even if the Government were to direct the inflows from energy exports into socially-desirable investments, such as infrastructure and human capital. The reason is that the foreign inflow of funds would remain in the country pressing for an appreciation of the RER. The only effective way to contain this appreciation is to save a portion of the proceeds from energy exports abroad.

To determine how much to save, one must rely on the stock component of the explanation. Since oil and gas are non-renewable resources, their supply is finite. Inadequate management of limited stock limits the country's sustained economic growth and its potential for development. Significant mismanagement during the oil booms of the 1970s and 1980s already hurt the country's long-term outlook. Thus, the central issue is to design appropriate policies for managing current and future oil booms. The key questions for policy designers are how to allocate 1) current energy revenues between expenditure and savings and 2) current expenditures.

There is no unique answer with regard to how much of the energy proceeds to save to ensure adequate management. From a purely financial view of wealth management, if the country aims to share the oil and gas proceeds with future generations, then the goal would be to smooth consumption out of energy wealth over time. In this case, the standard recommendation would be to limit expenditures to the annuity value of energy wealth.²⁶ In chapter 1, Artana, Bour, and Navajas estimate the value of energy wealth, which could help determine how much the Government needs to save in an energy fund if future generations are to benefit beyond the time that reserves are exhausted.

Various countries, most notably Norway, have used this type of energy fund. Despite its potential benefits, a fund that aims to smooth consumption out of energy wealth over time fails to consider a country's socially pressing needs. In the case of Trinidad and Tobago, addressing urgent development challenges might be essential for political stability. Thus, while a consumption-smoothing fund might prove ideal for Trinidad and Tobago several years from now, it might be justifiable, and even necessary, to spend above the annuity value of energy wealth over the short term.

The short-term issue is this: Is the current Revenue Stabilization Fund (RSF), set up in fiscal year 1999–2000, the adequate mechanism for saving part of the windfall from increased oil revenues. By most standards, the answer is negative. As Artana, Bour, and Navajas indicate, the RSF's policy objective is not yet clear. Given the limited contributions to the Fund, (9% and 11.6% of total gas and oil income in 2004 and 2005, respectively), it is not operating as a consumption-smoothing fund trying to spread fuel wealth across generations; nor is it operating as a Fiscal Stabilization Fund, which is used to smooth fiscal expenditures (e.g., the Chilean copper fund). Its small size (US\$ 907 million or 6.1% of GDP, as of November 2005) would prevent it from acting effectively as a counter-cyclical tool to stabilize fiscal expenditures in the non-energy sector if an adverse shock were to significantly reduce fiscal fuel revenues.

²⁶ Estimating the value of the annuity depends on assumptions about the discount rate that the Government needs to use; for a full discussion, see IMF (2003).

Artana, Bour, and Navajas suggest how the RSF design might be improved. In so doing, they recommend how much of the energy boom to save and how to spend the remaining fuel revenues. A key recommendation is to set up a medium-term goal of converting the RSF into a Norway-style fund, whereby energy wealth is spread across generations. Given current pressing needs, however, part of the energy wealth could be used in the immediate future to: 1) reduce public-sector debt to a ratio consistent with long-term sustainability (about 30 percent of GDP); and 2) invest in social programs with adequate assessments of social rates of return. The Government has indicated its intention to invest a portion of energy revenues in eradicating poverty and improving human capital. Unquestionably, this is a wise decision. To compete internationally and move beyond the production of energy goods, the country's population must upgrade its skills and living standards. However, insufficient financial resources are not the constraint to investing in social services. Instead, the emphasis should be efficiency of social-service targeting and delivery. This issue is a central focus of discussion in chapter 2.

Will adequate management of energy revenues ensure a more dynamic economy and a steady move toward developed-country status? While improved energy wealth management is essential, it is insufficient for achieving Trinidad and Tobago's development goals. Complementary policies are also needed to attain an important developed-country characteristic: capacity to maintain high levels of private-sector competitiveness.

Improving Global Competitiveness

In addition to avoiding excessive appreciation of the RER, Trinidad and Tobago must have various conditions in place to promote the development of a competitive, non-energy private sector.²⁷ These conditions can be grouped into four overall categories: 1) labor markets with adequate flexibility, relationship between wages and productivity, and conflict-resolution mechanisms; 2) lack of restrictions to trade to facilitate export diversification; 3) adequate micro-level infrastructure to maximize firms' performance; and 4) efficient institutions that promote, rather than inhibit, private-sector businesses.

Each of these four categories is analyzed in corresponding chapters of this book and Annex I. In chapter 3, Cortázar recommends ways to increase the dynamism and flexibility of labor markets. The author emphasizes the need to maintain collective bargaining at the firm level, avoiding, to the extent possible, intervention of the Ministry of Labor (MOL). He argues that such third-party intervention clouds negotiations, resulting in an outcome inferior to what can be achieved by allowing the private sector to resolve its own problems. Cortázar also recommends keeping the growth rate of real wages at the same pace as that

²⁷Measuring, and even defining, the term competitiveness is a difficult task. Throughout this book, the term generally refers to the private sector's capacity and ability to perform efficiently in the world economy.

of labor productivity. Because productivity gains can differ significantly between sectors over time, sector-specific minimum wages should be avoided.

The problems for sustained growth and development associated with dependence on commodity exports have been emphasized above. Thus, it is not surprising that, in chapter 4, Jessen and Vignoles recommend expanding the supply of non-fuel products that face growing demand in world markets and ensuring that these products get better market access through trade-liberalization agreements. One possible way for the Trinidad and Tobago Government to support export diversification, in terms of both products and geographical markets, could be through targeted assistance to TIDCO (Tourism and Industry Development Company) and other public institutions in charge of private-sector development. In the context of the multiple trade negotiations in which Trinidad and Tobago is involved, Jessen and Vignoles stress the importance of handling certain implementation issues at the regional level. They suggest that the country should explore that possibility with CARICOM members in the immediate future.

In chapter 5, Fairbanks, Rabkin, Escobari, and Rodriguez focus on a critical actor in the competitiveness play: the firm. The authors recommend improving efficiency at the micro level. Naturally, several of their recommendations coincide with those advanced to improve social indicators, such as improving training programs to raise the skill levels of the labor force and increasing the private sector's adoption of information and communication technologies. They also propose supporting the development of business clusters (defined as all related and supporting industries involved in the production and delivery of a specific set of products or services to a customer). In the authors' view, an efficient cluster is one in which participants from up and down the value chain work together toward the production and delivery of goods to downstream consumers. Deciding whether a government should support a particular cluster is not an easy task as the decision process could involve all types of economic distortion. To avoid such an outcome, the authors propose that the Government's support be extended through a competitive and iterative process between potential clusters. Predictably, this proposal is not free of criticisms or counter-arguments. Beyond its merits and shortcomings, the proposal and the issues raised provide much food for thought to all parties concerned with improving the competitiveness of Trinidad and Tobago's firms.

Finally, the Annex, prepared by Balgobin and Omar, assesses the role of key Trinidad and Tobago institutions necessary to encourage private-sector development. The author identifies lack of clarity and coordination between Government agencies created to build an enabling regulatory and supportive environment as a critical constraint that affects the country's business climate. Moreover, inefficiencies of the public bureaucracy, including its outdated systems and procedures, impede the proper functioning of businesses. The annex summarizes current Government initiatives to remedy overall deficiencies and improve individual agencies and institutions.

Concluding Remarks

Trinidad and Tobago faces many difficult short- and medium-term challenges. Fortunately, oil and gas wealth provide resources and a cushion at a time when the country may address these issues. The window of opportunity for change, however, is relatively small because, at current levels of extraction and technology, oil and gas reserves are projected to last only another 20 years. Though new discoveries and technological improvements in the industry can expand the exploitation period, reserves are finite.

This book concludes that the overall outlook for Trinidad and Tobago is positive. Beyond its financial resources, the country has the political will to implement difficult, yet necessary, policies. Vision 2020 and the consultation process that it entails are encouraging current developments that point in the right direction. Deciding which policies to implement ultimately rests with the people of Trinidad and Tobago. This book will have succeeded if its recommendations serve to inform the difficult exercise of prioritizing reforms.

References

- Barro, Robert. 1995. *Inflation and Economic Growth*. NBER Working Paper 5326. Cambridge, MA: National Bureau of Economic Research.
- Birdsall, Nancy. 2001. "Why Inequality Matters: Some Economic Issues." *Ethics and International Affairs*, vol. 15, no. 2.
- Birdsall, Nancy, and Liliana Rojas-Suárez. 2004. "Regionalism for Financing Development: The Unexploited Potential." In *Financing Development: The Power of Regionalism*, eds. Nancy Birdsall and Liliana Rojas-Suárez. Washington, D.C.: Center for Global Development.
- Cashin, Paul. 2004. *Caribbean Business Cycles*. IMF Working Paper WP/04/136. Washington, D.C.: International Monetary Fund.
- Easterly, William, and Ross Levine. 2002. *Tropics, Germs and Crops: How Endowments Influence Economic Development*. Working Paper No. 15. Washington, D.C.: Center for Global Development.
- IMF. 2003. *Trinidad and Tobago: Selected Issues and Statistical Appendix*. IMF Country Report No. 03/233. Washington, D.C.: International Monetary Fund.
- Kaufmann, Daniel, A. Kraay, and M. Mastruzzi. 2005. *Governance Matters IV: Governance Indicators for 1996–2004*. Washington, D.C.: The World Bank.
- Khan, Mohsin S., and Abdelhak S. Senhadji. 2001. *Threshold Effects in the Relationship Between Inflation and Growth*. IMF Staff Papers, vol. 48, no. 1. Washington, D.C.: International Monetary Fund.
- Pattillo, Catherine, Hélène Poirson, and Luca Ricci. 2004. *What Are the Channels Through Which External Debt Affects Growth?* IMF Working Paper WP/04/15. Washington, D.C.: International Monetary Fund.

Annex I

Economic Growth Cycles: Country Comparisons

Figure AI-1 compares Trinidad and Tobago's economic growth cycle for the 1970–2004 period with those of its benchmark (Iceland, Ireland, Norway, and Singapore) and comparator (Chile, Costa Rica, Malaysia, and Mauritius) countries.

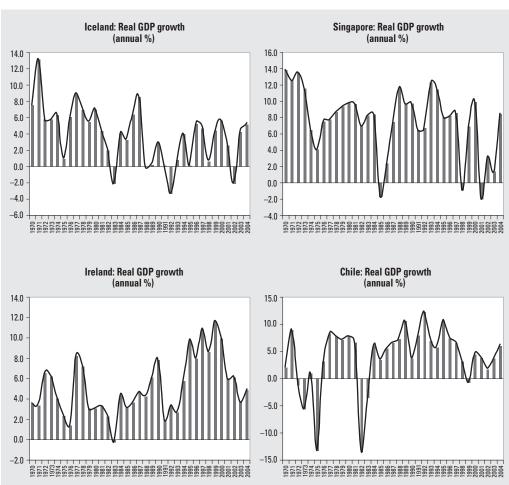


Figure AI-1. Real GDP Growth for Selected Countries (*percent*)

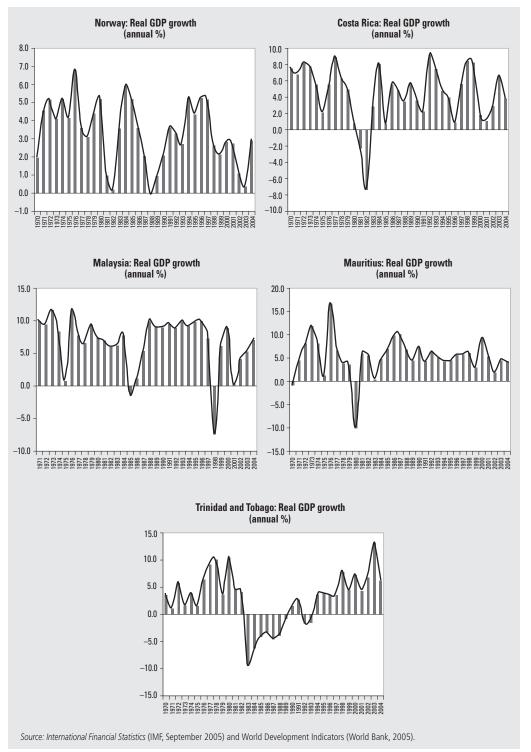


Figure AI-1. Real GDP Growth for Selected Countries (continued)

Chapter 1

Designing Fiscal Policy to Achieve Development

Daniel Artana, Juan Luis Bour, and Fernando Navajas

A fter a decade of sustained economic growth, Trinidad and Tobago—a natural-resource abundant economy—faces several policy challenges. New developments in natural gas and crude oil fields suggest that rates of extraction and downstream output of petrochemicals and liquefied natural gas (LNG) will increase substantially. While production will boost short-term growth, the country's own history suggests that poorly administered fiscal revenues from oil booms may create serious economic problems if output or prices are lower than expected (Box 1-1).

A deep recession in 1982 followed expansion brought on by the oil booms of 1973 and 1979. During the second oil boom, the country adopted poor decisions similar to those of other resource-rich countries. Government expenditures were not carefully evaluated so as to ensure positive social rates of return. Government subsidies eased private investment in declining industries, and abundant capital inflows were spent. Strong appreciation of the real exchange rate (RER), characteristic of Dutch disease, penalized non-fuel tradable activities, which reduced their share in non-fuel GDP. Overall fiscal policy was expansive, with public-enterprise losses equivalent to 55 percent of fuel revenues in 1979. When prices of crude oil dropped in international markets, the country used its foreign reserves (which fell from US\$3.3 billion in 1981 to US\$0.2 billion in 1992); even so, it could not avoid recession, and unemployment soared.

During the late 1980s and early 1990s, the Government of Trinidad and Tobago embarked on a program of structural reforms, including trade and financial liberalization, removal of quantitative restrictions and intervention mechanisms, reform of the tax system, and privatization. Consistent application of macroeconomic reforms, together with energy-sector development, has translated into a sustained economic recovery. Over the last decade, GDP

The authors acknowledge the helpful comments of Vito Tanzi, Liliana Rojas-Suárez, and Carlos Elías, as well as those of participants at conferences held in Washington, D.C. and Port of Spain during 2004. They also thank Michael Baptiste and Damie Sinanan of the IDB office in Port of Spain for their support.

Box 1-1. Managing Natural Resource Abundance: What's the Policy Challenge?

Empirical evidence suggests that economies abundant in natural resources may tend to shift away from competitive manufacturing sectors where positive externalities for growth are generated. Or they may promote rent-seeking or low productive activities, especially in countries with large State participation. More recently, it has been argued that such economies tend to have a high level of income per capita, but low growth rates, given that resources will be exhausted in the future; therefore, they catch up to their steady state growth from above (Rodríguez and Sachs 1999).

The challenge for resource-abundant economies is this: How to implement a fiscal policy that is inter-temporally consistent—one that preserves resource wealth for future generations, reduces volatility in both output and government expenditures, minimizes low productive public and private investments financed by large windfalls in fiscal revenues, and consolidates a sustainable fiscal policy (Barnett and Ossowski 2003; Ebrahim-zadeh 2003; Buchanan, Farquhar, and Nielsen 2003).

growth has averaged 7.2 percent, with a balanced evolution between the fuel and non-fuel sectors until the late 1990s. A strong growth cycle in the fuel sector that began five years ago has brought about new developments in gas, crude oil, and petrochemical activities. The fuel sector (including petrochemi-

Table 1-1. GDP Shares in Trinidad and Tobago's Economy

Period	GDP at Factor Cost	Fuel*	Non-fuel
1966–74	100	46.3	53.7
1975–84	100	30.1	69.9
1981–94	100	24.5	75.5
1995–2004	100	32.8	67.2
2004–present	100	42.3	57.7

Source: Central Statistical Office, Ministry of Finance.

* Including petrochemicals.

cals)—accounting for more than 42 percent of the economy—has resumed its high share observed in the early 1970s (Table 1-1).

Today Trinidad and Tobago continues to benefit from higher crude-oil prices. The recent discovery of the most significant offshore oil field in the country's history will permit increased energy production over the next four years. Natural gas now accounts for 83 percent of the country's crude oil and gas reserves, resulting in the development of petrochemical and other energy-intensive industries. Trinidad and Tobago has become the world's leading exporter of ammonia and methanol and the main supplier of LNG to the U.S. market.

How does this oil-rich economy, which aims to achieve developed-country status by 2020, design its fiscal policies to manage volatile oil revenues? That is the central focus of this chapter.

Country	Gross Debt/Fiscal Revenue	Net Debt (1)/Fiscal Revenue ¹	Net Debt (2)/Fiscal Revenue ²	Gross Debt/ GDP	Net Debt (1)/ GDP	Net Debt (2)/ GDP
Benchmark Countries						
Iceland	121.4	104.8	95.0	36.0	31.1	28.2
Ireland	104.1	94.7	81.7	34.5	31.4	27.0
Norway	55.8	22.6	24.8	37.0	15.3	15.1
Singapore	398.8	2.9	-229.1	95.3	0.8	-54.7
Comparator Countries						
Chile	62.7	-28.4	-28.4	13.6	-6.2	-6.2
Costa Rica	229.1	189.4	194.1	52.0	43.0	41.8
Malaysia	175.9	71.9	24.1	67.2	27.5	9.5
Mauritius	160.0	20.1	19.6	27.7	3.5	3.4
Trinidad and Tobago	207.3	126.6	109.2	55.5	33.7	29.0

Table 1-2. Country Comparisons of Average Debt Ratios, 2000–2004

Sources: Article IV reports, International Financial Statistics, and World Economic Outlook (IMF).

¹Net Debt (1) = Gross debt less Central Bank foreign reserves

²Net Debt (2) = Gross debt less Central Bank reserves and deposits (of the Central Government and of State enterprises in the case of Trinidad and Tobago).

Relative Growth Performance

Compared to other developing countries, Trinidad and Tobago ranks high in per-capita GDP. Over the past decade, high economic growth and low population growth yielded an average growth rate of GDP per capita of 6.8 percent. Thanks to a relatively stable currency, the country's GDP (in US\$) increased 8.5 percent faster than that of other developing countries.

Among comparator countries, Trinidad and Tobago also ranks well in terms of inflation and export growth. Despite high volatility in the current account balance—reflecting foreign investment episodes and changes in the price of crude oil—the bilateral RER with the US\$ and the Real Effective Exchange Rate (REER) were relatively stable compared to other resource-rich developing countries.

Given that Trinidad and Tobago aspires to reach developed-country status by 2020, it is also useful to compare its macroeconomic evolution with benchmark countries (Iceland, Ireland, Norway and Singapore), as well as comparator countries (Chile, Costa Rica, Malaysia, and Mauritius (measured by the PPP-adjusted, per-capita GDP) (Table 1-2).

Compared to countries at a similar stage of development, Trinidad and Tobago has a relatively larger government share in its economy (measured by total fiscal revenues and total expenditures of the consolidated public sector) and a higher primary surplus, consistent with a relatively higher gross public debt.¹ As a percentage of GDP, the country's

¹ Includes the external and domestic consolidated public sector.

gross public debt is about 50 percent, compared to an average of 40 percent for the four comparator countries; its measures of net public debt are also higher.² Data comparisons with developed economies reach a similar conclusion. In certain cases, net public debt 2 is negative (because of enormous public-sector deposits in the banking system [Singapore] and high international reserves in the central bank

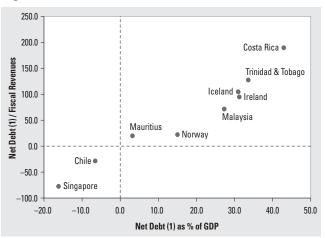


Figure 1-1. Net Debt Ratios for Selected Countries

[Chile and Singapore]). In terms of the ratios of net debt 1 to fiscal revenues and GDP, Trinidad and Tobago is worse off than seven of the eight benchmark and comparator countries (Figure 1-1).

Trinidad and Tobago's recent fiscal performance, compared to that of earlier oil booms, has been more prudent; however, several weaknesses persist. Although public debt has been reduced, it remains high compared to other countries. In terms of emerging economies, public outlays have grown to a relatively high level. In addition, the non-fuel deficit has escalated to more than 10 percent of the country's GDP (FY 2002–03 and 2003–04).

Recent Fiscal Performance

In any resource-abundant economy, it is important to consider the country's overall budget. It is also relevant to check its non-fuel deficit to determine the gap its government would need to fill once resources are depleted. In the case of Trinidad and Tobago, sizeable offbudget expenses and debt decisions have been customary. These practices, in turn, have distorted fiscal statistics. For example, overall deficits were underestimated because those in public enterprises were not properly included. In addition, composition of expenditures was distorted because the interest burden of certain loans was registered as other current expenditures. While the International Monetary Fund (IMF) provided consolidated figures

Source: Authors' estimates, based on data in Table 1-2.

² Net debt (1) is calculated by subtracting central-bank international reserves from gross public debt; net debt (2) also subtracts public-sector deposits in the banking system. In Chile, debt used to close the pay-as-you-go pension system was excluded to permit a fair comparison with countries that did not reform their pension systems into a fully-funded, private scheme. Including the recognition bonds issued in the early 1980s, Chile's total public debt represented about 40 percent of GDP in 2004.

for public-sector operations with corrections on these issues, comparisons with previous data was made more difficult. The public debt shown in IMF reports accounts for the budgetary effect of letters of comfort and other guarantees the Government provides to other public agencies. By doing so, it provides a good estimate of gross and net public debt.

In Trinidad and Tobago, fiscal accounts of the consolidated public sector include figures for the Central Government, public enterprises, and statutory bodies. No contributions on labor income are earmarked for the pension system, which is financed from the Central Government's budget.

Recently, the country introduced an oil stabilization fund (Interim Revenue Stabilization Fund); however, parliamentary approval is still pending. Since 2000, the Government has contributed annually to the Fund.³ According to projected surplus appropriations stated in the 2005 budget, the Fund balance is TT\$4,209 million, slightly more than 5.5 percent of GDP.

The Government has used the windfall of high oil prices to reduce poverty and improve health and education. Unlike the last oil boom, when resources were spent in capital outlays, the plan is to raise current Government expenditures. While increased expenditure is needed in these areas, it is also desirable to assess the efficiency of current expenditures to prevent undue appreciation of the RER and potential misallocation of resources.

Evolution of Fiscal Variables

Table 1-3 highlights the evolution of Trinidad and Tobago's most important fiscal variables (IMF 1999, 2003b, 2005b). Increase in the world price of crude oil—from US\$16.3 per barrel in FY 1998–99 to US\$37.2 per barrel in FY 2003–04—helped to increase fuel revenues from 3.9 to 11.9 percent of GDP over the same period. Growth in fuel revenues to 39 percent of total Government revenues was partially offset by a reduction in non-fuel revenues as a percentage of GDP (from 20.6 percent in FY 1998–99 to 16.1 percent in 2002–03, recovering to 18.4 percent in FY 2003–04).⁴ Thus, the Government used a fraction of the oil boom to lower the private-sector income tax rate or accepted some deterioration in tax compliance.

Price changes and, more recently, growth in quantity cum price have largely accounted for the increase in share of fuel revenues. After having fallen to 22.9 percent in FY 1999–2000, the ratio of current expenditure to GDP reached a new high of 26.9 percent in 2003–04.⁵

³With the exception of 2002.

⁴As a percentage of GDP, non-fuel revenues included goods and services (falling from 7.6 percent in 1998–99 to 6 percent in 2003–04 and non-tax related (4.5 to 3.5 percent).

⁵ The share of transfers in current primary expenditures increased from 7.8 percent of GDP in 1998–99 to 12.3 percent in 2003–04.

, 1996–2004
Operations,
Fiscal
Tobago
and
Trinidad
1-
le

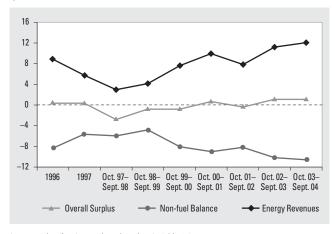
Year (% GDP)	Year	Year (% GDP)			Fiscal Year (Oct.–Sept.) (% GDP)	t.–Sept.) (% G	(DP)		
ltem	1996	1997	1997–98	1998–99	1999–2000	2000–01	2001–02	2002-03	2003-04*
Central Government									
Current Revenue	27.6	25.4	26.5	24.0	24.6	26.1	25.0	27.3	30.4
Тах	23.3	21.3	21.2	19.5	20.9	22.5	20.8	23.9	26.8
Non-tax	4.3	4.1	5.3	4.5	3.7	3.7	4.2	3.4	3.5
Capital Receipts and Grants	0.0	3.7	1.8	0.6	0.1	0.4	0.5	0.0	0.1
Energy Sector	8.9	5.6	3.2	3.9	7.5	9.7	7.9	11.2	11.9
Non-energy Sector	18.7	19.8	23.3	20.6	17.3	16.8	17.6	16.1	18.4
Current Expenditure	25.4	25.8	27.6	24.0	22.9	24.1	24.3	24.6	26.9
Capital Expenditure and Net Lending		3.2	3.3	1.2	2.5	1.8	1.4	1.5	2.2
Primary Balance		-0.4	-1.1	0.0	1.7	2.1	0.7	2.7	3.4
Overall Surplus	0.5	0.1	-2.6	-0.6	-0.6	0.7	-0.2	1.2	1.3
Non-fuel Balance	-8.4	-5.5	-5.8	-4.6	-8.0	0.6–	-8.1	-10.0	-10.7
Net External Financing	n.a.	n.a.	n.a.	2.0	3.3	-1.4	-0.3	0.0	0.0
Net Domestic Financing	n.a.	n.a.	n.a.	-1.4	-2.7	0.7	0.5	-1.2	-1.3
Public Enterprises									
Primary Balance	n.a.	n.a.	n.a.	n.a.	2.8	1.9	-1.1	1.5	3.3
Overall Surplus	n.a.	n.a.	n.a.	n.a.	0.8	-1.1	-2.4	0.6	0.4
Statutory Bodies									
Primary Balance	n.a.	n.a.	n.a.	n.a.	-0.5	-1.1	0.0-	-1.0	-1.2
Overall Surplus	n.a.	n.a.	n.a.	n.a.	-1.7	-0.8	-0.6	0.0-	-1.7
Central Government, Public Enterprises,		and Statutory Bodies	3odies						
Primary Balance	n.a.	n.a.	n.a.	n.a.	4.0	2.9	-1.3	3.2	5.6
Overall Surplus	n.a.	n.a.	n.a.	n.a.	-1.5	-1.2	-3.2	0.9	0.0
WTI Spot Price FOB									
(US\$ per barrel)	22.11	20.6	16.2	16.3	28.5	28.8	24.2	30.4	37.2
Fiscal GDP (millions of TT\$)	34,586.60	35,870.80	37,516.50	41,683.10	49,250.30	54,098.10	55,276.00	63,467.60	70,450.60
Sources: Ministry of Finance, Central Bank of Trinidad		and Tobago, and IMF (2005a)	a).						

* Central Bank of Trinidad and Tobago estimates.

Copyright © by the Inter-American Development Bank. All rights reserved. For more information visit our website: www.iadb.org/pub Even so, with the surge in energy receipts, the overall budget deficit of 2.6 percent of GDP (FY 1997-98) was transformed into a 1.3-percent surplus (2003-04). The deficit of statutory bodies increased to 1.7 percent of GDP by 2003-04, while the behavior of public enterprises was more volatile (averaging an overall surplus of 0.5 percent of GDP in the last two fiscal years). With regard to the consolidated public sector, the overall deficit turned into small surpluses in the last two fiscal years. The Government non-fuel deficit increased to about 11 percent of GDP or 17 percent of the non-energy GDP (Figure 1-2).⁶

Measuring the evolution of public expenditures in foreign currency is important to evaluate the risk of introducing excessive pressure on the prices of non-tradables and appreciation of the RER (in most world economies, the public sector is a key consumer of non-tradables).

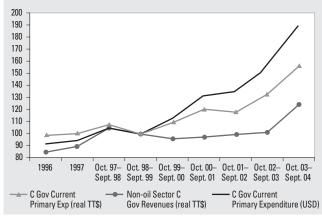
Figure 1-2. Central Government Fiscal Balance (percent of GDP)



Source: Authors' estimates, based on data in Table 1-3.

Figure 1-3. Evolution of Public Expenditure and Non-oil Revenues

(1998 - 99 = 100)



Source: Authors' estimates, based on data in Table 1-3.

Over the last decade, current primary expenditure of the public sector (in dollars) more than doubled, raising concerns about another episode of Dutch disease. Since 1996, primary expenditures have outpaced the increase in non-fuel revenues (a 55 percent, versus 20 percent, increase in real terms) (Figure 1-3).

⁶ Figures in Table 1-3 are expressed as fractions of total GDP; over a five-year period, share of non-fuel GDP declined from 73 percent to less than 60 percent.

The recent oil windfall has allowed the Government to reduce net public debt by about 10 percent of GDP. Gross public debt oscillated within a range close to 55 percent of GDP (peaking at 59 percent in 2000–02 and falling to 52.7 percent in 2003–04). According to the IMF (2005b), it is expected to decrease to about 47 percent by 2005. At the same time, the Government has accumulated international reserves and public-sector deposits in the financial system.

To manage its fiscal policy effectively, the Government of Trinidad and Tobago, like the governments of other oil-rich economies, must address four key issues. First, it must consider what instruments to use to reduce volatility of output and employment caused by fluctuation in commodity prices (e.g., a well-designed oil stabilization fund). Second, it must determine a prudent level for public debt to reach. Third, it must decide what taxes to use to capture the rent of oil and natural gas. Finally, it must recognize the importance of budgetary institutions since lack of transparency would jeopardize achieving fiscal-policy targets.

Managing the Oil Boom: Policy Design Decisions

The Revenue Stabilization Fund (RSF), created in 1999–2000, is structured such that deposits and withdrawals are made when fuel revenues differ by more than 10 percent of the quarterly projected budget, for 60 percent of the difference. Since FY 2001, transfers have been made to the interim RSF (with the exception of FY 2002). The total RSF balance of TT\$4,209 million (US\$648 million), invested by the Central Bank of Trinidad and Tobago (CBTT), currently represents about 20 percent of total reserves.

In its recent re-evaluation of RSF provisions, the Government expressed this view: "Consistent with transfers to the Fund, withdrawals should be the lesser of 60 percent of the deficit of petroleum taxation revenues and 25 percent of the opening balance of the Fund." Detailed design of the Fund is still under discussion; to date, the official position on its objective—whether it should be a mechanism for intergenerational smoothing or placing fiscal planning on a predictable base—has not been decided. Even if designed as a fiscal smoothing device, the Fund's size is small (only about 5.5 percent of GDP) to buffer unexpected changes that may affect the non-fuel sector.

Fiscal Stabilization versus Future Wealth

Fiscal stabilization funds are becoming more pervasive. Their main objective is to reduce the effect of volatility in government revenues on government expenditures. For example, most U.S. state governments adopted fiscal funds because constitutional mandates for balanced budgets forced them to reduce expenditures or raise taxes precisely when their economies were in recession.

For economies rich in natural resources, fiscal stabilization funds have been created to offset volatility caused by changes in commodity prices. When prices are high, the government saves all or part of the surplus revenue so that it is available to finance public expenditures in years of depressed prices. This is the underlying rationale of Chile's Copper Fund and similar funds in other fuel-producing countries.⁷

Other funds, such as the Norwegian Oil Fund, also save a portion of production proceeds for future generations (Bergo 2003). Following the rationale of consuming according to one's permanent income, the country's oil wealth is estimated, and the Government has a non-oil deficit equivalent to the real interest rate multiplied by oil wealth. By doing so, it can spend more than it collects through taxation on non-oil activities for an amount that allows it to maintain constant wealth in real terms. Thus, current and future generations are ensured of enjoying income from oil wealth. According to Bergo (2003), Deputy Governor of Norges Bank, which is responsible for Fund administration, the idea is to diversify oil risk by converting the proceeds into financial assets that give the country a higher rate of return than would a single-asset investment and allow future generations to achieve the consumption level of the current one, given the challenges of an aging population.

The Norwegian Ministry of Finance gives Norges Bank directives so as to maximize returns. The annual Fund target is 4 percent real return; however, it is subject to constraints that limit risk. All oil revenues are deposited into the Fund each year (net of Government-financed oil investments); in return, the Government receives a reverse transfer equivalent to the real return calculated on the oil wealth.⁸ Another feature is that Fund assets are saved abroad to reduce the effect of fluctuations in the price of crude oil on the domestic economy (e.g., the mitigation of Dutch disease). The Fund cannot be used as collateral for Government or private borrowing, which would undo longer-term, countercyclical objectives.

The IMF has suggested that the Norwegian Fund is a good benchmark for designing the Trinidad and Tobago RSF. While the Government of Trinidad and Tobago agrees on the Fund's fiscal stabilization role, no consensus has been reached on having a non-fuel deficit consistent with maintaining constant fuel wealth. Over the longer term,⁹ the Government targets a non-fuel deficit of about 8–10 percent of GDP, while the IMF estimates that it can be no more than half of the Government target to avoid a reduction in fuel wealth.

⁷ Chile has other fiscal rules to ensure macroeconomic consistency throughout its economic cycle. Its Government is supposed to achieve a structural surplus of 1 percent of GDP; however, the fiscal position may differ from this structural target due to cyclical fluctuations. The Copper Fund is integrated into the long-term fiscal rule to cushion the effect of price fluctuations on fiscal revenues. Although unlikely, it might be possible for flows to accumulate in the Copper Fund when resource prices are high and, at the same time, have a fiscal deficit if the output gap is created by other external shocks. European countries have similar fiscal targets, based on a long-term, sustainable fiscal policy.

⁸ The Norwegian Fund is expected to grow from 50 percent of GDP in 2000 to 120 percent by 2012, falling to about 100 percent by 2050; over most of the period, the expected non-fuel deficit is about 4 percent of GDP.
⁹ See Vision 2020.

Saving When Public Debt Is High

Saving for the future is a rationale strategy when public debt is at sustainable ratios. In the case of Trinidad and Tobago, gross public debt stands at about 50 percent of GDP, while net debt is about 30 percent of GDP (when international reserves are netted out from gross debt). This ratio is below the ceiling of 60-percent of GDP agreed on by European countries under the Maastricht Treaty. However, for developing countries, a reasonable ceiling would be about half of that amount (Artana, López Murphy, and Navajas 2003; Reinhart, Rogoff, and Savastano 2003). This rule would reflect the narrowness of domestic capital markets, higher interest rates,¹⁰ and lower revenue share in relation to GDP.¹¹ It would reinforce pressure to increase public savings and therefore weaken the vulnerability associated with a fragile fiscal position. It would also help to avoid an exaggerated expansion of current expenditures and private consumption, which, in turn, would reinforce private savings.

In this context, it may pay the Government of Trinidad and Tobago to use surplus fuel revenue to reduce debt, similar to what Russia did during the early 2000s.¹² According to Vision 2020, the Government wants to reduce public debt with windfall revenues not earmarked for the RSF. This appears to be a balanced decision, given the country's starting point of relatively high debt and the need to smooth volatile fuel revenues. The problem is that calculating the windfall takes the budget's projected price of crude oil, which may be set at a high level, as the reference. In fact, during 2002, when the average price of crude oil was US\$24.2 per barrel—about 10 percent higher than the average of the last decade—no contributions were made to the RSF. However, over the last two years, a prudent policy of setting budgeted oil revenue prices below market prices made additional transfers to the interim RSF possible.¹³

¹⁰ From the late 1990s until 2002, the prime lending rate remained consistently above 15 percent, with inflation rates averaging 4.3 percent and the nominal implicit interest rate for public debt averaging about 11.6 percent. In FYs 2002–03 and 2003–04, the prime rate and inflation declined to 9 and 3.6 percent, respectively, while the implicit rate for Government debt averaged 11.6 percent (Table 1-6).

¹¹ For European countries, the ceiling of 60 percent of GDP, expressed as a fraction of government revenue, equals 150 percent; this figure is similar to the debt-to-sales ratio used widely for private companies. Considering Trinidad and Tobago's Government revenues of about 30 percent of GDP, a debt ceiling of 150 percent of revenues would yield a reasonable debt-to-GDP ratio of 45 percent. The rule-of-thumb ratio of 30 percent takes into account a higher liquidity risk.

¹² Only now that its ratio of public debt to GDP is headed to below 25 percent of GDP is Russia ready to introduce an oil fund. However, Russia's case is unique. It decided to regain the reputation it lost after the 1998 default; building resources in an oil fund probably sent a less powerful signal than repaying the debt with surplus oil revenue.

¹³ The FY 2004–05 budget set an oil price for estimating revenue at US\$32.80 per barrel.

Using Oil Wealth Wisely

The Government of Trinidad and Tobago believes it must invest the country's fuel wealth to ease the creation of a knowledge-based society. This implies that part of the country's fuel wealth should be spent, rather than saved, for future generations.¹⁴ The Government rationalizes that Norway, unlike Trinidad and Tobago, is a high-income country with an aging population. In that case, having a non-oil deficit equal to the real interest yield on oil wealth (which maintains constant real oil wealth indefinitely) is easier to understand.

Because Trinidad and Tobago's aging problem lies far into the future, it is tempting to use part of the country's fuel wealth to develop the growth potential and abilities of its citizens. Yet such thinking carries several risks. First, spending in current expenditures probably carries the same risk of creating Dutch disease as spending in capital outlays. Episodic changes in the value of the RER, associated with increases in world-market prices of crude oil, also increase the equilibrium exchange rate (Figure 1-4).¹⁵ Current levels suggest some appreciation of the RER measured against the prevailing rate of the 1990s. Depreciation since 2002 is mainly attributable to the fall of the U.S. dollar, to which Trinidad and Tobago's currency has been pegged since 1997.¹⁶ To avoid the Dutch disease, fuel revenues need to be saved abroad (matching the additional foreign exchange supply with an additional foreign exchange demand).

Second, investing part of Trinidad and Tobago's fuel wealth today assumes that the social rate of return of government outlays is higher than what could be achieved in a well-

¹⁴ The IMF (2003b) estimates Trinidad and Tobago's fuel wealth as the present discounted value of future Government revenues of crude oil and natural gas. In the base case, the IMF uses only proven reserves, based on Ministry of Energy projections, and assumes a constant price of crude oil in real terms. If the discounted real rate were 3.5 percent per year, fuel wealth would amount to US\$8,623 million (2002), equivalent to 85 percent of GDP or about 110 percent of non-fuel GDP. With proven reserves of crude oil (825 million barrels) and natural gas (20.758 billion cubic feet), the estimated value of fuel wealth appears conservative, even before adjusting prices after the increase observed after 2003 and increased reserves.

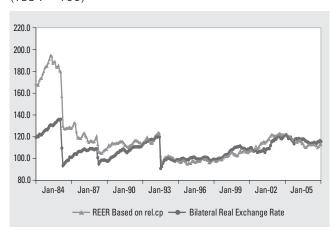
The authors could not obtain information on the value of reserves sold between private parties; however, if one assumes wellhead prices of US\$1 per million BTU of natural gas and a price of US\$25 per barrel of crude oil for 2003, the value of Trinidad and Tobago reserves at market prices would be US\$41 billion. Considering that reserves are traditionally sold in the U.S. at about 30 percent of the wellhead price, Trinidad and Tobago's oil wealth would equal about US\$12 billion. In 2003, Potash Corporation estimated the country's gas cost at US\$1 per million BTU, which is consistent with the market price of ammonia (US\$100 per ton). After Venezuela, this is the cheapest price; it is competitive with U.S. producers if the domestic price of natural gas in the U.S. is about US\$1.50 per million BTU (about 25 percent of U.S. market prices at that time).

¹⁵ The simple correlation coefficient between both series of the RER and the WTI price for the period January 1986 to March 2005 is about 0.5. The IMF (2005b) estimates that the equilibrium real effective exchange rate (EREER) has been steadily increasing since the late 1990s, pointing to further pressure to appreciate the currency.

¹⁶ The IMF (2003b) notes clear problems in overestimating Trinidad and Tobago's CPI, which may justify the conclusion of no serious problem of overvalued currency. However, it is unclear whether problems of overvaluation have increased in recent years.

diversified portfolio. Revenue administration of previous oil booms is discouraging.¹⁷ Although the current idea is to finance public outlays in investments in human capital, which may be less exposed to inefficiencies, the Government would need to evaluate this decision carefully. For example, evidence from cross-country growth studies suggests that quality of education, not the amounts spent on it, is what is important for growth. Social project evaluation techniques can be applied to public out-





Source: Authors' estimates, based on International Financial Statistics (IMF). Note: The Bilateral Real Exchange Rate (BRER) is the nominal exchange rate adjusted by PPI inflation of the U.S. and CPI inflation of Trinidad and Tobago; its increase implies an appreciation of the RER. The Real Effective Exchange Rate (REER) is a trade-weighted exchange rate calculated by the IMF.

lays in current expenditures to approximate the social rate of return on these expenditures, compared to other alternatives for the use of extra revenues.

Third, from a financial strategy perspective, investing part of fuel wealth today does not diversify risk, which could negatively affect the portfolio's return.

The Government has emphasized that today's oil boom is less risky than those of the past because of the country's efforts to diversify its production base. However, diversification into petrochemical products and LNG is not enough hedge to offset fluctuations in the price of crude oil. The Government forecasts a growing share of LNG, methanol, and ammonia. Since 2003, the proportion of refined products (LPG and LNG) has increased to 50 percent of total merchandise exports. As Table 1-4 shows, there is no negative price correlation between pairs for key commodity exports, suggesting little room for diversification of price risk;¹⁸ in fact, prices appear highly correlated. This lack of hedging is even more acute for government revenues. The bulk of the country's fuel revenues are derived from corporate and withholding taxes paid by producers of natural gas and crude oil and its manufacturers and a smaller fraction from royalties, which are a fraction of the value of upstream production. Therefore, government revenues obtained from producers of natural

¹⁷ The money was used to finance public investments, which turned out to be poor decisions in general.

¹⁸ If the return of two assets has a correlation coefficient of -1, there is a perfect risk hedge; that is, a portfolio with both assets has a safe return. In the text exercise, the assets are each commodity and their return is the change in prices.

Correlation	Ammonia	Methanol	Natural Gas	Propane, mb	Propane, mp	WTI	Steel
Ammonia	1.00	0.52	0.52	0.67	0.71	0.53	0.61
Methanol		1.00	0.83	0.68	0.71	0.69	0.47
Natural Gas			1.00	0.87	0.85	0.85	0.45
Propane, mb				1.00	0.96	0.94	0.63
Propane, mp					1.00	0.88	0.56
WTI						1.00	0.60
Steel							1.00

Table 1-4. Correlation Coefficients for Selected Commodities

Sources: U.S. Department of Energy and Central Bank of Trinidad and Tobago. Note: Quarterly figures from I 1994 to I 2004.

gas and petroleum should be highly correlated with the international price of crude oil and the wellhead price for natural gas. Given the high positive price correlations of upstream and downstream products in the most relevant markets for Trinidad and Tobago's products, it is highly likely that profits from these stages of the production process will move closely with the price of crude oil or natural gas. Although insufficient information is available to test this hypothesis, it would be surprising to discover that profits move countercyclical to upstream prices, given the correlation coefficients shown in Table 1-4.

Deciding how to use the surplus revenues that an oil boom generates depends on a government's medium-term targets, as well as the country's urgent, short-term needs and characteristics of its economy. One major decision is whether to consume a higher fraction of oil wealth in the current generation. For example, a developed country like Norway decided not to do that, granting current and future citizens the possibility of financing the same non-oil deficit as a fraction of the country's GDP.

Many countries with enormous oil wealth have a greater rationale for spending part of their oil boom today; however, this is not the case for Trinidad and Tobago. Even if the country decides to spend more on the current generation, the Government should practice prudence in its decision-making because oil-wealth estimates vary widely, depending on assumptions about future prices and discount rates.

Trinidad and Tobago may consider various alternatives, as follows:19

• *Increase current expenditures* (e.g., higher public-sector wages or transfers to public or private firms). This is the worst alternative because it maximizes Dutch disease and lacks any professional evaluation of the social return of these spending decisions.

¹⁹ The authors wish to thank Vito Tanzi for suggesting this helpful taxonomy.

- Use part of the oil windfall to reduce poverty. This alternative demands a careful evaluation of projects and design of a compatible incentive system so that poverty alleviation does not discourage job creation. The cost of these expenditures potentially favors a Dutch-disease phenomenon, which would be difficult to resolve through other government policies.
- Reduce the tax burden to non-oil activities. This supply-side response has some justification in countries with heavy tax burdens; however, this is not the case in Trinidad and Tobago (although the Government has used part of the extra oil revenues to reduce non-oil revenues). Even if this decision has a consensus, the Government must be careful in its implementation. That is, it is best to reduce tax rates rather than weaken tax administration or grant incentives. Lower tax rates favor formal activities that have a higher productivity than informal activities or sectors or firms favored by tax breaks. Moreover, lower tax rates are easy to reverse if oil revenues end up lower than expected. Some evidence suggests that the decline in tax revenues observed in Trinidad and Tobago has more to do with a deterioration of tax administration than lower tax rates, although income taxes were reduced during the 1990s. Finally, lower private-sector tax revenues are not as serious as higher government expenditures for Dutch disease because the privatesector composition of spending is less biased toward non-tradables; however, a reduction in taxes to non-fuel activities increases the fragility of the fiscal position, given that fuel revenues are based on limited natural resources.
- *Build badly needed infrastructure.* Careful project evaluation might reveal that infrastructure strengthening is a good alternative to stimulate growth. However, Trinidad and Tobago has good-quality infrastructure compared to other countries in the region.
- *Reduce public debt.* This alternative is good when debt is relatively high and pays a premium over developed-country bonds higher than 150 basic points (the target agreed on by European countries under the Maastricht Treaty). By the early 2000s, with a BB rating (S&P recently upgraded Trinidad and Tobago's foreign currency debt to the A– level), a relatively high debt burden, and a higher spread than the European target, reducing public debt was—and still should be—a priority alternative for Trinidad and Tobago.²⁰ A successful strategy would reduce Government borrowing costs, the fiscal deficit, and real interest rates for the private sector through lower borrowing in domestic capital markets and lower sovereign rates (currently a floor for private-sector borrowing costs).

²⁰When countries suffer a confidence crisis, gross public debt is the relevant variable to watch because government assets (e.g., reserves or public deposits) tend to vanish quickly. The authors wish to thank Liliana Rojas-Suárez for this comment.

• *Reduce the fiscal deficit.* This alternative is especially recommended for countries with high deficits. Although the overall result has turned strongly positive for the Government of Trinidad and Tobago since FY 2002–03, certain public enterprises and statutory bodies show losses of 1.7 percent of GDP.

Lessons in Fund Design

In its criticism of Trinidad and Tobago's RSF design, the IMF (2003b) argues that:

- RSF deposits occur when fuel revenues exceed budgeted revenues, which are based on a discretionary reference price. In this context, two-thirds of windfall revenues should be earmarked for the RSF, while the other one-third, in principle, should be used to reduce public debt. Withdrawals are also rigid: either 60 percent of the deficit of the estimated fuel revenues or 25 percent of the opening Fund balance, whichever is less.
- Withdrawals, which are authorized by the Ministry of Finance, are not subject to parliamentary approval.
- The RSF does not guarantee a countercyclical fiscal policy.
- There is no explicit prohibition to using the RSF balance as collateral in loan operations.
- Reports are annual (with no intra-year reporting) and are not publicly available, and auditing is controlled by the auditor general, not independent auditors.

Norway's oil fund addresses both targets: smooth spreading of oil wealth across generations and a countercyclical fiscal policy. To accomplish the first target, all oil revenues (less public investment in oil activities) are deposited into the fund, which is invested mostly in foreign financial assets. The non-oil deficit has a ceiling of a real return on the value of the oil wealth; however, this rule also makes it possible to achieve the second target by eliminating the effect of crude oil price fluctuations because fund transfers to the Government (and economy) are based on a long-term real return independent of the short-term international price. According to Bergo (2003), a rise of US\$3 per barrel in the price of crude oil increases the Government's cash flow substantially (about 2 percent of the country's GDP). Transparency and protection from political manipulation are also clear concerns.²¹ In addition, there is a clear mandate to diversify risk by using rules that attempt to achieve a portfolio balance of equities and fixed income and reduce interest-rate risk.

²¹ Parliament must approve appropriations; in addition, the fund cannot be used as collateral for extending credit to the public or private sector to reduce the risk of reversing the countercyclical decision to save the oil wealth in a fund by obtaining loans guaranteed by it.

In less developed countries, the emphasis has been on improving transparency (e.g., by including members of civil society on boards that administer oil funds) and protecting oil funds from political manipulation. To date, the record has not been impressive; many episodes suggest that money has been spent to finance public projects in the oil industry or other government needs (Welch 2002).

Improving RSF Design

A reasonable medium-term target for Trinidad and Tobago is to save all fuel revenues in the RSF, invest these funds abroad, and make a reverse transfer to finance a non-fuel deficit equivalent to the real return on the value of the fuel wealth. Achieving this target will demand a moderate fiscal tightening of 2–3 percent of GDP and a rule to calculate fuel wealth based on the present value of future energy revenues that will accrue to the Government. By doing so, the Government would also spread wealth to future generations and avoid the effect of volatile fuel prices on the economy and its revenues. Fuel wealth would be adjusted automatically as new reserves are added, in which case a higher fuel deficit could be financed.

Over the next decade, the Government may attempt to use part of the country's fuel wealth to accomplish two goals: 1) reduce gross public debt to about 30 percent of GDP and 2) foster growth. With regard to the second target, several points must be considered. On the one hand, even high-yield investments (in public investment or human capital) financed from fuel wealth create pressure to appreciate the RER, which discourages tradable activities; only saving abroad avoids Dutch disease. On the other hand, spending part of the fuel wealth requires careful evaluation of alternative investments using social project evaluation; currently, such evaluations are not carried out for all projects. Modern evaluation techniques for social projects make it possible to measure social rates of return on both public and human-capital investments. For a medium-income country like Trinidad and Tobago, with high government involvement in the economy, there is less need for public intervention to initiate a virtuous growth circle. Prudent public policy will suffice by creating an atmosphere that attracts private investment and permits the achievement of high total-factor productivity gains and, at the same time, corrects traditional market failures (public goods and externalities, antitrust policy, and income distribution).

If the Government decides to allocate a larger share of fuel wealth to the current generation by running a higher non-fuel deficit, the RSF will play only a countercyclical role. If this were to occur, it would be better to independently evaluate how to fix the budget reference price.²² Chile's copper fund is an example, but it assumes that the international price of copper tends to revert to the mean of the series, which the data does not clearly establish.

²² Even benevolent governments have clear incentives for setting a price too high, for it always maximizes consumption of the asset (by weakening the budget constraint).

Thus, it would be advisable for Trinidad and Tobago to:

- Request an independent group of experts to study the behavior of the international price of crude oil and the wellhead price of natural gas in the United States (the most relevant market for the country's natural-gas byproducts) to determine the long-term target price for both products (this study should be updated every two or three years).
- Establish, in the RSF legal framework, that two-thirds of surplus revenues compared to target prices be deposited into the Fund (with no exceptions), and the other one-third deposited in either the Fund or used to reduce public debt.
- Establish that the RSF may only be used when actual prices are below target prices and Parliament approves Fund appropriation.
- Stop Fund withdrawals when fuel revenues return to normal level (after this period, deposits of surplus revenues for prices higher than the reference prices start).

A clear mandate should be established on how to invest the RSF. If it is used only as a countercyclical fund, its resources should be invested in safer, shorter-term assets, given that, during periods of fuel busts, it is likely that other sources of liquidity may be scarce. In addition, a limit should be set on how much can be deposited into it. Over the past decade (1995–2004), fuel revenues have averaged 7.7 percent of GDP; during 1997–99, the maximum cumulative reduction compared to this average was 10.4 percent of GDP. Thus, if the Government had wished to maintain constant fuel revenues throughout the decade, it would have needed to accumulate about 10 percent of GDP—a reasonable medium-term Fund target—before the three-year period of low fuel revenues. Moreover, Fund administration could be made public every quarter, and members of civil society could be advisors to the board that administers the Fund, thereby enhancing accountability. Finally, the Fund should never be used as collateral for any loan operation of the Government or private sector.

Public Debt Sustainability

Although Trinidad and Tobago's public debt is higher than that of other emerging economies, it has declined about 13 percent since 2001–02 (Table 1-5). This conclusion holds even when Central Bank reserves and public-sector deposits are netted out from gross public debt. In FY 2003–04, total gross public-sector debt declined to 52.7 percent of GDP (about 1.7 times total tax revenues); in 2005, it was expected to fall another 5.7 percent.

Domestic debt accounts for two-thirds of total public debt, with public enterprises using the domestic market more (Table 1-6). About 35 percent of external debt (11 percent of total public debt) is owed to multilateral and bilateral agencies or governments. Average interest rates (calculated by dividing the amount of interest paid by the stock of outstand-

(percent)	Gross Debt/Fiscal	Net Debt (1)/Fiscal	Net Debt (2)/Fiscal	Gross Debt/	Net Debt
Country	Revenue	Revenue ¹	Revenue ²	GDP	(1)/GDP ¹
Argentina	294.0	236.0	52.0	73.6	59.1
Azerbaijan	85.9	37.8	29.9	20.1	8.9
Bolivia	295.2	256.6	230.4	73.8	64.2
Chile	54.3	-26.3	-26.3	11.9	-5.8
Colombia	167.4	125.0	117.3	52.9	39.5
Costa Rica	229.1	189.4	194.1	52.0	43.0
Czech Republic	69.2	1.3	-11.9	26.5	0.5
Hungary	134.8	101.4	97.1	60.8	45.8
Iceland	121.4	104.8	95.0	36.0	31.1
Ireland	101.5	98.6	83.8	33.5	32.5
Israel	288.4	225.8	180.0	107.0	83.8
Jamaica	484.3	416.3	325.7	144.8	124.5
Korea, Republic of	92.4	-14.8	-29.0	22.0	-3.5
Malaysia	183.7	32.7	-26.7	68.3	12.2
Mauritius	160.0	20.1	19.6	27.7	3.5
Mexico	67.4	26.5	17.6	15.3	6.0
Norway	62.5	-20.4	29.9	44.9	-14.6
Poland	131.4	93.9	82.2	50.2	35.9
Russian Federation	73.2	26.7	15.7	26.8	9.8
Singapore	514.0	9.8	-258.7	106.4	2.0
Slovenia	70.7	6.2	-6.1	29.5	2.6
Trinidad and Tobago	173.2	92.6	75.6	52.7	28.2
Turkey	306.0	276.0	267.0	80.0	65.0

Table 1-5.	Public Debt in Selected Emerging Economies
(percent)	

Sources: Article IV reports, International Financial Statistics, and World Economic Outlook (IMF).

Note: Figures include subnational governments in federal countries; in most cases, figures are for 2004.

¹ Net Debt (1) = Gross debt less Central Bank foreign reserves.

² Net Debt (2) = Gross debt less Central Bank reserves and deposits and State enterprises.

ing debt) are higher in the domestic market, despite decline in recent years. External debt contracted at maturities of less than one year is virtually zero.

In assessing public-debt sustainability, it is easy to estimate the primary surplus needed to maintain a constant ratio of public debt to GDP over time. However, international benchmarking suggests that Trinidad and Tobago's public debt must be reduced as a fraction of the economy's size. If the ratio of actual public debt could be maintained indefinitely, the required primary surplus, as a fraction of GDP, would be:²³

²³ Edwards (2002) derives equations for the required primary surplus, similar to equation (1), and dynamics from year 1 until a steady state is reached.

			Fiscal Year	(Oct.–Sept.)		
Item	1998–99	1999–2000	2000–01	2001–02	2002–03	2003–04
Gross Public-Sector Debt	23,394	26,792	29,758	32,794	35,491	37,125
Central Government Debt	18,390	20,749	20,044	20,637	21,461	21,842
Domestic	9,105	9,917	10,313	10,845	10,457	11,398
Foreign	9,285	10,833	9,731	9,792	9,938	9,444
BOLTS and Leases	_		—		1,066	1,000
Public Enterprises and						
Statutory Bodies	5,004	6,043	9,714	12,157	14,030	15,283
Guaranteed	4,965	5,747	9,020	9,827	10,706	10,823
Letters of Comfort	39	296	694	2,330	3,324	4,460
Central Government						
Interest Payments	1,986.2	2,520.3	2,382.7	2,409.0	2,591.9	2,194.0
Domestic	1,271.9	1,680.9	1,565.7	1,585.7	1,834.3	1,593.6
Foreign	714.3	839.4	817.0	823.3	757.6	600.4
Central Government						
Average Interest						
(% of Debt Stock)	10.8	12.1	11.9	11.7	12.7	10.5
Domestic Debt	14.0	16.9	15.2	14.6	17.5	14.0
Foreign Debt	7.7	7.7	8.4	8.4	7.6	6.4

Table 1-6. Composition of Public-Sector Debt (millions of \$TT)

Source: Foundation for Latin American Economic Research (FIEL).

(1)
$$ps = [d/(1 + g + p^*)] [rc dc + r dd - (g + p^*)] - (g + p) b$$

where

ps = primary surplus as a fraction of GDP

d = total public debt as a fraction of GDP

g = real growth rate

 p^* = international inflation rate

rc = interest rate on external debt (in US\$)

dc = external debt as a fraction of total public debt

r = domestic interest rate (expressed in US\$ to ease computations)

dd = domestic debt as a fraction of total public debt

p = domestic inflation rate

b = monetary base as a fraction of GDP

Obviously, dc + dd = 1; for simplicity, it is assumed that all debt has been issued in foreign currency. The required primary surplus is reduced to account for the optimal infla-

tion tax and seignorage (g + p) b. It grows as the difference between the weighted average interest rate and growth of the nominal GDP (both measured in foreign currency) increases.

Interest Rate (on Domestic D		Annual Growth (%)	
(\$TT)	3.20	4.30	5.40
8	0.11	-0.49	-1.09
10	0.76	0.15	-0.45
12	1.40	0.79	0.18

Table 1-7. Primary Surplus Required to MaintainPublic Debt Constant at 47 Percent of GDP

Table 1-7 simulates the primary surplus required, which assumes that external debt can be maintained at 13

Source: Authors' estimates.

percent of GDP. If the country can grow steadily at 4.3 percent per year in real terms (6.3 percent in US\$, assuming 2 percent international inflation) and the annual nominal interest rate on domestic debt is 10 percent in TT\$ (a weighted average cost for overall public debt of 8 percent in US\$, similar to 2005 IMF projections), then the country needs a consolidated primary surplus of 0.2 percent of GDP to maintain the public debt constant as a fraction of GDP. It follows that one point change in the expected GDP growth rate modifies the required primary surplus in the steady state by about 0.6 percent of GDP, while a reduction of 100 basic points in the domestic interest rate faced by the Government requires a primary surplus about 0.3 percent of GDP lower.

If Trinidad and Tobago could maintain a public debt to GDP ratio of 47 percent over the long term (projected by the IMF for 2004), the consolidated primary surplus of about 5.6 percent of GDP expected for 2004 would be in excess of what is necessary to achieve long-term fiscal sustainability (Table 1-7). However, traditional simulations of public-debt sustainability are intended for countries that must maintain the public debt to GDP ratio constant. Unfortunately, this might not be the case for Trinidad and Tobago. The need to gradually reduce the public-debt ratio must be considered when a country's economic policy is designed. Obviously, the final target of primary surplus for any year depends on many variables; however, policymakers should remain biased toward fiscal prudence, especially when privatization is not expected as a key source of extraordinary revenues (Box 1-2).

As Figure 1-5 shows, the path of total public debt varies significantly, despite small changes in key variables. For example, if Trinidad and Tobago can maintain a primary surplus of 4 percent of GDP, GDP grows 4.3 percent annually on average, and the interest on domestic debt is equivalent to 9 percent (in US\$), then the debt ratio declines rapidly to negative numbers by 2020. On the contrary, a primary surplus of 3 percent of GDP, combined with long-term growth of 3.2 percent, results in a public debt of about 25 percent of GDP by the same year.

Box 1-2. Divestiture at a Glance

Trinidad and Tobago's divestiture program aims at limiting the State's intervention to such strategic areas as crude oil and gas and providing social services. The program's three major components are 1) restructuring of deficit-making companies (e.g., the sugar company Caroni^{*}), 2) selling of shares, and 3) isolated privatizations.

By the mid-1990s, divestment operations had gained in magnitude, subsequently losing momentum until a new wave was announced in 2002. Since 1998, the main operations have been two public offerings of shares of National Enterprises Limited (February 2001 and September 2002), totaling \$TT 450 million (averaging 0.4 percent of GDP). By late 2004, the Government still had 100 percent ownership of 27 companies, plus indirect ownership of another 38 (including three created through Caroni restructuring).

Despite delays, the program has progressed in several cases—Caroni, Tanteak, and Port Authority of TT. In FY 2002–03, restructuring accounted for less than 0.2 percent of GDP of net transitory fiscal gains, and a one-off rise in public debt (less than 2 percent of GDP). In the near future, the entire process will likely account for a minor fraction of the Government's total net revenues.

* Caroni's restructuring may serve as a benchmark for the future operations of other State firms.

In sum, while high public debt appears sustainable, macroeconomic uncertainties and intrinsic economic vulnerability suggest that saving the oil windfall through a strong primary surplus is a prudent policy. Moreover, the Government must carefully decide between reducing debt and increasing spending, especially if efficiency considerations have not been resolved first.

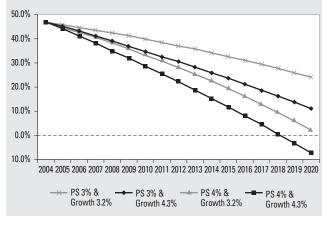


Figure 1-5. Public Debt Scenarios

Source: Authors' estimates.

Energy Taxation

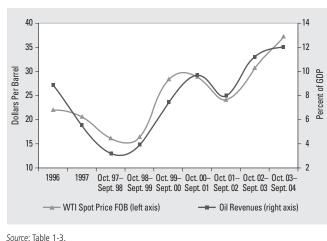
In Trinidad and Tobago, energy taxation is complex, based on production and income taxes charged on the various stages of production (upstream, refining, and marketing). Taxation on crude oil is higher than on natural gas. Since 1999, corporate and withholding taxes have accounted for more than 60 percent of total fuel revenues (Table 1-3). Royalties, relatively important in the mid-1990s, have lost importance. Therefore, most government intake is based on income, not production, taxes. Despite reliance on income taxation and the grow-

ing importance of natural gas, there is a close relationship between fuel revenues and West Texas Intermediate (WTI) prices (Figure 1-6).

Exploration and Production Licenses

In Trinidad and Tobago, most production is done under exploration and production licenses (EPLs).²⁴ Crudeoil production is subject to a 12.5 percent royalty for offshore activities and 10

Figure 1-6. Evolution of Oil Revenues and WTI Prices



percent for onshore. As most production is obtained offshore, the average royalty is 12 percent, according the Ministry of Finance. Royalties on natural gas are lower (fixed at TT\$0.015 per million cubic feet for onshore activities and TT\$0.02 per million cubic feet for offshore production, less than 0.3 percent of the value of the gas produced). For onisland production, royalties are based on the value of byproducts, less an allowance for refining and handling (9 percent of the value at international prices of refined crude oil byproducts and a variable percentage of the value of 94-octane gasoline for LNG).

Natural-gas and crude-oil producers pay a small impost, earmarked for the Ministry of Energy. Petroleum producers pay an additional 3 percent as a production levy and income taxes. There is a 50-percent tax on profits, an additional 5 percent on profits for unemployment, plus a supplemental petroleum tax (SPT) at a variable rate that depends on the price of crude oil and production location (0–38 percent for onshore activities and 0–45 percent for offshore activities).²⁵ Natural-gas producers pay only income taxes at the standard corporate rate of 35 percent. It is evident that taxation of natural gas is lighter than taxation of petroleum. The Government can do little to change it because existing fuel contracts are protected by tax stability; in the case of natural gas, any change in royalties is passed on to the public gas company.

 $^{^{24}}$ In 2002, EPLs accounted for about 68 percent of proven reserves of natural gas and about 80 percent of proven reserves of crude oil.

²⁵ The SPT is 0 percent if the price of crude oil is lower than US\$13 per barrel and reaches the maximum rates when the price is higher than or equal to US\$49.51 per barrel.

Production-Sharing Contracts

In the 1990s, production-sharing contracts (PSCs) became more pervasive. As of 2002, there were 16 contracts, with only one in production and five others with discoveries. Private companies bear the risk on non-discovering fuel; however, if they succeed, a fraction of production (known as "cost oil" or "cost gas") is separated to cover investment costs and the rest (known as "profit oil" or "profit gas") is split between the Government and the company, according to shares that vary with the volume produced and prices. The bidding process usually includes four price ranges and five volume ranges, creating 20 rates of sharing, which must be bid and agreed on between the Government and the winning company.

The companies prefer PSCs because they have tax stability in the EPL and the Government share is subject to credit against the income tax of the parent company in the home country. Royalties are only deducted from the income-tax base of Trinidad and Tobago's corporate income tax. The Government also discovered how to reduce a break that favored incumbents in new auctions by expensing dry wells against profits from other fields in EPLs; in PSCs, expensing can be done only for contracts in the same area.

Fiscal Regime and Fuel Activities

Governments of fuel-rich economies tax production of exhaustible resources to capture the economic rent associated with their exhaustibility and the possibility that OPEC may raise crude oil prices above competitive levels. To maximize revenue, governments must work to ensure that: 1) risk is allocated to the contractual party that can better diversify it; 2) economic incentives at the margin are distorted as little as possible; 3) government officials can easily monitor government share; 4) bids are easily comparable so that the government can choose the most suitable offer; 5) risk of expropriation is minimized; and 6) potential collusion among bidders is discouraged. Table 1-8 summarizes the advantages and disadvantages of each form of government intake with regard to these issues.

The tax regime the Government uses in the EPLs, which is based on profit taxes, is exposed to maneuvers to reduce government intake (e.g., thin capitalization strategies to exaggerate interest payments on debt used to finance the investment); while the tax regime used in PSC contracts affects economic incentives at the margin and exposes the Government to price and quantity risk when international companies are in a better position to diversify this risk. Most economists prefer bonus bidding, the method that the U.S. government uses to auction offshore oil leases.²⁶ The Government of Trinidad and Tobago does not use this

²⁶ A government using bonus bidding applies standard income taxes to fuel producers and, in some cases, a fixed royalty, and allocates exploration rights to the firm offering the higher payment of up-front cash. Under a competitive tender, the winning firm offers a bonus equal to the expected economic rent, leaving it with a normal return

			Advantages and [Disadvantages	5	
Instrument	Risk- Sharing ¹	Economic Incentives	Cost Monitoring	Risk of Collusion ²	Comparability of Bids	Risk of Expropriation
Royalty	Government and company share risk.	Reduces incentives to exploit marginal fields; company sees net of royalty price.	Low; volumes are easily monitored, and government has international price reference.	Firms may collude in any variable chosen to select the winner.	Easy	Low; government is a "partner" in the oil venture.
Production Sharing	Government and company share risk.	Reduces incentives to exploit marginal fields; company sees net of government share price.	Low; volumes are easily monitored, and government has international price reference.	Firms may collude in any variable chosen to select the winner.	Easy	Low; government is a "partner" in the oil venture.
Special Profit Taxes	Government and company share risk.	Gives company incentive to exaggerate costs.	Gives company incentive to exaggerate costs.	Firms may collude in any variable chosen to select the winner.	High-cost company may offer a higher profit surtax and win bid over a low- cost company.	Low; government is a "partner" in the oil venture.
Bonus Bidding	Company bears quantity and price risk.	Gives company appropriate incentives.	Low; company has already paid bonus cash upfront.	Firms may collude in any variable chosen to select the winner.	Easy	High; upfront bonus increases the amount of sunk investment.

Table 1-8. Trade-Offs of Instruments to Capture Rent of Exhaustible Resources

Source: Authors' elaboration.

¹ International oil companies are better positioned to diversify risk because they operate in several countries and have fewer restrictions with regard to future markets and other economic activities.

 2 The worst-case scenario is when the variable used to select the winner is neither transparent nor easy to compare among bidders; in this respect, investment plans is the worst variable.

on capital. Empirical evidence for the U.S. suggests that this is exactly what occurred, on average, during several decades of offshore leases (i.e., in some fields, the winning firm paid bonuses only to have dry holes; in others, the up-front bonus turned out to be small compared to the sizes of the discovered reserves). Because of uncertainty about the exact value of each field, a government may end up receiving more than the expected economic rent (known as "winner's course phenomenon" in the auctions literature).

method; some cash bonuses are paid by the companies; however, selection of the winning bid is based on other variables.

For emerging economies, bonus bidding may increase the risk of expropriation because it would mean an additional sunk investment in the country. However, a bonus paid in installments guaranteed by the company can reduce such risk. Another criticism is that bonus bidding is not suitable for handling the sale of exploration leases in areas of low geological knowledge. A political problem may arise if a company that paid a low bonus discovers a huge oil field.²⁷

Resource Revenues and Energy Wealth

In Trinidad and Tobago, the expected size and management of energy taxation is a fundamental source of fiscal revenues and a central element in estimating fiscal sustainability and design of fiscal institutions. The IMF (1999, 2003a, 2003b) has focused on this issue using estimates of expected reserves and rates of extraction, prices, and taxes to estimate fuel revenues and energy wealth that can be used to design the RSF (following a permanent income criteria).

The IMF's analysis and description of the country's energy tax system showed differences in the treatment of crude oil and gas and estimated an implicit total tax burden (expressed as a percentage of the production value) of about 21 percent, including both royalties and income taxes (IMF 1999). The difference between crude oil and natural gas is important since the former not only has a greater tax burden in general but also accounts for nearly all royalty payments from energy (12 percent on average). The royalties for natural gas are extremely low, and revenues come in a different form, given the use of PSCs instead of traditional EPLs.

Investors concerned with the overall tax burden of Trinidad and Tobago and their home countries may view these contracts, which allow a different treatment of expenses, as more attractive. On the other hand, despite being implemented from general guidelines, lack of uniformity of these contract proceedings, combined with the confidentiality of their negotiations, makes it more difficult to estimate fiscal revenues from legal tax rates or royalties.

More recently, the IMF mission used various assumptions to estimate energy wealth from the perspective of public finances (about 86 percent of GDP); it estimated a permanent income flow component that can be used as a benchmark for a target of the non-energy balance. The authors' estimate of such a wealth stock, using updated prices and reserves, concluded a higher estimate of about 200–300 percent of GDP.

²⁷ This problem is usually exaggerated, and there are several counter-arguments: bonus bidding is designed to capture the average economic rent, and companies may be obligated to quickly revert parts of the area under exploration; reversion of deeper rights has been successfully used in Alberta, Canada.

To define sustainable consumption from energy wealth, the IMF (2003b) used the following formula:

$$r \cdot \left[V + \sum_{t=1}^{n} \frac{R_{t}}{(1+r)^{t}} \right]$$
(1)

where the term within brackets is the energy wealth defined as the value of energy revenues at the end of the previous period (V), plus the net present value (NPV) of future revenues discounted at a rate representing the average real return on wealth (r). This rate is also used to estimate sustainable or permanent income. In (1), given that the rate r used is the same, the case of constant and perpetual revenues makes the use of the rate irrelevant (as wealth can be approximated by R/r), and the annuity is simply the expected permanent revenue flow. Obviously, this is not the case in practice; therefore, use of (1) becomes relevant even when one does not adapt it for uncertainty concerning the time horizon of revenues (which depends on addition to reserves and rate of production), as done here. The authors have also considered a less conservative alternative or more favorable scenario where probable (but not possible) reserves are included.

As IMF estimates make clear (2003b), the value of rate r captures an average real rate of return on expected wealth; as such—and to estimate the NPV of wealth (the bracketed term)—it is independent of the actual interest rate faced by the private and public sectors. There is nothing wrong with using this method, particularly for social accounting calculations. However, the resulting value of energy wealth may not be validated by the implied value of wealth in actual private-sector market transactions. If the private sector uses a discounted rate close to the actual cost of capital of a project in Trinidad and Tobago—which will be higher than rate r (IMF 2003b)—the resulting value of wealth implied in actual transactions of reserves will be lower than that estimated in (1).

A final point of the method relates to treatment of the stock of public debt in calculating sustainable consumption, as given in (1). Since the value of (1) defines the sustainable non-energy deficit, including interest expenditures, the rate of interest paid by the public sector on its existing debt is treated as a right-hand side element of the break-even or sustainable rule. Thus,

$$r\left[V + \sum_{t=1}^{n} \frac{R_{t}}{(1+r)^{t}}\right] = (non - energy \ primary \ deficit) + \rho.D$$
(2)

where ρ equals the cost of public-sector capital and D equals stock of public debt. The equation indicates that interest costs or expenditures are included in the definition of sustainable consumption (derived from energy wealth) when it could be netted out in the left-hand side of (2), making the non-energy primary deficit the definition (or the target)

to be matched by sustainable consumption from energy wealth. Following the latter, the treatment of public debt becomes clear as it also compares the rate of discount r and the cost of public-sector capital.

In the calculations performed in Table 1-9, the authors have followed the basic criteria stated in formula (1) and have included assumptions mainly because of data limitations. These estimates should be viewed as a preliminary attempt to check for consistency in estimating Trinidad and Tobago's energy wealth, which will be revisited as more data are included and alternative assumptions updated.

The main elements of the assumptions adopted for estimating Trinidad and Tobago's energy wealth are as follows:

- Until 2008, annual crude oil production was estimated at 140,000 barrels per day, subsequently declining at Government-estimated depletion rates. Using this production path (short-horizon scenario), proven reserves would be exhausted by 2018. In the most optimistic case (long-horizon scenario), which includes probable and surplus reserves from the Billiton field, production could be sustained until 2030. Natural gas production was estimated at 5.6 million cubic feet per day, allowing for the full impact of Atlantic LNG's Train IV. Total gas reserves were estimated at 32 billion cubic feet in the short-horizon scenario, the country could produce natural gas until 2023.
- Prices of crude oil and gas were projected until 2006 using U.S. Department of Energy projections. The import price of natural gas into the U.S. market is taken as a reference or escalator and does not represent the net back value of gas relevant to estimate fiscal revenues in Trinidad and Tobago. Prices of crude oil are expected to decline after that; however, the estimated long-term price is US\$45 per barrel. Natural gas prices follow a similar path.
- The net back price of natural gas was estimated from U.S. prices for this product. It started at US\$1.40 for 2003 (consistent with revenues obtained that year); after that, it is assumed that about 66 percent of the increase in the U.S. price will fully affect the net back price received in Trinidad and Tobago.
- The authors estimated projected values of crude oil and gas production for the different years in the various horizons. Because the exercise started in 2005, the value of V in (1) was representative of that year.
- Initially, the authors used the IMF (2003b) value of crude oil and fiscal gas revenues and then estimated an amount of crude oil revenues (at a rate of 21 percent), leaving gas revenues for that year as a residual and calibrating gas revenues for the future as implicit; that is, a percentage of the value of production (about 17 percent). (They took these steps because they could not obtain information on

Table 1-9. Estimated Energy Tax	Revenue	ax Revenues and Fiscal Revenue Energy Wealth	cal Reven	ue Energ	y Wealth					
Energy Type	2003	2004	2005	2006	2007	2008	2009–11	2012–18	2012-23	2012–30
Oil										
Production (million barrels per day)	136,680	140,000	140,000	140,000	140,000	140,000	130,000	110,000		110,000
Cum % share of proved reserves	9	13	20	26	33	39	58	94		146
Cum % share of P + P reserves	c	Ŀ	8	11	13	16	24	38		61
Price (US\$ per barrel)	26.5	41.4	57.6	64.5	58.8	56.2	48.0	45		45
Production value (millions of US\$)	1,322.0	2,117.8	2,943.2	3,296.0	3,004.8	2,871.8	2,277.6	1,806.8		1,806.8
Fiscal revenues (millions of US\$)	277.6	444.7	618.1	692.1	631.0	603.1	478.3	379.4		379.4
Implicit government take	21	21	21	21	21	21	21	21		21
Gas										
Production (million c ³ ft. per day)	2,594	3,042	3,284	5,584	5,584	5,584	5,584	5,584	5,584	
Cum % share of proved reserves	c	7	10	17	23	30	49	95	167	
Cum % share of P + P reserves	, -	c	S	8	11	15	24	46	81	
Price (US\$ per million BTU)	5.36	5.50	7.89	7.85	7.16	6.84	6.60	6.00	6.00	
Assumed net back value	2.77	2.87	4.54	4.52	4.03	3.81	3.64	3.22	3.22	
Production value (millions of US\$)	2,626.6	3,182.8	5,447.3	9,203.2	8,213.9	7,761.3	7,418.9	6,562.9	6,562.9	
Fiscal revenues (millions of US\$)	971.8	1,177.6	2,015.5	3,405.2	3,039.1	2,871.7	2,745.0	2,428.3	2,428.3	
Implicit government take	37	37	37	37	37	37	37	37	0.37	
Oil and Gas										
Production value (millions of US\$)	3,948.7	5,300.6	8,390.6	12,499.2	11,218.7	10,633.1	9,696.5	8,369.6		
Revenues (millions of US\$)	1,249.5	1,622.4	2,633.6	4,097.4	3,670.2	3,474.8	3,223.3	2,807.7	2,428.3	379.4
Implicit government take	32	31	31	33	33	33	33	34		
Fiscal energy wealth (NPV) at 3.5%	1,048.6	1,567.5	2,633.6	3,958.8	3,426.1	3,134.0	8, 145.0	15,853.2	22,071.5	4,231.6
Total NPV (2005–18)			37,150.7							

Source: Authors' estimates.

Total NPV (2005–18) Total NPV (2019-30)

10,450.0

Copyright © by the Inter-American Development Bank. All rights reserved. For more information visit our website: www.iadb.org/pub actual revenues from crude oil and gas; thus, in this respect, future exercises could be modified.)

- With the stream of revenues, the authors estimated (1) using a reference rate of 3.5 percent as the benchmark (IMF 2003b). For the case of proven reserves only, they estimated wealth at about US\$37 billion (2005) (about 300 percent of GDP). When probable reserves were included, the estimate rose to US\$47 billion.
- When prices are assumed to decline to lower levels, the size of fuel wealth is also smaller. Assuming, from 2008 on, a crude-oil price of US\$40 per barrel and a natural-gas price of US\$5, fuel wealth would decline to about 250 percent of GDP; if prices declined to US\$21 per barrel and US\$ 3.8 per million BTU, wealth would be further reduced to about 200 percent of GDP. Assuming that a well-diversified portfolio yields 3.5 percent per year, the non-fuel deficit may represent 7–10.5 percent of GDP in either scenario.

Fiscal Institutions and Outcomes: Toward Sound Policies

Over the past 15 years, analysis of determinants of fiscal outcomes has focused increasingly on the political and institutional frameworks that determine fiscal policies. Both analytical and empirical studies, as well as policy-oriented evaluations of many countries, have established a firm relationship between fiscal institutions, budgetary procedures, and fiscal outcomes (IMF 2001; Fiess 2002; Poterba 1994, 1996; de Haan, Moessen, and Volkerink 1999; Hallerberg and von Hagen 1999; Poterba and von Hagen 1999). A major part of the analysis has involved characterizing incentive problems in weak institutional settings. When decentralized decision-making lacks appropriate rules or procedures, incentives are created for overspending and deficit bias. This so-called "common pool" approach suggests the need for both institutional and procedural arrangements to constrain or eliminate such incentives. In this regard, explicit fiscal rules and budgetary procedures that help to internalize the costs of budget deficits lead to more efficient fiscal outcomes.

Characterization of Fiscal Institutions

The analysis has introduced several relevant concepts with which to characterize fiscal institutions: fragmentation, centralization, and transparency. Fragmentation occurs when there are many actors in the budgetary process and decision-making diffuses power among them. Centralization of the budgeting process involves institutional provisions conducive or equivalent to partially or fully internalized costs. Transparency implies budget procedures that provide clear information on all aspects of fiscal policy.

These three interrelated dimensions also serve to characterize fiscal policy (Poterba and von Hagen 1999; Alesina and Perotti 1999; Kontopoulos and Perotti 1999). At one extreme,

a too fragmented, unconstrained decision-making process will lead to deficit bias. A move toward centralization to correct the problem can take various forms: 1) limiting the number of actors in the budgeting process, 2) centralizing budgetary authority to a responsible party or so-called "fiscal entrepreneur," and 3) implementing decision-making rules and cooperative budget procedures among relevant participants in fiscal policy and budget determination (i.e., decentralization with constraints on decision-making by rules or procedures).

Transparency is critical when fiscal policy involves centralization.²⁸ In an environment of fragmentation, however, transparency is less important. Budget procedures can be fully transparent and still be seriously biased toward deficits because the fundamental problem involves incentives more so than information (with the qualification that, in too fragmented environments, non-transparent procedures compound incentive problems). Transparency extends beyond full release of information to the public and participants in or evaluators of the policymaking process. Budgets with numerous special accounts or that fail to consolidate all fiscal or public-sector activities into a single bottom-line measure are not transparent per se. Thus, within transparency assessments, it is customary to include the scope for hidden liabilities and the borrowing autonomy of other public agencies.

Evidence from developed countries points to the importance of centralization, through the role of the executive and use of rules. Kontopoulos and Perotti (1999) study the relation between political and procedural factors and ideology in Organisation for Economic Co-operation and Development (OECD) countries. They focus on fragmentation of the budget process, measured by the number of participants involved in deliberations that ultimately determine the budget. They find this dimension, together with political factors and ideology (e.g., orientation of the party in power) an important determinant of outcomes.

Lessons from Other Fiscal Studies

Studies of fiscal institutions and outcomes include additional major lessons:

Effective institutional design of the budget process to reduce spending and deficit bias should promote a comprehensive view of the costs and benefits of public policy. If centralization is followed, objectives of the department or ministry in charge should be general, rather than concerned with partial objectives or sectors. If centralization relies heavily on common agreements, the key is to agree early on in the budget process. Mechanisms to enforce agreement or cooperation should be effective (e.g., punishment for violations, limits on parliamentary

²⁸ Alesina and Perotti (1999) recognize three strategies to increase transparency: legalistic, legislative bodies, and non-governmental or private party.

amendments, and strong monitoring of the treasury in budget implementation to prevent other participants from reneging).

Evaluation of fiscal institutions should consider the entire institutional environment and budget process rather than focus on particular rules. Fiscal institutions, including design of the budgeting process, and other dimensions of the country's constitution, including relative positions of the executive and legislative branches and type of electoral law, are inextricably linked. Budget institutions that work in one constitutional context may fail in others because of incentive or coordination failures (Kennedy and Robbins 2001).²⁹

Legislated fiscal rules and a sound budget institution are not always necessary conditions for successful fiscal consolidation. Frequently, rules become ineffective because of so-called "creative accounting." In certain cases, the fiscal discipline imposed by market mechanisms can be as effective as fiscal rules; however, this requires a well-functioning capital market with widespread use of rating agencies. Such practices are rare in developing countries.

Fiscal rules have different objectives. Certain rules are designed to guarantee inter-temporal fiscal solvency, while others act only as a countercyclical device to reduce volatility of output.³⁰ However, they may pursue other objectives. For example, the Maastricht Treaty signed by European countries probably tried to reduce free-rider behavior by member countries linked by a common currency.

To sum up, many years of aggregate and detailed studies of fiscal policy performance show that sustainable fiscal outcomes depend on quality fiscal institutions to solve incentive problems with overspending, weak revenue collection, and deficit and debt bias. Centralization, combined with a transparent budgetary process, is crucial to improving and sustaining fiscal outcomes. Thus, any evaluation of fiscal institutions in countries where fiscal performance is under stress should first look at this dimension within a general assessment of constitutional design and political and policy procedures. Beyond this general guidance, there is an open debate on the effectiveness of explicit rules that try to constrain outcomes versus design of procedures that constrain decisions. Rules may be preferable when procedures cannot be constrained, and procedural or institutional design may be required when rules cannot be enforced. Whatever the case, the rules-versus-procedure dichotomy should not be exaggerated; rather, it should be read in a complementary manner within a broader view of fiscal and policy institutions and the specificity of the country's fiscal problems and outcomes.

²⁹ See also Alesina and Bayoumi (1996) and Bayoumi and Eichengreen (1995).

³⁰ Talvi and Vegh (2000) show that fiscal policy is more pro-cyclical in LAC than in OECD countries.

Cross-Country Assessments and Case Studies

Several empirical works and policy-oriented case studies have focused on these issues in practice (Poterba and von Hagen 1999). These studies can be separated into cross-country assessments of fiscal outcomes explained by variables selected to approximate fiscal institutions and case studies that focus on specific issues in particular countries. Earlier studies on the relationship between fiscal institutions and outcomes developed summary indexes of fiscal institutions to explain fiscal performance measured as deficits or debt accumulation. For the European Union (EU), von Hagen (1991, 1992) and von Hagen and Harden (1995) found that a comprehensive index of budget institutions significantly affected deficits and debt ratios.

This method was extended to Latin America and the Caribbean (LAC) in studies conducted by the Inter-American Development Bank (IDB). Alesina et al. (1999) developed an index of budgetary institutions in 20 LAC countries for 1980–92 with related primary deficits or surpluses.³¹ Stein, Talvi, and Grisanti (1998) evaluated the interaction between electoral systems, budget institutions (using the previous index for 1990–95), and outcomes of fiscal policies; they went beyond previous attempts in considering the relationship between public debt and GDP (or fiscal revenues) and degree of pro-cyclicality of fiscal policy and government size. Both studies reinforce the idea that fiscal institutions matter for fiscal performance, although the method is problematic with regard to the assumed substitutability among index components, limited capacity to capture country specificities, and use of primary deficit or surplus that neglects debt-ratio dynamics (Alesina et al. 1999).

Trinidad and Tobago's Institutional Performance

Summary and comparative assessments of Trinidad and Tobago's budgetary institutions have revealed relative weaknesses. Alesina et al. (1999) gave the country an intermediate overall rating (Figure 1-7); Table 1-10 shows the country's relative and absolute performance within the questionnaire structure for the index of budgetary institutions.

Overcoming Fiscal Weakness: Call for Reform

By the late 1990s, Trinidad and Tobago performed relatively poorly on questions related to the Government's assumption of debt incurred by other public agencies and constraints in

³¹ The index was built from data obtained from a questionnaire containing 10 questions administered to budget authorities; replies were ranked from 0 to 10, according to collegial (fragmented) and hierarchical (centralized) budget procedures. Questions 1, 2, and 3 related to constraints on the budget deficit (constitutional constraints, importance of a previously approved macroeconomic program, and degree of borrowing autonomy). Question 4 related to the degree to which institutions were hierarchical or collegial during the budget preparation stage. Questions 5 and 6 reflected the relative power of the legislature and government during budget discussions. Question 7 related to budget amendments and who commands initiative or supervision. Question 8 asked whether the

Variable	Definition	Grade Range	Trinidad and Tobago's Grade	Performance
1	Constitutional constraints on fiscal deficit	0–5	0	17–20
2	Macroeconomic program as a prerequisite			
	for submission to Congress	0-10	5	9–13
3	Government borrowing authority	0-10	10	1–6
4	MOF authority relative to budgetary spending			
	of ministries	0-10	10	1–17
5	Legal constraints on Congress' authority to amend			
	Gov'tproposed budget	2-10	0	14–20
6	Gov't. options when proposed budget is rejected	0-10	2	18–20
7	Flexibility to change budget approval	0-10	7.5	2-12
8	Gov't. ability to cut spending unilaterally after			
	budget passage	0-10	6.66	11–17
9	Whether Gov't. assumes debt incurred by other			
	public entities	0-6.66	3.33	8–17
10	Borrowing autonomy of State and local gov'ts. and			
	public enterprises	0-10	6.25	4—9
Total			50.74	15

Table 1-10. Trinidad and Tobago Performance: Budget Institutions Questionnaire

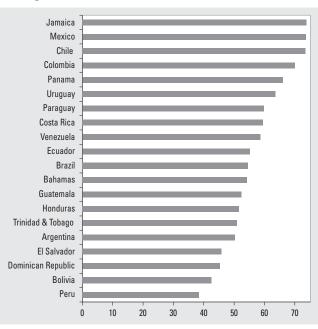
Source: Alesina et al. (1999).

the budgetary process. More recent experience with public enterprises and the privatization of Caroni shows that the country frequently assumes debt originally contracted by other public agencies.³²

government can cut spending after the budget is passed. Questions 9 and 10 related to transparency.

³² Changing the answer of question number 9 (see footnote 31) would lower the total score by 3.33 points, other things being equal, but would not significantly change the country's relative position. However, since the late 1990s, many countries have introduced fiscal and budgetary reforms, which have weakened the position of non-reformers (Alesina et al. 1999).

Figure 1-7. Index of Budgetary Institutions (*average 1980–92*)



Source: Alesina et al. (1999).

Box 1-3. Revitalizing Public Procurement

Proposed reforms to Trinidad and Tobago's public procurement system call for adopting a decentralized system based on best international practices of transparency and accountability. Given that US\$200 million of operations is allocated through the system—more than 2 percent of GDP—the new procurement environment should be consistent with a centralized set of rules and procedures, with a decentralized approach at the level of agencies. At the same time, it should comply with general rules. For example, public bidding must be the general rule, procedures must be standardized, budget information must be disclosed, and information on results released.

The level of discretion may depend on the nature of the goods procured. In addition, information on non-price components is crucial to determine the contracting agency's degree of discretion. Finally, guarantees of bid maintenance and contract fulfillment should be strong enough for bidders not to make opportunistic offers, as long as capital markets allow for it.

Continued use of letters of comfort and other government guarantees on debt of public enterprises and off-budget expenses suggests that no major improvements have been achieved, reducing the country's true score.

Against this backdrop, the Government has announced a reform agenda that includes:

- reforming the State enterprises sector,
- improving transparency and classification of statistics for public enterprises (IMF 2003a, 2005a),
- improving the budget process through an integrated system of accounts,³³ and
- revising public procurement rules and procedures (Box 1-3).

From the viewpoint of accountability and transparency, Trinidad and Tobago's main budgetary weakness is that public-sector enterprises and other fiscal operations outside the Government do not allow for easy consolidation of public accounts with which to assess fiscal performance. Public entities are not integrated into the budget process in the way that ministries and agencies are, and information on non-Government accounts is not obtained from the budget memorandum. These observations support the case for extending the hard-budget-constraint institutional setting to the rest of the public sector. This idea must be assessed through a careful design analysis, encompassing regulatory reform of public services that does not conflict with efficiency objectives of decentralization and arm-length

³³ While a well-designed system of accounts is an important input for a more transparent budgeting process, it alone cannot resolve the problem. In Trinidad and Tobago, for example, if public enterprises remain outside the budget process, most of the country's fiscal deficit will be beyond reach of the discipline that a modern budget accounting system would impose. Argentina, a country that substantially improved its budget process during the 1990s, experienced a dramatic fiscal crisis in 2001–02.

Box 1-4. Toward a Harmonized Pension System

Trinidad and Tobago is well-positioned to transform its public pension system into a fully-funded scheme. This move would involve no financial transition cost because current pensions are financed from the budget. The new scheme could be made mandatory for young workers, with the Government ensuring a minimum pension.

In 2003, results of a Government-commissioned working group called for harmonization of the system's Old Age Pension System (OAP) and National Insurance Scheme (NIS), a complementary mandatory program that covers retirement, disability, on-the-job injury, and illness. A third program, Public Service Scheme (PSS), provides civil servants and members of protective services retirement pensions.

Currently, the OAP serves 78 percent of citizens 65 years and older, a high percentage given the existence of the NIS, PSS, and private schemes that manage funds worth more than 20 percent of GDP. In 1997–2004, OAP expenditure rose from 0.75 to 1.2 percent of GDP, a trend that will likely drive up public-system expenditure.

relationships. Further steps in the same direction include efforts to make budget executions consistent with approved budgets and improvements in formal budgetary procedures, which recent multilateral-agency evaluations have stressed.

In addition, debt accumulation derives from hidden liabilities outside formal budget allocations. It takes the form of fiscal liability surprises (Box 1-4).

Additional Considerations

Four complementary avenues of institutional improvement follow from the major Government-identified reform issues. These are:

- Designing explicit fiscal rules on configuring fiscal institutions that act as constraints to insulate fiscal outcomes from fiscal surprises. The case for explicit rules may be unclear for fiscal consolidation if existing institutions generate good results; how-ever, explicit rules make fiscal results more sustainable and ensure against adverse shocks. Fiscal responsibility laws that set the path of fiscal deficits and public debt are the main ones to be considered.
- Designing contingency funds that prepare for absorption of external shocks or fiscal surprises through hidden liabilities. A well-designed RSF would be an important step in the right direction.
- Introducing accrual accounting, which takes potential liabilities into account, into the budget process. Multilateral institutions recognize accrual accounting for its transparency and as a move toward commitment-based accounting. From a fiscal policy perspective, it permits a correct treatment of hidden liabilities and makes fiscal outcomes more predictable and, therefore, controllable.

• Introducing multi-year budgeting to create clear guidelines on medium-term fiscal policy and viability of further reliance on an incremental, line-item approach (as opposed to a more programmatic approach based on explicit strategic and performance targets).

Concluding Remarks

Trinidad and Tobago has not easily managed its oil windfalls in the past. During the current oil boom, however, the Government has maintained a more prudent fiscal stance, allowing it to reduce public debt by more than 10 percent of GDP. Despite this achievement, the non-energy fiscal deficit in 2004 was nearly 11 percent of GDP—higher than the Vision 2020 targeted ceiling of 8 percent and the 7–10 percent of GDP needed to fully maintain oil wealth for future generations.

Deciding how much oil wealth to spend on the current generation is ultimately up to the citizens of Trinidad and Tobago. To the extent possible, their decision-making process should consider that public debt is still high in this emerging economy. Allocating a fraction of the oil windfall to continue reducing the debt will permit a reduction in the interest rate and a crowding in of the private sector. In addition, spending on current or capital government expenditures creates the risk of Dutch disease; thus, the projects involved must be carefully evaluated. Moreover, the RSF needs improving in order to function as a pricestabilization device. However, if the decision is to allow current and future generations to benefit equally from the country's oil wealth, the Fund will require a major overhaul. Finally, budget institutions must be strengthened, decentralized agencies must face a hard budget constraint, and procurement rules should be improved.

References

- Alesina, A., and T. Bayoumi. 1996. "The Costs and Benefits of Fiscal Rules: Evidence from U.S. States." NBER Working Paper No. 5614. Washington, D.C.: National Bureau of Economic Research.
- Alesina, A., R. Hausmann, R. Hommes, and E. Stein. 1999. "Budget Institutions and Fiscal Performance in Latin America." *Journal of Development Economics* 59(2): 253–73.
- Alesina, A., and R. Perotti. 1999. "Budget Deficits and Budget Institutions." In *Fiscal Institutions and Fiscal Performance*, eds. J. Poterba and J. von Hagen, chapter 1. Chicago: The University of Chicago Press.
- Artana D., R. López Murphy, and F. Navajas. 2003. "A Fiscal Policy Agenda." In After the Washington Consensus: Restarting Growth and Reform in Latin Amercia, eds. Pedro Pablo Kuckzynski and John Williamson. Washington, D.C.: Institute for International Economics.
- Barnett, S., and R. Ossowski. 2003. "Operational Aspects of Fiscal Policy in Oil-producing Countries." IMF Working Paper, WP/02/177. Washington, D.C.: International Monetary Fund.
- Bayoumi, T., and B. Eichengreen. 1995. "Restrain Yourself: The Implications of Fiscal Rules for Economic Stabilization." *IMF Staff Papers* 42(1): 32–48.
- Bergo, J. 2003. "The Effect of the Petroleum Fund on the Norwegian Economy." Speech by Deputy Governor of Norges Bank to the Norwegian-Swedish Chamber of Commerce, Stockholm, October 22. Available at www.norges-bank.no/english/speeches/2003-10–22/speech-2003-10–22.html.
- Buchanan, M., R. Farquhar, and F. Nielsen. 2003. "Managing Oil Windfalls: Good and Bad in EMEA." *EMEA Economics Analyst*, Goldman Sachs, August 1.
- de Haan, J., W. Moessen, and B. Volkerink. 1999. "Budgetary Procedures-Aspects and Changes: New Evidence for Some European Countries." In *Fiscal Institutions and Fiscal Performance*, eds. J. Poterba and J. von Hagen. Chicago: The University of Chicago Press.
- Ebrahim-zadeh, C. 2003. "Dutch Disease: Too Much Wealth Managed Unwisely." *Finance and Development*, vol. 40, no. 1 (March).
- Edwards, S. 2002. "Debt Relief and Fiscal Sustainability." NBER Working Paper No. 8939. Washington, D.C.: National Bureau of Economic Research.
- Fiess, N. 2002. Chile's New Fiscal Rule. The World Bank, Washington, D.C., May. Mimeograph.
- Hallerberg, M., and J. von Hagen. 1999. "Electoral Institutions, Cabinet Negotiations and Budget Deficits in the European Union." In *Fiscal Institutions and Fiscal Performance*, eds. J. Poterba and J. von Hagen. Chicago: The University of Chicago Press.

- IMF. 1999. "Trinidad and Tobago: Selected Issues and Statistical Appendix." Country Report No. 99/267. Washington, D.C.: International Monetary Fund.
- ——. 2001. *World Economic Outlook: Fiscal Policy and Macroeconomic Stability*. Washington, D.C.: International Monetary Fund.
- 2003a. "Trinidad and Tobago: 2003 Article IV Consultation." Country Report No. 03/232. Washington, D.C.: International Monetary Fund.
- ——. 2003b. "Trinidad and Tobago: Selected Issues and Statistical Appendix." Country Report No. 03/233. Washington, D.C.: International Monetary Fund.
- ——. 2005a. "Trinidad and Tobago: 2004 Article IV Consultation." Country Report No. 05/4. Washington, D.C.: International Monetary Fund.
- ——. 2005b. "Trinidad and Tobago: Selected Issues." Country Report No. 05/6. Washington, D.C.: International Monetary Fund.
- Kennedy, S., and J. Robbins. 2001. "The Role of Fiscal Rules in Determining Fiscal Performance." Working Paper 2001-16. Department of Finance, Canada.
- Kontopoulos, Y., and R. Perotti. 1999. "Government Fragmentation and Fiscal Policy Outcomes: Evidence from OECD Countries." In *Fiscal Institutions and Fiscal Performance*, eds. J. Poterba and J. von Hagen. Chicago: The University of Chicago Press.
- Poterba, J. 1994. "State Responses to Fiscal Crises: The Effects of Budgetary Institutions and Politics." *Journal of Political Economy* 102: 799–821.
- -----. 1996. "Budget Institutions and Fiscal Policy in the U.S. States." *American Economic Review* 86 (2): 395–400.
- Poterba, J., and K. Rueben. 1999. "State Fiscal Institutions and the U.S. Municipal Bond Market." In *Fiscal Institutions and Fiscal Performance*, eds. J. Poterba and J. von Hagen. Chicago: The University of Chicago Press.
- Poterba, J., and J. von Hagen, eds. 1999. *Fiscal Institutions and Fiscal Performance*. Chicago: The University of Chicago Press.
- Reinhart, C., K. Rogoff, and M. Savastano. 2003. "Debt Intolerance." *Brookings Papers on Economic Activity*, 1 (Spring), 1–74.
- Rodríguez, F., and J. Sachs. 1999. "Why Do Resource Abundant Economies Grow More Slowly?: A New Explanation and an Application to Venezuela." *Journal of Economic Growth* 4: 277–303.
- Stein, E., E. Talvi, and A. Grisanti. 1998. "Institutional Arrangements and Fiscal Performance: The Latin American Experience." Working Paper No. 367. Washington, D.C.: Inter-American Development Bank.
- Talvi, E., and C. Vegh. 2000. "Tax Base Volatility and Procyclical Fiscal Policy." NBER Working Paper No. 7499. Washington, D.C.: Natural Bureau of Economic Research.
- von Hagen, J. 1991. "A Note on the Empirical Effectiveness of Formal Fiscal Constraints." *Journal of Public Economics* 44: 199–210.

- ———. 1992. "Budgeting Procedures and Fiscal Performance in the European Communities." Economic Paper no. 96. Brussels: Commission of the European Communities, Directorate-General for Economic and Financial Affairs.
- von Hagen, J., and I. Harden. 1995. "Budget Processes and Commitment to Fiscal Discipline." *European Economic Review* 39: 771–79.
- Welch, C. 2002. "Oil Funds: Answer to the Paradox of Plenty." Policy Brief. Friends of the Earth International. Available at www.foe.org/camps/oilrev.pdf.

This page intentionally left blank

CHAPTER 2

Policies for Poverty Reduction

Ralph Henry, Edwin St. Catherine, Dennis Brown, Ann Rajack-Talley, and Wendell Thomas¹

Trinidad and Tobago stands at a crossroads in development. This middle-income country's economy—one of the most prosperous in the Caribbean—currently enjoys low inflation and a growing trade surplus, thanks largely to the recent boom in oil and natural gas production and processing.² At the same time, the country faces serious social challenges. Measured poverty is high, and pockets of acute poverty and indigence persist in certain eastern, far south, and southwestern regions.³ Over the past two decades, the number of displaced persons, unemployed youth, and street children has increased. Moreover, crime and violence (including kidnappings and in-school violence), use of illicit drugs, and spread of HIV/AIDS have risen.

The Government of the Republic of Trinidad and Tobago has expressed its commitment to investing more in human resources, pledging to improve standards of production and productivity. The present administration has encapsulated its objectives in the rallying theme of Vision 2020, whereby the country aspires to achieve developed-country status by the year 2020. For this to occur, however, its economy must undergo a major transformation. It must be based on human capital since the oil and natural-gas sectors, having provided considerable foreign exchange over the short and medium term, are subject to longer-term volatility and offer few jobs. To this end, the skills and knowledge of the country's work force must be upgraded dramatically to create a foundation for economic competitiveness in the twenty-first century. At the same time, social protection structures must be put in place to protect the most vulnerable citizens against the risks of economic and social change.⁴

¹ This chapter is based on original work produced by Kairi Consultants Ltd. commissioned by the IDB.

² Among countries assessed on the Human Development Indicators, Trinidad and Tobago is in the upper third.

³ Household Budgetary Survey data have established that, in 1997–98, nearly 25 percent of Trinidad and Tobago's population was poor. Expenditure levels suggested that more than 8 percent was indigent; that is, based on available resources, this group lacked the means to consume enough to maintain bodily health.

⁴ In this chapter, social development refers to measures and programs that aim to enhance human capital and support individuals and communities through social protection structures and institutions.

At this historic moment, Trinidad and Tobago can, at its current level of expenditure and resources, significantly reduce, and even eliminate, extreme poverty. Countries with fewer resources, including Jamaica, have achieved lower poverty rates.⁵ Though the dream is within reach, its realization will depend heavily on the social and economic policies that are formulated and implemented. The analysis and recommendations that follow suggest what the next steps might be.

Comparative Overview

Trinidad and Tobago is viewed as one of the Caribbean's most developed countries. In 1997–98, the country had one of the region's lower poverty estimates. However, with respect to incidence of extreme poverty, both the Turks and Caicos Islands and St. Lucia had lower rates than Trinidad and Tobago.⁶ Barbados—the only country in the Commonwealth Caribbean whose social-protection mechanisms include unemployment insurance—had the lowest poverty rate in the 1990s (Table 2-1). Based on various indicators, Barbados is clearly ahead of Trinidad and Tobago with respect to achieving developed-country status. Thus, Barbados

is among the larger group of comparator countries analyzed in this chapter (Table 2-2).

Comparisons in Table 2-2 are largely consistent with expectations; that is, wealthier countries spend more per capita on health and have a higher ratio of physicians to population than poorer countries. With regard to readily-available, broad indicators, there is little difference between middle-income and developed countries.⁷ Nor do

Table 2-1. Comparative Estimates of Povertyin the Commonwealth Caribbean

Country	Poor (Percent of Population)	Indigent (Percent of Population)
Barbados	13.5	n.a.*
Belize	33.0	13.4
Grenada	32.1	13.0
Nevis	32.0	17.0
St. Kitts	30.5	11.0
St. Lucia	25.1	7.1
St. Vincent and		
the Grenadines	37.5	25.7
Trinidad and Tobag	o 24.0	8.3
Turks and Caicos	26.0	3.2

Sources: Caribbean Development Bank (CDB) and Inter-American Development Bank (IDB). * n.a. = not available.

⁵ Jamaica regularly conducts living conditions surveys, which have allowed the country to target poverty alleviation more effectively; estimated poverty has been under 20 percent for some time.

⁶ To achieve developed-country status, Trinidad and Tobago will need to be well ahead of its neighbors in this respect.

⁷ Trinidad and Tobago is most often compared to Chile, Costa Rica, Malaysia, and Mauritius (middle-income countries), and Iceland, Ireland, Norway, and Singapore (OECD developed countries).

	ורמנטוא	ספופרופת רו	סמנותופ	. 2002 .						
T Indicator	Trinidad and Tobago	Barbados	Chile	Costa Rica	Iceland	Ireland	Norway	Mauritius	Malaysia	Singapore
÷			L			0				
Population (in millions)	<u>.</u> .	0.27	0.61	3.9	0.28	3.9	d.4	1.2	24.3	4.2
Per-capita GNI (US\$)	6,490	9,750	4,260	4,100	27,970	23,870	37,850	3,900	3,540	20,690
Population Growth rate (%)	0.6	0.4	1.1	1.6	0.8	1.1	0.6	1.1	2.3	2.1
Life expectancy (years)	72	75	76	78	80	77	79	73	73	78
Persons living with										
HIV/AIDS (ages 15-49) (%)	2.50	1.20	0.30	0.55	0.15	0.11	0.80	0.10	0.35	0.20
Physicians per 100,000 people	79	121	115	178	326	226	413	85	68	135
Per-capita health expenditure										
(PPP) (US\$)	468	606	697	474	2,642	1,908	2,769	315	310	913
Infant mortality (per 1,000 live births)	15	12	10	6	5	ß	4	15	7	c
Gross primary-school										
enrollment (%)	100	104			102	119	101	109	66	94
Net secondary-school enrollment (ratio)	71	85	75	49	83		95	64	70	
Public expenditure on education										
(in US\$ millions)	4.0	7.1	4.2	4.4		4.4	6.8	3.5	6.2	3.7
Public expenditure on health										
(in US \$ millions)	2.6	4.1	3.1	4.4	7.5	5.1	6.6	1.9	1.5	1.2
GDP growth (%)	2.7	1.5	2.1	2.8	0.0	3.6	2.0	4.4	4.2	2.2
Export of goods and services/GDP	34.3	47.5	34.7	42.1	40.5	95.4		60.7	113.8	
Industry (% of GDP)	42.3	20.3	34.3	28.1	28.6	35.7	33.8	33.1	48.2	33.6
Human Development Index (HDI)	0.802	0.888	0.831	0.832	0.942	0.930	0.944	0.779	0.790	0.884
Sources: Human Development Report (UNDP 2003) and World Bank	3) and World Bank.									

Table 2-2. Comparative Indicators for Selected Countries, 2002*

Sources: Human Development Report (UNDP 2003) and World Bank.

* Or nearest year.

all indicators vary by level of development. For example, Barbados has a higher Human Development Index (HDI) than Singapore with half the per-capita income. Moreover, Singapore spends a smaller percentage of its GDP on education and health, but has efficient delivery systems in both and is a global model in certain advances and approaches it has adopted. In terms of economic performance, more recent growth rates have been depressed because of lower growth rates in the international economy, which started before the September 11, 2001 terrorist attack in the United States.

On the other hand, the last three decades have witnessed periods of rapid transformation in the comparator countries. Indeed, in its first years of political independence, Singapore's per-capita income was somewhat lower than that of Trinidad and Tobago; however, as a result of strategic industrial and macroeconomic policy decisions of the 1970s, it caught up with and surpassed Trinidad and Tobago. Malaysia underwent radical transformation, although its initial resource configuration differed entirely from that of Singapore. Ireland was early to promote Foreign Direct Investment (FDI) in special development zones, with output targeted at export markets. Costa Rica has promoted targeted participation in particular areas of manufacturing and tourism. Barbados has also depended on tourism; however, because of a systematic attempt to improve the knowledge and skills base of its work force, it has discovered niches in the international division of labor that have improved its people's living standards.

As Table 2-2 shows, life expectancy in Trinidad and Tobago is lower than in all other selected countries and infant mortality is higher in all except Mauritius. In addition, Trinidad and Tobago has the second lowest number of physicians per 100,000 people (after Malaysia). Thus, with regard to key social indicators, Trinidad and Tobago lags comparator countries.

Poverty Measurement⁸

Trinidad and Tobago's return to economic growth in the mid-1990s had a positive effect on social conditions. The Government became more concerned about targeting the poor in its policies and programs, declining unemployment brought many into the income stream, and the Gini coefficient (one of the more regularly used indexes of inequality) remained high.⁹

⁸ This section analyzes poverty and inequality, based on data tabulated from the 1997–98 Household Budgetary Survey. Continuous Sample Survey of Population (CSSP) data for 1994, 1998, and 2002 are also analyzed to gain insight into the social and economic conditions prevalent during the period.

⁹In 1998, the Gini coefficient was 0.393; in the early 1990s, it was estimated at 0.42 (World Bank 1996). One should note that the Gini was lower in Tobago, whose population represents about 4 percent (50,000) of the country's nearly 1.3 million people.

Quantitative Assessment of Inequality

By and large, comparisons over time suggest some consistency with the Kuznets hypothesis, in which the inequality level reaches a plateau and then starts to decline as a function of increase in average incomes. On the other hand, following the collapse of oil prices in the 1980s, Trinidad and Tobago's economy suffered reverses. Moreover, given the society's plural-

istic nature and a certain level of segmentation in economic participation, the Gini coefficient alone masks shifts that may be occurring among various societal groups.¹⁰ The apparent validation of the Kuznets hypothesis may be related less to increase in per-capita income and more to interventions that have had structural effects. The Gini fell from a high of 0.51 (1971-72) to 0.39 (1997-98) (Figure 2-1). Underlying this change is poverty reduction

0.6 0.5 0.4 0.3 -0.2 -0.1 -1957/58 1971/72 1975/76 1981/82 1992 1997/98

Figure 2-1. Gini Coefficient for Selected Years

Source: Trinidad and Tobago: Poverty Reduction and Social Development (Kairi Consultants, Ltd. 2004).

among Indians and development of an economic base outside of agriculture, which could be attributed more to mobilization of intra-group social capital for advancement than to any inexorable factors associated with the Kuznets hypothesis.

Gini ratios for household heads, by ethnicity, were as follows: African, 0.40; Indian, 0.36; mixed, 0.41; and other, 0.39.

Poverty Estimates

Table 2-3 provides poverty estimates for selected groups, based on data from the 1997–98 Household Budgetary Survey and respective indigence and poverty lines of TT\$228.30 and TT\$376.54 per adult. The percentage of the population considered poor was 24.0 percent; as much as 8.3 percent was considered extremely poor or indigent (i.e., lacking in

¹⁰ The phenomenon of ethnic oligopolization of economic sectors guarantees that various ethnic groups experience differential effects of increased and decreased economic activity and wealth status from one period to another because sectors grow and decline at different rates than the economy (Henry 1989).

levels of food consumption needed to maintain sound bodily health). While the percentage of poor females was marginally higher than poor males, it was not statistically significant. However, female household heads were more likely to be poor than male household heads. Indigence was estimated at 8.3 percent for the total population, and 6.0 percent for households.

A much higher percentage of poor children was found in Tobago than in Trinidad. Because larger households generally had a higher percentage of children, a significantly higher percentage of the poor were children; this finding also extended to indigence. Figure 2-2 provides the distribution of poverty by age group.

Geographic and Ethnic Dimensions of Poverty

St. George has the largest concentration of population,

as well as the highest concentration of poor people. However, along with Port of Spain, San Fernando, Caroni, and Tobago, St. George has fewer poor people than their representation in the population. This is evident in the disparity ratio, which measures the poor relative to the population. A ratio of 1 means that the poor in a location represents the same percentage as the location represents in the population; a ratio higher than 1 means that the poor's presence in an area is greater than its representation among the population. The closer the ratio is to zero, the smaller the representation of the poor in an area. In this respect,

Table 2-3. Poverty Estimates for Selected Groups,1997–1998

Population group	
Poor	24.0
Indigent	8.3
Youth	28.9
Elderly	15.0
Female	24.4
Male	23.7
Household group	
Poor	18.4
Indigent	6.0
Male heads	17.1
Female heads	21.4

Source: Household Budgetary Survey.

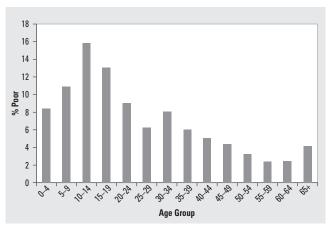


Figure 2-2. Distribution of Poor, by Age Group

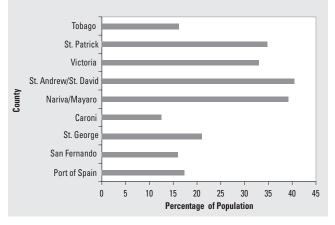
Source: Trinidad and Tobago: Poverty Reduction and Social Development (Kairi Consultants, Ltd. 2004).

Caroni was the best-off area in the country in 1997–98, while St. Andrew/St. David and Nariva/Mayaro were the worst off.

Historically, St. Andrew/ St. David and Nariva/Mayaro have been Trinidad and Tobago's poorest areas (Figure 2-3). When these two areas were combined with Victoria and St. Patrick and tested against other areas, the difference was statistically significant. This result was repeated with respect to indigence; eastern, far south, and southwestern portions of the country were found to be poorer than other areas.

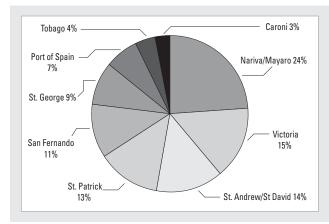
Levels of indigence in St. Andrew/St. David and Nariva/Mayaro are consistent with these being the poorest areas of the country. While Nariva/Mayaro was just under 7 percent of the sample, it accounted for 24 percent of the extremely poor: One in every four indigent persons in the country resided in Nariva/Mayaro. Caroni had the lowest level of indi-

Figure 2-3. Distribution of Poor, as Percentage of County Population



Source: Trinidad and Tobago: Poverty Reduction and Social Development (Kairi Consultants, Ltd. 2004).

Figure 2-4. Distribution of Indigent Population, by County (percent)



Source: Barbados Stayover Visitor Survey 2003 and 2004 Quarterly Publications.

gence. In that area, industrial and commercial development, along with establishment of middle- and higher-income residences, has led to prosperity relative to other locations (Figure 2-4).

As Table 2-4 shows, conditions in Port of Spain worsened between 1972–73 and 1988, but improved by 1997–98. One can observe a similar trend for St. Andrew/St. David. While conditions in Tobago improved overall, Caroni is the only area that improved

consistently over the entire period, exhibiting the country's lowest poverty rates by 1997–98. Given that Caroni's population is predominantly East Indian, improved income in that county suggests that its poorer communities experienced greater relative increase in income over the period. Disparity ratios between African and Indians were 1.16, 0.91, and 1.00 for years 1971–72, 1975–76, and 1981–82, respectively.

	Disparity Ratio (Poor/Population)				
County	1972–73	1988	1997–98		
St. Andrew/St. David	1.39	0.78	1.68		
Nariva/Mayaro	1.58	1.46	1.63		
St. Patrick	1.21	1.14	1.44		
Victoria	1.31	0.98	1.37		
St. George	0.72	0.71	0.88		
Port of Spain	0.71	1.09	0.70		
San Fernando	0.66	0.68	0.68		
Tobago	1.15	1.23	0.68		
Caroni	1.09	0.77	0.52		

Table 2-4. Comparative Disparity Ratios

Source: Household Budgetary Surveys.

Note: Data from which disparity ratios are derived relate to households for 1972–73 and 1988 and individuals for 1997–98.

The major factors that

helped to transform Caroni from one of Trinidad and Tobago's poorer areas into a relatively prosperous one by 1997–98 include:

- Establishing a major industrial estate at Point Lisas;
- Deciding to maintain (even at considerable state subsidy) Caroni 1975 Ltd., the major state enterprise, until 2003;
- Locating headquarters of major institutional, business, and commercial operations in that county;
- Developing Chaguanas as a major commercial node in Trinidad; and
- Establishing middle-income residential districts in that area.

With regard to areas of Trinidad and Tobago that should be targeted for alleviating poverty, Nariva/Mayaro, St. Patrick, St. Andrew/St. David, and Victoria immediately qualify. For the past 25 years, Nariva/Mayaro and St. Patrick have consistently been over-represented among the poor. The case of Nariva/Mayaro is particularly ironic. The country's largest share of oil and gas exports—revenue that is the source of transformation and on which funding for diversification depends—originates in Nariva/Mayaro; however, its people have benefited little. Indeed, the most visible sign of social marginalization is local people not qualifying for employment in oil and gas operations.

At the same time, other major pockets of poverty have emerged. It is well established that areas within Caroni, Port of Spain, and St. George require immediate attention. Morvant/Laventille, which has a large concentration of persons of African descent, has witnessed

copyright © by the Inter-American Development Bank. All rights reserved or more information visit our website: www.iadb.org/pul

2.8

escalating crime; this has affected the rest of the country, leading to unprecedented incidence of violence. In addition, massive losses in the sugar industry have forced the Government to close most operations at the state enterprise, Caroni 1975, Ltd. Despite measures to mitigate fall-out effects, increased unemployment in Caroni is inevitable.

Table 2-5 provides 1997–98 estimates of the

poverty gap and the Foster-Greer-Thorbecke (FGT2) index by county. Not unexpectedly, St. Andrew/St. David and Nariva/Mayaro had a wider poverty gap and more severe poverty

than did Caroni and Tobago. Household survey data for 1997–98 did not immediately reveal any statistically significant difference in poverty levels between the two groups, except that the African poor were largely urban and the Indian poor were largely rural; however, closer examination revealed that a gap between the two ethnic groups may have emerged. For example, by analyzing the distribution of household heads by ethnicity across quintiles, one sees that Africans were better represented than Indians in the lowest quintile; they were far less represented in the highest quintile than were Indians and other ethnic groups (Tables 2-6 and 2-7).

Table 2-6.	Ethnicity of Household Head by Quintile*
(percent)	

Quintile (per-capita consumption)	African	Indian	Mixed	Other	All Trinidad and Tobago
I	15.6	13.9	17.0	6.5	15.0
П	18.7	16.8	18.1	6.5	17.7
III	19.4	18.8	14.6	6.5	18.3
IV	21.5	24.1	18.4	12.9	21.9
V	24.9	26.5	31.9	67.7	27.1

Source: Trinidad and Tobago: Poverty Reduction and Social Development (Kairi Consultants, Ltd. 2004).

* Column distribution.

County, 1997–1998 County **Poverty Gap** FGT2 Index St. Andrew/St. David 11.3 6.1 5.7 Nariva/Mayaro 11.0 Victoria 8.1 4.3 St. Patrick 7.8 3.9 4.5 2.4 St. George 3.6 2.1 Port of Spain San Fernando 2.5 1.5 Caroni 2.4 1.4 2.5 1.1 Tobago

5.3

Table 2-5. Poverty Gap and the FGT2 Index by

Source: Household Budgetary Survey.

Trinidad and Tobago

(percent)							
Quintile (per-capita consumption)	African	Indian	Chinese	White	Mixed	Other	Not Stated
Ι	47.3	35.7	0.3	0.3	16.4		_
II	48.1	36.5	0.5		14.9	_	_
III	48.4	39.5	_		11.6	0.5	_
IV	44.7	42.3	0.2	0.4	12.2	_	0.2
V	41.9	37.7	0.6	2.4	17.1	0.2	0.2
All Trinidad and Tobago	45.6	38.5	0.3	0.8	14.5	0.1	0.1

Table 2-7.	Ethnicity	of Househo	old Head	by Quintile*
(nercent)				

Source: Trinidad and Tobago: Poverty Reduction and Social Development (Kairi Consultants, Ltd. 2004).

Note: (----) = no observations.

* Row distribution.

Other Dimensions of Poverty

This subsection examines a range of other measurable dimensions of poverty—from gender, unemployment, and education to household-head distribution, housing, and expenditure patterns.

Gender

With respect to gender differences among the poor, results of this analysis were consistent with findings elsewhere. In terms of socioeconomic status, percentage differences between male and female Trinidadians and Tobagonians were not statistically significant (Table 2-8).

Unemployment

In Trinidad and Tobago, distribution of unemployment by quintile is consistent with the hypothesis that the poor are more likely to be affected by difficult labor-market conditions.

Table 2-8. Gender and Soc	ioeconomic Status, 1997–1998

	Poor		Non-po	or	Тс	otal
Gender	Within Socioeconomic Status	Within Gender	Within Socioeconomic Status	Within Gender	Within Socioeconomic Status	: Within Gender
Male Female	48.3 51.7	23.7 24.4	49.3 50.7	76.3 75.6	49.1 50.9	100 (n = 4,338) 100 (n = 4,504)
Total	100 (n = 2,126)	24.0	100 (n = 6,716)	76.0	100 (n = 8,842)	

Source: Household Budgetary Survey.

Status		Quintile (II	per-capita coi III	All Trinidad and Tobago		
btutub	•	••		IV	V	
Male						
Employed	77.4	83.1	87.9	93.6	97.5	88.4
Unemployed	22.6	16.9	12.1	6.4	2.5	11.6
Female						
Employed	63.4	77.0	77.1	88.9	97.2	82.7
Unemployed	36.6	23.0	22.9	11.1	2.8	17.3
Both Sexes						
Employed	72.6	80.8	83.8	91.7	97.4	86.2
Unemployed	27.4	19.2	16.2	8.3	2.6	13.8

Table 2-9. Employment Status by Quintile and Gender, 1997–1998 (percent)

Source: Household Budgetary Survey.

The Household Budgetary Survey (1997–98) found that only 2.5 percent of those in the highest quintile were unemployed, compared to 22.6 percent in the lowest. Indeed, the higher the quintile level, the lower the percentage of unemployed. This was true, regardless of sex; however, males had a lower rate of unemployment than did females. In addition, indigent and poorer households were more likely to have no earners than were non-poor households (Table 2-9).

Interestingly, quintiles IV and V tended to converge; in quintile V, the unemployment-level difference between males and females was slight (Table 2-9). While this finding does not indicate the degree to which males and females in quintile V had equality of

opportunity, it may be that labor-market preparation of men and women showed the least difference in quintile V (given the known participation of women relative to men in post-secondary and tertiary education). Table 2-10 corroborates the general findings across quintiles.

Poor youth account for nearly 30 percent of Trinidad and Tobago's unemployed poor, 15 years of age and older (Table 2-11). This group is

Table 2-10. Employment Status by Gender across Quintiles, 1997–1998 (percent)

Status	I	Quintile II	(per-capita) III	a consump IV	tion) V
Male					
Employed	16.3	17.3	19.8	22.1	24.5
Unemployed	36.2	26.8	20.9	11.4	4.7
Female					
Employed	11.9	16.6	17.5	24.3	29.7
Unemployed	32.8	23.7	24.9	14.5	4.1
Both Sexes					
Employed	14.6	17.0	19.0	22.9	26.5
Unemployed	34.5	25.3	22.8	12.9	4.4

Source: Household Budgetary Survey.

likely to leave school without completing secondary education or attaining any certification. Poverty may be one factor that raises the opportunity cost of staying in and completing school. However, given the labormarket requirements, those in need of employment at this level are least equipped to participate; this situation, in turn, leads to frustration and the well-established proclivity of this group to disobey the law.¹¹ This group is likely to be heavily represented in the category Elementary Occupations.

Relative distribution of the unemployed by county corroborates earlier analyzed evidence (Table 2-12). The unemployed were more heavily represented in such locations as Nariva and St. Patrick (less so in Victoria) than in the population overall. In Mayaro, public protests have been held over lack of

Table 2-11. Unemployed by Age Group and Socioeconomic Status, 1997–1998 (percent)

Socioeconomic Status						
Age Group	Poor	Non-poor	Total			
15–19	29.9	16.4	21.8			
20–24	17.3	25.8	22.4			
25–29	12.7	17.4	15.6			
30–34	12.7	11.7	12.1			
35–39	7.1	9.7	8.7			
40–44	8.1	6.4	7.1			
45–49	3.6	4.0	3.8			
50–54	4.6	3.4	3.8			
55–59	2.5	3.0	2.8			
60–64	1.0	1.7	1.4			
65 and older	.5	.3	.4			

Source: Household Budgetary Survey.

Table 2-12. Distribution of Unemployed by County, 1997–1998 (percent)

County	Employm Employed	nent Status Unemployed	Distribution of Population
Caroni	15.7	15.2	15.6
Nariva/Mayaro	2.2	6.3	2.8
Port of Spain	4.0	2.4	3.8
San Fernando	3.8	5.3	4.0
St. Andrew/St. David	4.7	5.7	4.9
St. George	41.3	26.7	39.3
St. Patrick	8.4	18.0	9.7
Tobago	7.3	.8	6.4
Victoria	12.6	19.8	13.6

Source: Household Budgetary Survey.

employment. Data suggest that, in Nariva, severity of unemployment has been far more acute than in any other area of the country; that population's deep sense of marginalization

¹¹ Debate in the public media has centered on the low relative participation of youth of African descent in postsecondary programs. The Government has been accused of seeking to introduce affirmative-action programs targeted at assisting their entry. While such an approach is unwelcome in most circles, the society must face the growing costs of security and anti-crime programs that have resulted from ignoring the problems of poor (particularly African) youth. Indeed, according to Ramesh Deosaran; Independent Senator and Professor, Department of Behavioral Sciences, University of the West Indies, St. Augustine; Africans account for more than 60 percent of the country's prison population (pers. comm.).

and resultant restiveness are not without basis. Tests for significance have established that the unemployed, compared to the employed, are more likely to be poor or indigent.

Occupational Distribution

With regard to the labor market, data on occupational distribution across quintiles is fairly consistent (Table 2-13). Not unexpectedly, less than 1 percent of those in quintile I had professional qualifications, and only about 3.3 percent claimed to have reached the technician level. On the other hand, as much as 41.4 percent of those in quintile I were in Elementary Occupations, suggesting lack of skills and specialized knowledge. Indeed, only 14 percent of the population was found to have professional or technical certificates. If—in addition to the 23.6 percent of workers in Elementary Occupations—a substantial percentage in Agriculture, Clerical, and Sales and Service also lack educational preparation and training, then possibly some 40 percent of the labor force is in Elementary Occupations.

Beyond the dynamics of internal distribution of income or expenditure and skills distribution by quintile, Table 2-13 has serious implications for Trinidad and Tobago's efforts at economic diversification in a competitive international environment. As expected, the significance test indicates that, as the level of professionalism in various sectors of the population declines, poverty levels increase.

Given the heavy knowledge base of competitiveness, those in the lower quintiles are particularly vulnerable to a decline in the main foreign-exchange earner. Sluggishness of the non-oil export sector portends structural problems unless a radical program is put in

	Quintile (per-capita consumption)					All
Occupation	I		III	IV	V	Trinidad and Tobago
Unemployed	22.6	16.9	12.1	6.4	2.5	11.6
Agriculture	4.4	6.1	3.2	2.5	1.1	3.2
Clerical	4.0	7.6	10.4	15.8	17.4	12.1
Craft and Related	18.8	22.2	21.2	13.9	11.7	16.8
Elementary Occupation	41.4	30.6	26.1	20.5	10.3	23.6
Legislator	4.4	3.0	4.3	6.5	11.7	6.6
Plant and Machinery Operator	9.7	5.9	10.4	11.7	8.9	9.5
Professional	0.2	1.0	1.5	3.4	10.3	4.0
Sales and Service	12.8	17.3	15.7	14.4	11.1	14.0
Technician	3.3	5.5	7.2	10.7	17.5	9.9
Not Stated*	0.9	0.8	—	0.4	—	0.4

Table 2-13. Occupational Distribution by Quintile, 1997–1998(percent)

Source: Household Budgetary Survey.

* (----) = no observations.

place to upgrade the labor force for productivity growth and shift to competitive industry. While the country must deal with internal distribution, it must also address sustainable income generation from the international economy.

Sector of Employment

With regard to labor-force distribution by industry and quintile, most workers are in the non-tradable sector; Community, Social, and Personal Services employ nearly one-third of workers. When Construction and Wholesale and Retail Trade are added, at least 62.6 percent of the labor force is in the non-tradable sector (Table 2-14).

In the face of the Government's greater capacity to monetize foreign exchange earnings for domestic consumption, union restiveness can quickly expose the country to Dutch disease if wage rates escalate rapidly. The Government faces the dual challenge of containing wage inflation and using resources for social development, particularly to upgrade its work force, which is far below the skills level of workers in the countries with which Trinidad and Tobago would like to be compared.

With regard to employment distribution by worker type, only slightly more than 29 percent of workers were in Statutory Board, Government State Enterprise, or Central or Local Government Agencies (Table 2-15); these workers tended to be distributed more heavily in the higher-income quintiles. Private Enterprise or Own Account workers were

	Quintile (per-capita consumption) All Trin						
Industry	I	II.	III	IV .	V	and Tobago	
Community, Social, and Personal Services	25.4	27.2	29.5	32.4	37.3	31.2	
Wholesale and Retail Trade	20.6	20.7	18.1	18.5	16.3	18.5	
Construction	17.0	14.8	15.9	11.5	8.6	12.9	
Finance, Insurance, Real Estate, and							
Business Services	4.9	4.2	5.6	9.1	11.4	7.6	
Transport Storage and Communication	6.4	4.8	6.0	6.6	7.7	6.4	
Petroleum and Gas	3.1	3.0	3.1	3.3	4.2	3.4	
Other Mining and Quarrying	.4	.2	.2	.1	.2	.2	
Other Manufacturing	9.7	12.2	11.4	10.6	8.3	10.3	
Sugar	3.1	2.5	3.1	2.0	1.3	2.3	
Other Agriculture	8.4	8.6	4.9	4.0	2.4	5.2	
Electricity and Water*	_	1.0	2.2	1.4	2.2	1.5	
Not Stated*	.9	1.0	_	.6	.1	.5	

Table 2-14. Industry Distribution by Quintile, 1997–1998(percent)

Source: Household Budgetary Survey.

* (----) = no observations.

	Quintile (per-capita consumption)					All
Worker Type	I	П	ÎII	IV	V	Trinidad and Tobago
Private Enterprise	58.6	57.2	51.0	47.8	40.7	49.7
Central or Local Government	13.3	15.0	18.9	23.9	27.3	20.8
Own Account	20.1	19.8	18.1	17.3	16.0	17.9
Government State Enterprise	3.8	4.2	7.7	5.4	8.8	6.3
Statutory Board	1.3	1.7	1.9	3.0	3.1	2.3
Employer	.9	.8	1.4	1.6	3.5	1.8
Apprentice	1.3	.8	.5	.3	.2	.6
Unpaid Worker*	_	_	.3	_	_	.1
Not Stated	.7	.6	.2	.8	.4	.5

Table 2-15. Distribution of Worker Type by Quintile, 1997–1998(percent)

Source: Household Budgetary Survey.

* (----) = no observations.

more likely to be in the lower quintiles. Clearly, the private sector is far more competitive, absorbing more than 50 percent of the work force. The extent to which the private sector takes its lead in wage setting from the Government is a moot point. Tests among industries suggest significant differences, with employment in sugar or agriculture being a good predictor of poverty.

Education and Skills

As Table 2-16 shows, the educational and skills level of Trinidad and Tobago's labor force is low. In 1997–98, some 49 percent of workers had completed only primary school. Since the 1960s, the country has invested heavily in secondary education—more so after securing external financing from the World Bank and Inter-American Development Bank (IDB). As much as 32 percent of the work force had incomplete secondary education. Only 11 percent had successfully completed secondary school or a higher level of education. Among the indigent, 84 percent had not achieved beyond primary school, and 14 percent had incomplete secondary education. The sample data suggest that more than 62 percent of household heads had either no education or primary level only. In sum, the country is woefully lacking in quality human resources on which to build a secure base for competitive participation in the twenty-first century's knowledge economy. Heavy investment in adult education and training are required to treat the issue of "double miss."¹²

¹² When the secondary-education sector expanded in the 1970s, the challenge of providing for the baby-boomer generation was beyond the resources of Trinidad and Tobago and other Commonwealth Caribbean countries. Even

	0	intile (pe	r canita c	oncumnti	on)	All Trinidad
Highest Level Attained	I	lintile (pe II		IV	V	and Tobago
None	3.0	1.3	2.4	2.0	.9	1.9
None but On-the-Job Training (OJT)	6.4	5.7	5.4	4.8	4.1	5.3
Primary	59.3	53.3	48.3	46.5	37.6	49.0
Secondary (fewer than five subjects)	27.3	34.4	35.0	33.3	30.6	32.1
Secondary (more than five subjects)	3.2	4.5	7.4	10.5	16.8	8.5
University	.1	.2	.7	2.1	7.6	2.1
Diploma	.1	.2	.4	.5	1.8	.6
Foreign Education*	_	—	.1	.1	.2	.1
Other Education*	.1	.1	_	.1	.1	.1
Not Stated	.7	.4	.3	.2	.5	.4

Table 2-16. Educational Attainment by Quintile, 1997–1998(percent)

Source: Household Budgetary Survey.

* (----) = no observations.

Tests of significance showed that having only primary-level education was a good predictor of poverty.

Household Heads

With regard to distribution of household heads, no major differences were found between the poor and non-poor; however, it was estimated that more than 40 percent of indigent household heads were over 50 years of age (Table 2-17). Moreover, the mean number of dependents of such households was higher than the average for all indigent households, suggesting that grandparents were caring for children whose parents had migrated in search of better conditions abroad. As Table 2-18 shows, compared to poor male household heads, poor female heads were almost twice as likely to be unemployed; however, females generally were twice as likely as males to be unemployed. The difference was significant at the 5-percent level but not at the 1-percent level.

as the system expanded, many failed to secure a place in school. As they missed getting in, they lost the opportunity for secondary education. However, as the system expanded, the quality of education dropped precipitously; thus, many who got the opportunity failed to graduate with acceptable certificates: They were miseducated relative to the economic demands of the late twentieth century and are surely ill-equipped for the twenty-first. These victims of the so-called "double miss" are the core of Trinidad and Tobago's labor force—the group on whom the country's competitiveness is to be built in the short and medium term (Henry 2000).

Socioeconomic Status							
Age of Respondent	Poor	Non-poor	All Trinidad and Tobago				
15–19	.2	.3	.3				
20–24	2.5	1.9	2.0				
25–29	4.2	5.1	4.9				
30–34	12.0	11.2	11.4				
35–39	13.4	13.2	13.3				
40–44	14.5	12.7	13.0				
45–49	11.3	11.9	11.8				
50–54	10.2	9.9	9.9				
55–59	7.4	7.0	7.1				
60–64	9.0	7.4	7.7				
65 and older	15.2	19.3	18.6				

Table 2-17. Distribution of Household Heads by Age and Socioeconomic Status, 1997–1998 (percent)

Source: Household Budgetary Survey.

Table 2-18. Distribution of Household Heads by Employment Status, 1997–1998
(percent)

Socioeconomic Status								
Employment Status	Poor	Non-poor	All Trinidad and Tobago					
Male								
Employed	86.3	96.3	94.6					
Unemployed	13.7	3.7	5.4					
Female								
Employed	74.7	90.4	87.1					
Unemployed	25.3	9.6	12.9					
Both Sexes								
Employed	83.3	95.0	92.9					
Unemployed	16.7	5.0	7.1					

Source: Household Budgetary Survey.

Housing and Amenities

Regardless of income level, the population strongly preferred single-family residences. As Table 2-19 shows, more than 80 percent of people in all quintiles lived in separate houses. Table 2-19 also corroborates the popularity of owner-occupied dwellings. Thus, the Gov-ernment's thrust to improve housing stock and ensure decent housing for the population must consider people's apparent unwillingness, regardless of income group, to seek other forms of accommodations.

Household Quintile*					All	
Dwelling Type	I	Ш	Ш	IV	V	Trinidad and Tobago
Separate House	84.1	82.7	82.2	83.2	82.1	82.9
Apartment	10.8	12.2	15.0	13.2	11.1	12.5
Townhouse	.8	.2	.4	1.1	3.6	1.2
Condominium	—	—	—		.2	.0
Wafda	1.7	2.6	.6	1.1	.6	1.3
Duplex	2.1	1.9	1.3	.9	1.1	1.4
Part Commercial	—	.2	.4	.2	.6	.3
Barracks	—	—	—	.2	.2	.1
Out Room	.2	—	—	.2		.1
Other	.2	_	—		.4	.1
Not Stated		.2	—			.0

Table 2-19.	Dwelling	Туре	by	Quintile
(percent)				

Source: Household Budgetary Survey.

* (----) = no observations.

Poorer dwellings housed more children—and often more adults—than did wealthier ones and had fewer rooms and bedrooms. With regard to housing ownership and ethnicity, Indians, compared to African and Mixed groups, were more likely to own their homes and less likely to seek rented accommodations. (Urban/rural residence would have been an intervening variable.)

With regard to water access, those with higher incomes were more likely to have a piped-in supply. Residents in quintile V were more than twice as likely to have water piped into their dwellings than those in quintile I. Moreover, although various governmental administrations have attempted to ensure the total population a supply, quintile I residents still depended on delivery systems outside the piped-in, public source. Only 31 percent of the indigent—less than half the national average—had a piped-in supply. In Nariva/Mayaro, St. Andrew/St. David, and St. Patrick—the nation's poorest areas—less than half of all residents had piped-in water (Table 2-20).

Despite rapid improvement in the country's infrastructure, 32.4 percent of the population continued to depend on pit latrines. Access to water closets was closely associated with income level. Thus, as many as 62 percent of those in quintile I and some 72 percent of the indigent depended on pit latrines. Ninety percent of those in quintile V had water closets, compared to 37.2 percent in quintile I. Distribution of toilet facilities within areas shows that poorer counties tended to have their residents more reliant on pit latrines than was their representation in the population.

Not unexpectedly, the poor were unlikely to have fixed telephone lines; however, the recent spread of cellular services has increased the level of telephone access. Household Budgetary Survey results for computer ownership suggest the country had not caught up with

	Quintile					All
Source	I.	Ш	III	IV	V	Trinidad and Tobago
Piped into Dwelling (public)	40.1	56.8	69.9	77.4	83.0	65.5
Piped into Dwelling (private)	.8	1.5	2.8	2.3	2.8	2.0
Piped into Yard (public)	6.2	5.6	3.4	2.3	2.1	3.9
Standpipe (public)	24.4	17.3	8.9	7.4	4.5	12.5
Catchment (private, not piped)	10.2	7.3	6.8	3.8	1.7	6.0
Truck Borne	2.1	2.1	1.9	.9	1.7	1.7
Other	15.9	9.2	6.4	5.7	4.3	8.3
Not Stated [*]	.2	.2	n.a.	n.a.	n.a.	.1

Table 2-20. Household Water Supply by Quintile, 1997–1998(percent)

Source: Household Budgetary Survey.

* n.a. = not available.

the information age. However, radio and television sets were available to some 75 percent of the poor, suggesting they could access news through electronic media. Widespread use of electrical gadgets attests to the availability of electricity in most homes.

Household Expenditure Patterns

With regard to household expenditure patterns, middle-income groups spent more on clothing than did the wealthiest quintile (Table 2-21). The poorer the quintile, the larger the share of expenditure clothing represented. Food represented more than 33 percent of expenditure for quintile I, compared to about 21 percent for quintile V. Expenditure on medicine tended to rise rapidly by quintile, suggesting that this item was highly income elastic and that the rich could more readily access private health care. Interestingly, the wealthiest and poorest quintiles spent about the same percentage of their incomes on health-related services.

Table 2-21. Mean Expenditure on Selected Items by Quintile, 1997–1998(TT\$)

Household Item	I	Ш	Quintile III	IV	V	All Trinidad and Tobago
Clothing	44.30	61.75	68.54	72.54	60.27	61.48
Medicine	32.61	56.59	77.28	99.35	145.02	82.17
Education	13.76	15.05	15.31	12.64	9.33	13.22

Source: Household Budgetary Survey.

Interestingly, expenditure on education declined, as a percentage of total expenditure, by quintile. This finding has policy relevance, questioning the rationale for across-the-board transfers for education; that is, free textbooks, uniforms, and transport for all children may considerably subsidize the well-off, who can afford to pay.

Modeling Risks of Poverty

Poverty analyses have applied logistic regression models to identify the association between certain household or individual characteristics and poverty (Maddala 1983; Ruben 1996; Borooah 2001). These authors applied the logit model to establish a given household's odds of being poor, given various conditioning factors (including age, gender, adult equivalent family size,¹³ education, sector of employment, region, unemployment, and being outside the labor force). Exogenous variables were chosen based on their confounding and modifying (interaction) effects; however, final selection was based on theory, precedent of use in other studies, and limitations in the country's household micro data set.

Several variable types were used, based on inherent contrasts (e.g., unemployed, employed, and non-participants in the labor force; Indian and African ethnicity of household heads; and male- and female-headed households). The effects of such continuous variables as age and adult equivalent family size on poverty are interpreted in terms of the percentage contribution one additional year or household member would add to the odds of being poor. This model also uses variables whose contrasts are less clear-cut. In arriving at the most suitable model, alternative questions are tested: for example, should a specific region or definitional proxy for a region (urban/rural) be included in the final parsimonious list of variables to be analyzed?

The general form of the model tested is:

Logit
$$P(X)_{i}E_{i i}V_{i}E_{i j}W_{j}$$

where:

P(X) = probability of event X occurring

 $_{i}$ = coefficients of the exposure effect variables E_{i}

 $_{i}$ = coefficients of the confounding variables V_i

 $_{i}$ = coefficients of the effect modifying variables W_{i}

¹³ Use of adult-equivalent scales improves the specification of the absolute poverty line, compared to a per-capita measure, by according higher relative weights to adults over children; however, this study did not explore the possibility of economies of household consumption size, which, in some studies, has proven significant; see Ranjan (1999).

In the first instance, this equation was defined broadly. Theory and prior research have shown that, for the sake of model validity, previously mentioned variables should be included; they should not be removed in every case on the basis of tests of statistical significance since systematic, as opposed to random, error may result. In specifying the model, interaction effects between variables are considered; they are removed in the case of multiplicative variables, which are too complex or cause a rejection of the null hypothesis at the 5-percent level. These restrictions minimize multi-collinearity errors and improve the interpretation of odds/risk ratios associated with the equation coefficients.

Study Results

To arrive at the "gold standard" logistic regression equation, this study refined the general hierarchically well-formulated (HWF) model through a backward elimination procedure, based on chi-squared test for interaction involved.¹⁴ It eliminated most interaction terms that were not significant at or above the 10-percent level. Industry and occupation, along with region, were included as a categorical variable; both proved statistically insignificant on the Wald chi-squared test at the 10-percent level and were therefore eliminated in the early stages of model refinement. The coding of industry precluded the unemployed from identifying themselves with former employers. Thus, having an occupation was synonymous with being employed and perforce would reduce the risk of poverty, unless wage scales were severely depressed or highly skewed.

A common indicator of unmet basic housing needs—number of persons per bedroom—is introduced for two reasons. First, it is intuitively appealing to associate the risk of poverty and housing conditions of household members using this proxy. Second, the variable's statistical properties significantly enhance the model's overall validity, based on Wald and log likelihood test results. The model's specified variables are based on micro data, the records for which are defined at the household level (Table 2-22).

Figure 2-5 illustrates overall testing for the validity of the model.¹⁵ Unlike classical regression analysis, logistic regression does not produce unambiguous, universally-accepted, goodness-of-fit statistics. While two of these summary model statistics are reported, a more reliable assessment of the validity of the regression equation can be obtained by examining the Wald and Likelihood ratio test.

Table 2-23 specifies the model results.

¹⁴ Retention tests of lower-order components were independent of coding.

¹⁵ In choosing between competing logit models, one must consider whether certain explanatory variables contribute to the model's overall statistical validity. The log likelihood function and the Wald test, which measure this contribution, are distributed chi square.

Variable	Definition	Symbol in Estimated Equation
Dependent variable	P = 1 if poor, 0 otherwise Poverty estimate based on consumption per adult equivalent	Poor 1 in binary logit model
Explanatory variables		
Sex	Sex = 1 if Female, 0 Male	FHEAD
Unemployed	=1 if unemployed, 0 otherwise	UNEMP
Age	Single years of household head's age	AGE
Adult Equivalent	Equivalent number of adults	ADEQ
Education (all)	Education at all levels	EDUCAT1
1) Education (none)	No Education or No Education but OJT = 1, 0 otherwise	EDUCAT1(1)
2) Education (primary)	Primary or Primary with training = 1, 0 otherwise	EDUCAT1(2)
3) Education (secondary)	Secondary = 1, 0 otherwise	EDUCAT1(3)
4) Education (secondary)	Tertiary = 1, 0 otherwise	EDUCAT1(4)
Ethnicity	Black = 1, 0 otherwise	BETHNIC
Persons per Bed	Number of persons per bed	PERBED
County of Residence	All regions	COUNTY
1) Port of Spain	Port of Spain $= 1, 0$ otherwise	COUNTY(1)
2) San Fernando	San Fernando = 1, 0 otherwise	COUNTY(2)
3) St. George	St. George $=$ 1, 0 otherwise	COUNTY(3)
4) Caroni	Caroni = 1, 0 otherwise	COUNTY(4)
5) Nariva	Nariva = 1, 0 otherwise	COUNTY(5)
6) St. Andrew	St. And rew $= 1, 0$ otherwise	COUNTY(6)
7) Victoria	Victoria = 1, 0 otherwise	COUNTY(7)
8) St. Patrick	St. Patrick $=$ 1, 0 otherwise	COUNTY(8)
9) Tobago	Tobago = 1, 0 otherwise	COUNTY(9)

Source: Authors' computations, based on dataset variables from the 1998 Household Budgetary Survey.

Interpreting the Results

The model estimates allow one to conclude that households headed by an unemployed person (UNEMP) have a poverty risk 205 percent higher than the reference group of households with the contrasting feature (i.e., households with heads who were not unemployed). This model was also tested with number of earners as an explanatory variable; while number of earners was significant only at the 5-percent level, its presence in the model

adversely affected the Wald statistic for the unemployment variable and reduced the model's overall validity. Consequently, it was dropped in favor of the unemployed; this variable was significant not only at the 1-percent level, but improved the model's overall validity.

Age of household head (AGE), included by single years, proved significant at the 5-percent level. This result indicates that, for each year younger a household

Figure 2-5. Testing for Model Validity

	Omnibu	s Tests of Model C	oefficients	
		Chi-square	df	Sig.
Step 1	Step	387.796	17	.000
	Block	387.796	17	.000
	Model	387.796	17	.000
		Model Summary	,	
Step	–2 Log likelihood	Cox & Sn R Squar		Nagelkerke R Square
1	1694.610	.158		.262

Classification Table^a

				Predic	ted
			PO	OR1	
	Observed		.00	1.00	Percentage Correct
Step 1	POOR1	.00	1826	44	97.6
		1.00	309	82	21.0
	Overall Percentage				84.4

Source: SPSS Version 13 Logistic Regression run by the authors.

^a The cut value is .500.

				Variables in the	e Equation		
		В	S.E.	Wald	df	Sig.	Exp(B)
Step 1ª	UNEMP	1.123	.239	22.057	1	.000	3.075
	AGE	012	.005	5.162	1	.023	.988
	ADEQ	.251	.049	26.189	1	.000	1.285
	FHEAD	.389	.137	8.019	1	.005	1.476
	BETHNIC	.297	.138	4.639	1	.031	1.346
	PERBED	.517	.063	67.566	1	.000	1.677
	EDUCAT1			41.963	3	.000	
	EDUCAT1(1)	2.146	.578	13.780	1	.000	8.550
	EDUCAT1(2)	1.484	.474	9.807	1	.002	4.409
	EDUCAT1(3)	.577	.486	1.407	1	.236	1.780
	COUNTY			51.006	8	.000	
	COUNTY(1)	.379	.427	.786	1	.375	1.460
	COUNTY(2)	132	.475	.077	1	.781	.876
	COUNTY(3)	.446	.298	2.239	1	.135	1.562
	COUNTY(4)	100	.351	.082	1	.775	.905
	COUNTY(5)	1.236	.409	9.134	1	.003	3.443
	COUNTY(6)	1.407	.367	14.713	1	.000	4.084
	COUNTY(7)	.936	.326	8.227	1	.004	2.549
	COUNTY(8)	1.065	.330	10.421	1	.001	2.900
	Constant	-4.885	.616	62.887	1	.000	.008

Table 2-23. Model Results

Source: SPSS Version 13 Logistic Regression run by the authors.

^a Variable(s) entered on step 1: UNEMP, AGE, ADEQ, FHEAD, BETHNIC, PERBED, EDUCAT1, COUNTY.

head was, the odds of the household being affected by poverty declined by 1 percent; thus, younger households were relatively more affluent than those headed by older persons. Two factors could explain this result. First, in 1997–98, Trinidad and Tobago began to benefit from a demographic bonus, associated with more women in the younger age groups in the work force. Second, the economy was recovering from many years of slow growth or decline, and the benefits of increased material wealth were accruing more to younger households.

The adult equivalent (AQEQ) family size, included in this model as a continuous variable, was significant at the 1-percent level on the chi-square distributed Wald test. The odds ratio Exp(B) shown indicates that, for each additional equivalent adult added to the household, the risk of poverty increases by 28.5 percent. This result is not unexpected, as larger household sizes are associated with higher levels of deprivation and social and material deficiencies.

Analysis of the Continuous Sample Survey of Population (CSSP) data over the 1994–2002 period showed constant improvement in women's situation. In this model, the sex of head (FHEAD) was significant at the 1-percent level, and the poverty risk associated with a female-headed household was 47.6 percent greater.

The issue of race was tested for households headed by Indians and Africans (BETHNIC); at the 5-percent level, this characteristic increased the odds of a household being poor by 34.6 percent, proving that poverty-reduction strategies cannot overlook ethnicity in segmented societies, where there is differential economic participation by ethnicity.¹⁶

Overcrowding at the household (PERBED) level was the most statistically significant variable that influenced household-level poverty. Improved housing conditions (all other variables being equal) can improve the situation of the poor by up to 67.7 percent.

Education, introduced into the model as a categorical variable (EDUCAT1), was significant at the 1-percent level. Its components were classified broadly as none, primary, secondary, and tertiary education. Results clearly showed that households where the head had no education (EDUCAT1(1)) were 7.5 times more likely to be poor than the reference group (household heads with primary or higher level of education attained). This finding strongly supports ensuring that poverty reduction be accompanied by deliberate and sustained emphasis on primary education (EDUCAT1(2)); at the same time—since the odds ratio for household heads with primary education is still three times that of the reference group—secondary education is an important component in general education that requires

¹⁶ Race and ethnicity are politically charged variables in Trinidad and Tobago's governance and administration. The two major ethnic groups display differential participation in certain areas of the economy, and show differentials in their presence in prisons, as victims of kidnapping, and in achievement levels in certain areas of education and higher-level professions.

emphasis. Households whose heads had secondary and higher levels of education (EDU-CAT1(3)) were not generally poor; this statistically insignificant variable was included only because it was part of the categorical set.

The regional variable (COUNTY) showed the regions most affected by poverty and the odds of its incidence in every county. Tobago (COUNTY(9)) was dropped from the model because it was insignificant in explaining regional distribution of poverty. The respective odds ratios of 250 and 300 percent for Nariva and St. Andrew were greater than that of the reference region (i.e., the other counties). Port of Spain, San Fernando, St. George, and Caroni recorded higher levels of welfare than the reference group. Poor communities in Trinidad and Tobago were found to be largely rural.

Treating Poverty: Institutional Analysis and Review

Clearly, the causes of poverty in Trinidad and Tobago extend beyond access to adequate income. In certain districts, shortage of such public goods as potable water, transportation, and youth access to training and education diminish opportunities and quality of life. In other environments, informal but effective extra-legal groups influence income access, creating a subculture that undermines commitment to values consistent with the peaceful development of society.

Vulnerabilities

International economic and social forces also put the country's households at risk. Trade liberalization increases the vulnerability of employees in certain sectors, and the country has no developed mechanisms for handling trade adjustment. Failure to provide for the training and retraining of workers in the face of economic and technological change can put a household's main breadwinner, along with his or her family, on the breadline. In addition, external migration—in response to push factors at home and pull factors abroad—deprives households of parents, with often pernicious results for the children left behind. Moreover, new U.S. immigration and national security rules have led to the recent return of deportees with criminal records. Finally, drug abuse by individuals may impose unrequited costs on entire family units.

These vulnerabilities are, in part, a commentary on the country's institutional framework for coping with varying types of social ills. Many existing institutional structures treat areas of vulnerability or pathology that social forces have created. Most operate with a top-down philosophy or handout mentality. All must be viewed against the backdrop of the range of factors that contribute to poverty or create household risk. Current societal challenges include:

- rise of kidnappings,
- violence in schools,
- increased ethnic tension,
- domestic violence (especially abuse of women and children),
- increased incidence in use of narcotics and in narcotics trade,
- spread of HIV/AIDS, and
- trade liberalization's effects on certain sectors of the labor force and economy.

Service Delivery Mechanisms

Society is most effective at reducing and eradicating poverty if mechanisms are in place to treat whatever vulnerabilities may emerge. Thus, the discussion on institutional structure that follows questions whether the agencies identified have adequate capabilities and capacities to reduce poverty and protect society from vulnerability or remedy fall-out effects when individuals or households succumb.

Four social-service delivery ministries in the public sector, in addition to departments or agencies not directly under a minister's control in their day-to-day operations, are officially responsible for treating poverty issues. These are:

- Office of the Prime Minister (responsible for social-services delivery),
- Ministry of Community Development and Culture,
- Ministry of Youth and Sport, and
- Ministry of Social Development and Gender Affairs.

Tobago has devolved authority considerably with respect to government services. The Tobago House of Assembly is responsible for administration. Ministries in Trinidad are mirrored by Departments, under the control of Secretaries, which function essentially as Ministers of Government in Trinidad. Many of the programs operated in Trinidad are found in Tobago. However, the special needs of Tobago's population have led to the development of needs-specific programs. The Tobago House of Assembly generates its own budget and receives most of its revenue by way of transfers from the Central Government for running its social-sector programs.

More than 100 programs fall under the rubric of social services, besides those offered by the Ministries of Education and Health. A host of nongovernmental organizations (NGOs) and Community Based Organizations (CBOs) also operate in the country. The institutional environment is therefore "thick" with participants. Yet there are major gaps, attested to in the level of need felt by some sections of society and the outward visible evidence of social discord.

In this study, personnel from a variety of agencies were interviewed. In addition, with its renewed thrust in the delivery of social services, the Government has produced some documentation on its programs, attempting to list the number of beneficiaries, identify program objectives and costs of providing services, and assess the efficacy of interventions.

Change in the governing administration and restructuring of ministerial portfolios make it difficult to develop a historical series on beneficiaries by programs, even though it is possible to establish in broad terms the expenditure allocated to the social services: Recipients of old-age pensions and public assistance are among the few beneficiaries for whom there is a readily available series on benefits. Expenditure data from NGOs and CBOs are even more problematic. Government subventions are important to most and provide some sense of the commitment level.

Programs

The long lists of programs in Tables 2-24 and 2-25 represent the reorganization of a much longer list (more than 100 programs) that apparently existed when the present administration came into power. Table 2-24 lists developmental and preventive programs that currently target services to a range of clients, while Table 2-25 provides information on remedial and supportive programs administered by the Government, and in some cases, with the assistance of NGOs and CBOs. In undertaking rationalization, the new administration cut some programs but added others more consistent with its own electoral pledges and agenda.¹⁷ These lists show, in the final analysis, the Government's substantial commitment to social-services delivery. However, issues remain regarding the benefits clients derive, as distinct from the costs Government incurs, as a result of the nature of the delivery system and the systems for targeting beneficiaries.¹⁸

Interestingly, the thrust of the programs listed in Tables 2-24 and 2-25—and those that presumably have the focus of the Government's attention—are mainly of a developmental and preventive nature. As Table 2-26 shows, in 2003, just under one third (20) of the 63 programs were of a supportive and remedial nature. If the Unemployment Relief Programme (URP) and the Community Environment Protection and Enhancement Program (CEPEP) had been treated not as developmental, but as supportive and remedial, then the weight of expenditure would have listed heavily in favor of supportive needs. (A presumption may have been that women benefit equitably in programs available to the general public.)

¹⁷ The Prime Minister has the prerogative of deciding on Cabinet size and structure of ministerial portfolios; in turn, the ministries develop and implement programs as they see fit.

¹⁸ Interviews revealed that many program coordinators lacked the required data to properly target beneficiaries.

lable 2-24. Develop	lable 2-24. Developmental and Preventive Programs, 2003	ve Programs, 2003			
Program	Government Ministry or Department	Program Description and Targeted Clientele	Number Targeted	Cost (millions of TT\$)	Unit Cost (thousands)
Helping You Prepare for Employment	Science, Technology, and Tertiary Education	Provide recent secondary school graduates marketable skills.	1,100	5.30	4.80
On-the-Job Training	Science, Technology, and Tertiary Education	Provide graduates of secondary schools, technical institutes, and tertiary institutions pre-employ- ment training, with access to occupational experi- ence and work-based training opportunities.	2,832	n.a.	n.a.
Computer Literacy Train- ing Programme	Science, Technology, and Tertiary Education	Provide the population training in computer proficiency.	3,859	0.95	0.25
Textbook Rental/Loan Programme	Education	Loan students (forms 1 and 2) in public- and private-secondary schools textbooks in math, language arts, Spanish, and science.	47,000	25.2	0.54
School Book Grant	Education	Award grants of TT\$1,000 to students (forms 3, 4, and 6) to assist parents with books and school materials to ensure equal access to educational opportunity.	53,000	55.0	1.04
Provision of Textbooks for Primary Schools	Education	Award grants of four textbooks to primary school students to ensure equal access to educational opportunity.	156,000	40.0	0.26
Free Student Transportation	Education	Provide secondary- and some primary-school students free transportation.	45,000	34.0	0.76
				0)	(continued on next page)

Table 2-24. Developmental and Preventive Programs, 2003

Table 2-24. Developmental an	mental and Preventi	d Preventive Programs, 2003 (continued)			
Program	Government Ministry or Department	Program Description and Targeted Clientele	Number Targeted	Cost (millions of TT\$)	Unit Cost (thousands)
School Nutrition Programme	Education and Tobago House of Assembly	Provide underprivileged children (ages 3–18) breakfast and lunch (25,000 breakfasts and 90,000 lunches).	123 (preschools), 495 (primary schools), and 102 (secondary schools)	14.0	n.a.
Guidance and Counseling	Ministry of Education	Provide secondary-school students career development and personal, social, and academic guidance.	36,192 (career development) and 2,406 (special- ized guidance)	n.a.	n.a.
Project Peace	Ministry of Education	Reduce violence and lack of discipline in primary and secondary schools.	130 (secondary schools) and 440 (primary schools)	5.1	n.a.
Women in Harmony	Community Develop- ment and Gender Affairs	Provide single women opportunity to acquire skills in agriculture and care for the elderly.	413 (women, ages 26-45 years)	2.60	6.30
Prevention of Mother to Child Transmission of HIV	Health	Reduce number of children born with HIV.	All pregnant women in Trini- dad and Tobago	1.2	n.a.
				0)	(continued on next page)

Copyright © by the Inter-American Development Bank. All rights reserved. For more information visit our website: www.iadb.org/pub

(continued)
2003
Programs,
Preventive
and
Developmental
able 2-24.
able

Program	Government Ministry Program or Department	it Ministry Program Description and ent Targeted Clientele	Number Taraeted	Cost (millions of TT\$)	Unit Cost (thousands)
Non-traditional Skills Training for Women	Community Develop- ment and Gender Affairs	Train low-income women in construction and woodworking, auto repair, and computer repair.	348 (women, ages 19–25 years)	3.49	10.03
Domestic Violence Programme	Community Develop- ment and Gender Affairs	Reduce instances of acts of domestic violence.	n.a.	0.12	n.a.
Youth Development and Apprenticeship Centres	Sport and Youth Affairs	Engendering positive values and leadership po- tential and social life skills, along with entry-level skills geared for employability, among youth at high risk.	544 (youth 15–18 years old in residential set- ting and females 15–25 years old in non-residential setting)	16.86	30.99
Youth Facilities Develop- ment Programme	Sport and Youth Affairs	Provide youth at high risk (15–29 years of age) occupational training.	700	7.58	10.83
Save the Youth in Mar- ginalized Communities	Sport and Youth Affairs	Provide social education, sporting, and recre- ational programs for young persons (ages 12 –29 years) in four difficult communities.	n.a.	0.56	n.a.
National Youth Sport Festival Programme	Sport and Youth Affairs	Offer tournaments for young men and women under 20 years of age.	100 (teams)	0.4	4.00
Youth Health Project	Sport and Youth Affairs	Launch adolescent-friendly services in youth facilities or health caravans in selected areas.	500	0.08	0.16

Program	Government Ministry or Department	Program Description and Targeted Clientele	Number Targeted	Cost (millions of TT\$)	Unit Cost (thousands)
Capacity Building Youth Programme in HIV/ AIDSPeer Education Programme	Division of Health and Social Services of the Tobago House of As- sembly	Offer community outreach to youth (ages 11–25) to promote healthy lifestyles.	n.a.	0.03	n.a.
Focus on Youth	Health	Induce behavioral change to reduce HIV infection.	n.a.	0.05	n.a.
RapPort	Health	Provide community outreach to promote safety in sexual relationships among youth.	n.a.	0.5	n.a.
Tobago Drug Council and Alcohol Drug Abuse and HIV/AIDS Prevention Programme	Division of Health and Social Services of the Tobago House of As- sembly	Provide community and school intervention in preventive education, treatment, and rehabilita-tion.	л.а. П	0.12	n.a.
Spirituality in Action for Family Empowerment (SAFE)	Division of Health and Social Services of the Tobago House of As- sembly	Provide clergy and faith-based organizations training and development programs to build capacity to treat HIV/AIDS, poverty, substance abuse, domestic violence, and other social pathology.	.e.ц	0.03	n.a.
Tobago Health Promo- tion Clinic Programme	Division of Health and Social Services of the Tobago House of As- sembly	Promote HIV/AIDS and substance-abuse preven- tion, awareness, and social marketing among adults, youth, and children.	л.а. Л	14.0	n.a.

Table 2-24. Developmental and Preventive Programs, 2003 (continued)

lable 2-24. Develop	mental and Prevent				
Program	Government Ministry or Department	Program Description and Targeted Clientele	Number Targeted	Cost (millions of TT\$)	Unit Cost (thousands)
Creative Living Nutrition Project	Division of Health and Social Services of the Tobago House of As- sembly	Teach parents and caregivers how to prepare nutritious and appealing meals and promote good eating habits.	n,a.	0.03	n.a.
National Skills Develop- ment Programme	Science, Technology, and Tertiary Education	Prepare manpower base for industrial plant construction.	168 (young people 17 years of age and over)	13.00	77.38
Retraining Programme for Displaced Workers	Science, Technology, and Tertiary Education	Equip retrenched workers with new skills for operating in an industrial environment.	510	4.60	9.02
Youth Training and Employment Partnership Programme (YTEPP)	Science, Technology, and Tertiary Education	Prepare recent school leavers (15–25 years of age) with numeracy, literacy, vocational, and micro-entrepreneurship skills.	7,000	22.57	3.22
Civilian Conservation Corps	National Security and Rehabilitation	Prepare non-academically inclined youth (18–25 years of age) with educational and vocational exposure; foster self-esteem and socially-desir- able behavior.	2,500	19.99	8.00
Building Construction Technology	Science, Technology, and Tertiary Education	Train unemployed persons seeking skills in the construction industry.	163	0.74	4.54
Community Swimming Programme	Sport and Youth Affairs	Expose potential athletes to recreation and competitive swimming.	40,000	0.18	0.0045
				(כס	(continued on next page)

Table 2-24. Developmental and Preventive Programs, 2003 (continued)

Table 2-24. Develor	mental and Prevent	Table 2-24. Developmental and Preventive Programs, 2003 (continued)			
Program	Government Ministry or Department	Program Description and Targeted Clientele	Number Targeted	Cost (millions of TT\$)	Unit Cost (thousands)
Dollar for Dollar Educa- tion Plan	Science, Technology, and Tertiary Education	Provide students in tertiary-level education half the costs of their tuition fees.	7,604	35.73	4.70
Sport School Programme	Sport and Youth Affairs	Promote psycho-social development among talented athletes (two-week program).	140	0.24	1.71
Sports Plus	Sport and Youth Affairs	Engage youths (13–19 years of age) in sports as the basis for improving self-esteem and quality of life and becoming more physically and mentally active (national pilot program).	1,300	3.25	2.50
Sport Training and En- hancement Programme	Sport and Youth Affairs	Identify talented youth (8–14 years of age).	3,800	0.60	0.16
Coach Education	Sport and Youth Affairs	Support coaches of various sports disciplines in their work.	n.a.	0.02	n.a.
Information Made Avail- able through Technology Centres	Sport and Youth Affairs	Attract various client populations through delivery of information and training using technology.	n.a.	1.00	n.a.
Community Interface Programme	Office of the Prime Minister (Social Services Delivery)	Discuss adoption-related issues publicly with all communities in Trinidad and Tobago.	n.a.	0.07	n.a.
				5)	(continued on next page)

Copyright \odot by the Inter-American Development Bank. All rights reserved. For more information visit our website: www.iadb.org/pub

	mental and Prevent	lable 2-24. Developmental and Preventive Programs, 2003 (continued)			
Program	Government Ministry or Department	Program Description and Targeted Clientele	Number Targeted	Cost (millions of TT\$)	Unit Cost (thousands)
Youth Apprenticeship in Agriculture	Ministry of Agriculture, Land, and Marine Resources	Train youths (17–25 years of age) in specialized areas of agriculture to enable them to settle as farmers on state lands or become involved in agribusiness.	1,500	3.23	2.15
Unemployment Relief Programme	Ministry of Local Govern- ment	Provide unemployed persons and single mothers short-term employment.	6,000 (unem- ployed persons) and 23,800 (single mothers)	125.00	n.a.
Life Management and Parenting Education	Department of Social Services of the Tobago House of Assembly	Disseminate information and educational and training opportunities to parents and guardians.	n.a.	0.05	n.a.
Community Safety and Enhancement Pro- gramme	Community Develop- ment and Gender Affairs	Enhance security and safety in communities with high incidence of criminal activity.	100 (communi- ties)	0.7	7.00
Source: Government of the Republi	Source: Government of the Republic of Trinidad and Tobago, Social Sector Investment Programme, 2004.	Investment Programme, 2004.			

Table 2-24. Developmental and Preventive Programs, 2003 (continued)

Source: sovernment or the Republic of Inniada and Topago, sodal sector Investment Programme, 2004 *Note:* The table reflects gaps in data availability (n.a. = not available). Copyright © by the Inter-American Development Bank. All rights reserved. For more information visit our website: www.iadb.org/pub

lable z-zo. Suppor	арые z-zo. Supportive and кетера Programs, zuus	ograms, zuus			
Program	Government Ministry or Department	Program Description and Targeted Clientele	Number Targeted	Cost (millions of TT\$)	Unit Cost (thousands)
Children's Homes and Industrial Schools	Office of the Prime Minister (Social Services Delivery)	Children without parents or guardians and young offenders.	2,000	4.05	2.025
Chronic Disease As- sistance Plan	Health	Persons 60 years of age and older with chronic diseases: diabetes, hypertension, glaucoma and certain cardiac diseases.	4,739	14.0	2.95
Financial Assistance to Necessitous Patients	Health	Necessitous persons in need of medical diagnosis, treatment, and rehabilitation.	n.a.	3.5	n.a.
Special Programme for Treatment of Adult Cardiac Disease	Health	Needy cardiac patients requiring assistance for angiograms, angioplasty, and open-heart surgery.	n.a.	2.0	n.a.
Hardship Relief Pro- gramme	Public Utilities	Rebate to old-age pensioners and recipients of public assistance who own one residential property.	93,000	1.5	16.13
Anti-retroviral Treatment Programme	Health	Free anti-retroviral therapy for HIV/AIDs patients.	100	8.4	84.00
School Crossing Guard Programme	Labor	Rotational employment (assisting primary-school students cross streets outside schools) for unem- ployed women in East Port-of-Spain.	n.a.	0.2	n.a.
				(0	(continued on next page)

Table 2-25. Supportive and Remedial Programs, 2003

Copyright © by the Inter-American Development Bank. All rights reserved. For more information visit our website: www.iadb.org/pub

(continued)
15, 2003 (col
Program
e and Remedial
Supportiv
able 2-25.

Table 2-25. Suppor	tive and Remedial Pr	Table 2-25. Supportive and Remedial Programs, 2003 (continued)			
Program	Government Ministry or Department	Program Description and Targeted Clientele	Number Targeted	Cost (millions of ∏\$)	Unit Cost (thousands)
Social Help and Rehabili- tative Efforts (SHARE)	Office of the Prime Minister (Social Services Delivery)	Food distribution and skills training and empow- erment projects for needy persons and emergency cases (delivered through NGOs and CBOs).	15,000 (food distribution), 12,164 (skills- training), and 41,555 (empow- erment)	19.6	n.a.
Disability Assistance Programme	Office of the Prime Minister (Social Services Delivery)	Persons 40–65 years of age medically certified as permanently disabled.	8, 294	63.5	7.66
Adolescent Mothers Programme	Social Development, in collaboration with Child Welfare League (NGO)	Training, continuing education, and counseling for pregnant adolescents and teenage mothers and day-care services for their children.	n.a.	0.4	n.a.
Remedial Therapy Programme	Office of the Prime Minister (Social Services Delivery)	Counseling for young probationers and their par- ents to create healthy relationships and life styles, manage psychosocial issues, and curb recidivism.	1,163	0.002	0.0017
Piparo Empowerment Centre	Office of the Prime Minister (Social Services Delivery)	Drug-abuser rehabilitation, treatment, and skills development.	n.a.	4.4	n.a.
Community Residence and Ambulatory Services for Children and Adoles- cents at Risk	Department of Social Services of Tobago House of Assembly	Faith-based services for children and youth with deviant tendencies.	500	0.15	Ю. О
				0)	(continued on next page)

Copyright \odot by the Inter-American Development Bank. All rights reserved. For more information visit our website: www.iadb.org/pub

Table 2-25. Suppor	tive and Remedial Pr	Table 2-25. Supportive and Remedial Programs, 2003 (continued)			
Program	Government Ministry or Department	Program Description and Targeted Clientele	Number Targeted	Cost (millions of TT\$)	Unit Cost (thousands)
Substance Abuse and Prison Integrated Network (SPINE)	Children and Family Ser- vices Unit of the Tobago House of Assembly	Rehabilitation of socially-displaced substance abusers and support to relatives of persons in prisons.	20	0.15	7.5
Provision of Medical and Psychiatric Services for Socially Displaced Persons	Office of the Prime Minister (Social Services Delivery)	Health services for residents of the Centre for Socially Displaced Persons in Port-of-Spain.	72	0.06	0.833
Aided Self-Help Programme	Community Develop- ment and Gender Affairs	Relief to victims of disaster and senior citizens for reconstruction and repair of homes (grants not exceeding TT\$10,000).	6,553	5.0	0.763
Male Support Programme	Community Develop- ment and Gender Affairs	Addressing the vulnerability of men and boys and inducing attitudinal change through the active participation of males in the socialization of boys.	n.a.	0.03	n.a.
Children and Family Services Programme	Children and Family Services of the Tobago House of Assembly	Support services to families at risk.	n.a.	0.225	n.a.
Battered Women's Shelter and Services	Social Services of the Tobago House of As- sembly	Shelter services to victims of family violence.	n.a.	n.a.	n.a.
Community Service	Office of the Prime Minister (Social Services Delivery)	Engaging offenders in constructive, unpaid com- munity service.	126	0.001	7.9
Source: Government of the Republic of Trinidad and Tol Note: The table reflects gaps in data availability (n.a. =	<i>Source:</i> Government of the Republic of Trinidad and Tobago, Social Sector Investment Programme, 2004. <i>Note:</i> The table reflects gaps in data availability (n.a. = not available).	Investment Programme, 2004.			

Copyright © by the Inter-American Development Bank. All rights reserved. For more information visit our website: www.iadb.org/pub

Program Type	Total	Children and Youth	Women	Men	Elderly	General Population
Developmental and						
Preventive	43	23	4		_	16
Supportive and Remedial	20	4	2	1	2	11

Table 2-26. Summary of Programs by Targeted Clientele, 2003

Source: Authors' assessment of the Social Sector Investment Programme.

The data also raise an issue with regard to the degree to which developmental programs for the general public are designed to treat deficiency of skills and knowledge relative to the needs of an economy that must anticipate greater reliance on applications of science, technology, and knowledge in the medium term. Current and prospective rents from oil and natural gas may mask the real hurdle that the country faces with respect to the required human capital revolution.

Tables 2-24 and 2-25 suggest that many of the agencies engaged in service delivery may not be social-service providers. However, given the current commitment to shift the delivery focus from supportive and remedial to developmental and preventive, many other agencies outside the scheduled social-service agencies will need to be involved in program delivery, as demonstrated by the recent work of the Ministry of Science, Technology, and Tertiary Education.

Recommendations

Today Trinidad and Tobago stands at a crossroads of achievement and challenge. In terms of its HDI and several Millennium Development Goals (MDGs), the country is well placed. Primary education is universal, gender equality and women's empowerment are growing, and institutional mechanisms are being put in place to achieve environmental sustainability. In addition, the country participates actively in international society and is committed to the global partnership for development. At the same time, serious social challenges persist. Measured poverty is high, extreme poverty and indigence are prevalent in certain areas, and violent crime is on the rise. Compared to developed countries and those on the threshold of attaining developed status, Trinidad and Tobago lags severely with respect to both health and education. Moreover, a weak labor force compromises the country's ability to compete effectively in the knowledge economy of the twenty-first century.

The recommendations that follow address these urgent issues; they represent a minimum program for poverty reduction and social development. If these measures are adopted, it is possible that inequality could be reduced to a Gini of 0.3 or lower and indigence or extreme poverty halved or nearly eliminated within five years.

Human Capital Investment

At the macroeconomic level, the Government must ensure that large inflows of foreign exchange from the exploitation of its natural-resource base are used to create human capital to compete in the knowledge-based labor force of the twenty-first century. Implementing this resource replacement model requires winning the population's support; otherwise, the country could dissipate its increased income on consumption rather than in crucial investments.¹⁹ The best strategy is to relate household income growth to performance of the non-oil export sector and, in the monetizing of foreign-exchange earnings, weight expenditure on human-capital and infrastructure investment, consistent with building an export capacity that relies less on the natural-resource base.

Investments in education (especially remedial education and training), primary health care, and social services and protection are critical to overcoming poverty in the medium and longer term. They are the outward visible evidence of the human capital thrust that must underpin the search for competitiveness alternatives to oil and gas.

Inter-agency Coordination for Reorganized Governance

Trinidad and Tobago has received loan assistance and grant financing in various areas related to the social sectors from several international agencies: Inter-American Development Bank (IDB) (community development support and education- and health-sector reform), European Union (EU) (disease [HIV/AIDS] and poverty reduction), and United Nations Development Programme (UNDP) (decentralization of social-services delivery). To date, limited achievements in health and education reform point to the challenges involved in whole system changes, especially where the fulcrum of change centers on social and psychological shifts of key stakeholders and actors. Solving the problem is less about finance and more about appreciating the problem's enormity and developing the mechanisms to attack it.

Expenditure on education reform must face the dual challenge of winning over students who feel alienated by the educational system and its processes and engaging their parents more effectively. In addition, teachers must be encouraged to become more passionate about the knowledge they impart at all levels of the educational system.

With regard to health reform, a psychological shift is required at all levels. The general population must make a personal commitment to wellness, doctors and other medical

¹⁹ If the country failed to transform its resource configuration for competition to a knowledge-based labor force, workers would seek large increases in wages that have little to do with productivity, and businesses would use market power, where possible, to sequester resources from the community. In either case, the primary direct or indirect source would be foreign-exchange earnings from the country's natural-resource base.

personnel must commit to best practices at all times, and policymakers and administrators must collect and use data to inform policy and guide decision-making.

The technical-assistance packages must be revisited to establish the degree to which the ideational terms of reference have been identified and criteria laid out for their achievement. Otherwise, international-assistance and domestic resources may be spent without addressing the real problems constraining the reform process. This is the implication of reviews of the IDB-financed health reform project.

In terms of social-services delivery, the Government recognizes the need for reform, including substantial decentralization. There is potential for both the Government and Civil Society Organizations to make the programs more coherent, anchoring them in a feedback process that includes real-time information on program performance and active involvement of clients in their localities and regions.

The UNDP financed a major initiative to study the decentralization of social-services delivery. Decentralization goes to the heart of many people-related issues; the process of decentralization is likely to result in greater interaction with clients at the local level, not only with respect to the narrow range of social services, but also with regard to education, health, and local government. Moreover, the Government has signaled its intention of addressing governance at the local level. The pressure point for whole system change may well lie in local-area initiatives that can engage the entire society in purposeful reorganization and empower the poor to participate effectively in their own development.

Much can be gained from inter-agency coordination. Together, the IDB, EU, and UNDP could address how to coordinate their efforts with respect to whole system changes and lay out the foundational thinking required of key stakeholders across a wide spectrum of society. At the same time, regularly generated data are needed to keep policymakers and service providers informed about the universe of actual and potential need. In this regard, more regularly-generated CSO data that responds to the country's requirements is needed.

Central Statistical Office: Assurance of Timely Data

The CSO must secure resources to allow it to produce and disseminate data on time. Long lags in data collection and publication of results are entrenched; as a result, many agencies have been forced to plan without data, thereby undermining their capacity for research and technical analysis in key areas of social-service delivery, with implications for the effective-ness of social development and protection. Surveys of living conditions and similar studies should be conducted more frequently. The ethos of data gathering in service of the range of public groups must become preeminent in the CSO's work. In this context, the international community can play a role in bringing the CSO up to current standards.

Crime Prevention and Detection

The threat to personal security damages the country's economy. It reduces investment and leads the very people needed to build the economy to withdraw. This group includes the entrepreneurs who create the Small and Medium Enterprises (SMEs) that contribute to employment creation and thus poverty reduction. Those with resources seek to expatriate their savings into foreign accounts. (They become hesitant about investing at home, and seek to relocate abroad, even if they keep some minor investment in the home country.) Middle-class professionals and technical manpower likewise seek to emigrate. Considerable investment is needed to improve security, upgrade policing, and prevent and detect crime—all part of the necessary infrastructure for development. The international community may be able to assist in this area, given the immense importance of personal security to the country's social and economic development.

Investing in Work-Force Skills

The fulcrum for economic transformation lies in the educational and training system. The foundation for eradicating poverty is to ensure that the vast majority of citizens are equipped to participate in the knowledge economy of the twenty-first century. This means addressing the needs not only of school-age children,²⁰ but also of those who have already entered the work force. Training must include social skills, introduction to entrepreneurship, and work-place etiquette. Initiatives of the Ministry of Science, Technology, and Tertiary Education and Ministry of Public Administration and Information are steps in the right direction, but need to be quickened and universalized.

Radical programs are needed to commit many clients to become engaged in self-upgrading, education, and training. This challenge extends to using the penal system to deliver educational upgrading. A special focus is programs that encourage young adults in their early twenties to enroll in large numbers in a wide range of educational and skills-development programs. In this group, single mothers who are heads of households should receive special attention for training and educational upgrading, possibly supported by such infrastructure as day nurseries. Others requiring special attention include the differently abled, a group that currently lacks services consistent with its requirements.

In the final analysis, the society's development goals will be best served if such a radical approach is used to train and upgrade all marginalized groups who extend across all working age groups. The knowledge they will have gained is the bulwark against poverty, which

²⁰ The Government may need to supply substitute teachers to deal with teacher absenteeism, which contributes to the undermining of student performance.

contributes to reducing societal inequality. Massive investment in remedial, post-school catch-up programs, especially for persons over 25 years of age, is required.

Fair Access to Entrepreneurial Resources

Steps that the country has already taken to break down barriers for new entrepreneurs should be supported by research and analysis to ensure that programs reach the right targets and that the support provided abides by universal criteria and principles of equity so that all regions benefit and all groups and individuals with business ideas have a fair chance at accessing resources. State-provided contracts must ensure that systems are in place to graduate SMEs so that they do not remain dependent on the State or create conditions where particular groups seek to capture administrative control of programs.

SMEs are likely to play a major role in diversifying away from resource-based industrialization, which is crucial to sustainable development and employment creation. IDB's contribution through its Community Development Fund (CDF) could be reviewed, given CDF's success in ensuring equity in its projects and programs.

Improved Social Services Delivery

Data from the Household Budgetary Survey, CSSP, and living conditions surveys should form the standard for analyzing the national poverty and living situation. There is need for greater sensitivity and commitment to documenting information on clients and their needs and identifying the time frame for delivery of services, including when to administer them indirectly through NGOs and CBOs.

The real-time mapping of services—whether delivered by Government agencies, NGOs, or CBOs—must be ensured so that the reach of services can be established by 1) geographic area, 2) age group, and 3) problem or need. Universality of services should be the primary objective in order to achieve greater equity across society, including treatment of the differently abled.²¹ Being able to judge the service delivery system against (at least) these three criteria provides an implicit test of the efficacy of social-development initiatives.

The informational requirements of such an approach can be addressed through current efforts to decentralize the delivery of social services. The country may want to set target dates for eliminating indigence or halving poverty through better targeting of beneficiaries, especially at the lowest level. Other immediate objectives include eliminating homelessness (especially that of street children) and dramatically reducing infant mortality. Old-age pension, public assistance, and disability benefits should be updated in keeping with the cost

²¹ In institutionalizing its delivery systems, the country must recognize that at least 10 percent of its population is differently abled.

of living and with reference to the poverty line. Minimum wages should also be monitored as an element of social protection. Other requirements include ensuring all communities, including the most remote, a potable water supply and focused interventions (in such special areas as Laventille and Morvant) that involve people in their own transformation.

Performance Documentation and Assessment

Documenting and assessing the performance of various providers will contribute to the improved efficiency and quality of service delivery. Commitment to improved standards and measurement of results is needed. A specific unit should be established in one ministry to measure the efficiency with which clients are reached and to compare the approaches of government agencies, NGOs, and CBOs. This ministry should be required to perform a social audit to pinpoint where deficiencies exist, how quickly they are being eliminated, and which approaches and programs are more efficient for doing so.

Stakeholder Partnerships

Examples from elsewhere in the world show that strong partnerships can be built among major stakeholders: NGOs, CBOs, private sector, government, civil society, and beneficiaries. Their responsibilities should include certifying organizations to work with low-income or poor individuals, families, households, and communities and conducting annual assessments of organizations. Collaborative agreements should be established with these organizations; they should be assisted in improving their capacity to write and access appropriate grants and other funding sources and monitor and evaluate funded programs and services.

Information Sharing

The various stakeholders must commit to information sharing and development of protocols so that all are sufficiently informed about the complementarities of what they do. Poverty studies (e.g., statistical reports), in particular, should be made available to all; this will help NGOs and CBOs to identify regions, communities, families/households, and individuals and validate data collected in the field through surveys and observations. In addition, protocols on data confidentiality and sharing must be worked out. Finally, the CSO must play a greater role in providing data.

Building from the Ground Up

Poverty alleviation and eradication are not limited to the sphere of Central Government policymakers. Mechanisms must be established that enable the poor and civil society gen-

erally to participate in developing bottom-up approaches. Their participation is essential to success. NGOs and CBOs provide a rich source of data, community experience, and knowledge that are invaluable to the practical aspects of program planning.

NGOs and CBOs: Financing and Infrastructure

Because NGOs and CBOs are involved in the delivery of public services outside the normative environment of rules and procedures, the Government may need to increase subventions to provide NGO and CBO staff basic salaries and fringe benefits. In the absence of grant funds, the Government should increase financial assistance to NGOs and CBOs. With regard to these organizations' infrastructure, the Government must handle their needs similar to the way in which it has dealt with those of religious organizations that provide primary and secondary education. The efficiency of service delivery dictates that this matter be examined.

Service Delivery: Reoriented Focus

Service delivery of the Government and Civil Society Organizations tends to focus on survival strategies linked to the temporary alleviation of poverty. The focus of both needs to shift toward developing programs and services aimed at 1) poverty prevention and 2) transition from temporary relief to sustainable lifestyles.

Conclusion

Trinidad and Tobago's biggest challenge to the sustained reduction of poverty is development of human capital. The revenue derived from the country's natural resources masks the major imperative to transform the country so that it can compete outside the oil and natural gas sectors. Facing the knowledge economy of the twenty-first century, Trinidad and Tobago's labor force lacks the depth of education and skills needed to compete. Beyond CARICOM, the country's non-oil sector is of doubtful viability and its petro-chemical sectors cannot create the employment needed to absorb the work force.

Measured poverty is the outward sign of the human capital challenge. Eliminating poverty must be anchored not only to improved educational standards among school-age Trinidadians and Tobagonians; it also involves absorbing large numbers of adults in remedial education programs to bring them into the global knowledge stream. Failure to do so will lead to increased poverty as the petro-chemical sector matures and technological advances reduce demand for the country's energy resources.

The collaboration of civil society and reorganization of social-service delivery agencies raise the potential for Trinidad and Tobago to eradicate poverty and accelerate development of capacity among its poor and vulnerable citizens, enabling them to participate more fully in the knowledge economy of the twenty-first century. Not only would this achievement involve a more efficient use of resources, but it would also contribute to greater equity across ethnic groups, which, along with transformation of economic sectors, is critical to the efficient operation of a pluralistic society. The international community has contributed financially to the development of Trinidad and Tobago; however, current needs call for solutions that involve a profound shift in vision and thinking, enlisting commitment to whole system changes that can cultivate attitudes more propitious to sustainable development.

References

- Borooah, Vani K. 2001. *Logit and Probit, Ordered and Multinomial Models*. Paper No. 139. Thousand Oaks, CA: Sage Publications, Ltd.
- Henry, R. M. 1989. "Inequality in Plural Societies: An Exploration." *Social and Economic Studies*, vol. 38, no. 2.
- Maddala, G. S. 1983. *Limited Dependant and Qualitative Variables in Econometrics*. Econometric Society Monographs. New York: The Econometric Society.
- Ranjan, Ray. 1999. *Poverty, Household Size and Child Welfare in India*. Australia: University of Tasmania, School of Economics.
- Ruben, Marc. 1996. *Poverty, Labour Force Status and the Social Safety Net*. Washington, D.C.: U.S. Census Bureau.
- World Bank. 1996. *Poverty Reduction and Human Resource Development in the Caribbean*, vol. 11. Washington, D.C.: The World Bank.
- -----. 2000. Financing of Education in the Caribbean. Washington, D.C.: The World Bank.

CHAPTER 3

Policies for Labor Market Institutions

René Cortázar

Since 1994, Trinidad and Tobago has had sustained economic growth that has translated into job creation and a sharp reduction in unemployment (Table 3-1). Indeed, from 1994 to 2002, unemployment was halved. At the same time, the evolution of wages is mixed (Table 3-2). On the one hand, nominal entry-level wages have grown at a slower pace than inflation,¹ while industry wages have grown rapidly in real terms. The nearterm expectation is that this trend of high growth rates will continue (IMF 2003; Haque 2002).

Within this context, the administration elected in October 2002 states that it wants Trinidad and Tobago to achieve developed-country status by the year 2020. In response, a collective effort by all sectors of society is under way to identify the main reforms needed to reach this goal. To face this challenge, the country must develop appropriate labormarket institutions to ensure adequate allocation of resources and high productivity growth.

Institutions are crucial for the working of labor markets (North 1990). They provide the "rules of the game" that, along with economic and technological constraints, determine the set of opportunities for organizations or "players." Labor-market institutions affect employment creation, labor-productivity growth and competitiveness, and labor-market efficiency (Heckman and Pagés 2000; OECD 1994).² It is within this context that this author analyzes five key topics: (i) labor legislation, (ii) minimum wages, (iii) training, (iv) social "concertacion," and (v) role of the Ministry of Labor (MOL).

In each case, practical policy recommendations are offered. In certain cases, current institutions are adequate; in others, reforms are needed because of poorly performing institutions or in anticipation of future needs, based on theoretical reasons or experiences elsewhere.

¹ This series was discontinued in 2001.

² One could also discuss labor institutions from the perspective of labor standards or degree of social participation.

		Emplo	yment	Unemployment (%)*		
Year	GDP Growth	Number	Growth (%)	Standard Definition	Extended Definition	
1994	3.6	415,600	2.7	13.1	18.4	
1995	3.8	431,500	3.8	12.0	17.2	
1996	3.9	444,200	2.9	11.3	16.2	
1997	2.7	459,800	3.5	10.5	15.0	
1998	7.8	479,300	4.2	9.9	14.2	
1999	4.4	489,400	2.1	9.4	13.1	
2000	6.1	503,400	2.9	8.5	12.1	
2001	3.3	514,100	2.1	7.5	10.8	
2002	2.7	525,100	2.1	7.3	10.4	

Table 3-1. Growth, Employment, and Unemployment, 1994–2002

Sources: Central Statistical Office and Central Bank of Trinidad and Tobago.

* The standard international definition of the term *unemployment* considers those workers actively seeking a job during the week of the survey. The extended definition adds those persons out of the labor force who looked for work during the three months before the week of the survey (but not during the week of the survey) that are still available for work.

Labor Legislation

This section analyzes two main pieces of labor legislation: Industrial Relations Act (IRA) and Retrenchment and Severance Benefits Act (RSBA).³ The IRA regulates collective bargaining and associations of workers and employers; it also creates procedures for the settlement of disputes by negotiation, conciliation, and arbitration. The RSBA regulates the conditions under which an employer can terminate a worker's contract.

Table 3-2. Inflation and Wage Growth, 1994–2002(percent)

4			
Year	Inflation ¹	Entry Wage ²	Industry Wage ³
1994	8.8	0.5	5.1
1995	5.3	1.9	4.1
1996	3.3	2.9	8.5
1997	3.6	1.9	4.6
1998	5.6	2.4	5.1
1999	3.4	1.7	_
2000	3.5	2.4	9.0
2001	5.6	1.5	9.3
2002	4.1	_	11.6

Source: Central Statistical Office.

¹ Consumer price index.

² Rate for production and ancillary workers.

³ Weekly earnings rate.

Given the importance of the rules of the game, which affect the players' behavior, enforcement of these norms is also discussed.

³ New proposals are also being designed in other areas, including occupational health and safety (Ministry of Labor 2003).

Industrial Relations Act

Collective bargaining is crucial for employment creation and productivity growth. In an open economy like that of Trinidad and Tobago, the evolution of wages and productivity must be closely linked. If wages outpace productivity, firms lose competitiveness and jobs are lost. If they lag productivity, workers lose incentives. In turn—because of the importance of effort and innovation in the new economic scenario—productivity deteriorates. Because the evolution of productivity is, to a significant extent, firm-specific, collective bargaining at the firm level would help maintain a tight relationship between wages and productivity growth rates. On the other hand, wages determined at the sector level produce the same effect of sector-specific minimum wages, which negatively affect employment and underemployment.⁴ Therefore, bargaining at the firm level would contribute to job creation and productivity growth. In terms of centralization of collective bargaining and job creation, one can consider the contrast between the United States and the European Union (OECD 1994) or Chile and Argentina in the Latin America and Caribbean (LAC) region. In the case of Trinidad and Tobago, collective bargaining occurs at the firm level; thus, the country's bargaining structure appears functional for employment and growth.⁵

Recommendation 1.

Maintain collective bargaining at the firm level.

Collective bargaining also involves the mechanism through which conflicts of interest are resolved. Given that bargaining is decentralized and that workers and businesses must assess the evolution of productivity at the firm level, bi-partite bargaining is usually recommended. First, it is difficult for a third party to adequately assess the productivity of various firms and jobs. When the third party is a government official, the risk of politicizing labor conflicts increases. On the other hand, charging policymakers with resolving conflicts of interest that have a limited private effect damages public authority. The LAC region is replete with examples of governments—especially labor ministries—wasting energies and prestige attempting to resolve labor conflicts instead of concentrating on the design and implementation of labor policies.

⁴ Workers who, as a result of sector-specific minimum wages, lose their jobs in less productive firms usually are not hired by more productive ones either because the wages of the latter do not fall or because workers in more productive firms are more highly educated and trained.

⁵ Certain countries show that a more centralized collective-bargaining system does not necessarily lead to lower employment when bargaining occurs in a coordinated way (Aidt and Tzannatos 2002). However, given the social and political environment of countries in the LAC region, this author believes that collective bargaining at the firm level is generally an asset for competitiveness and job creation.

Second, when governments attempt to guarantee social peace by mediating conflicts between parties, they often end up aggravating, instead of resolving, disputes. In the case of collective bargaining, labor and businesses know that, if they must come to the table with a government authority, they will be hard pressed to reach an intermediate solution. The government official, who knows little about the firm's internal situation but is anxious to solve the problem, will try to moderate the position of both parties so as to reach an agreement. In this case, both parties have an incentive to exaggerate their positions (and increase social conflict) before the authority calls upon them to moderate their respective demands. By contrast, a non-interventionist collective-bargaining policy induces both parties to moderate their positions at the outset. That no one will "come to the rescue" makes it possible for labor and business to try to overcome their differences from the first day.⁶

Third, because both parties must work together between bargaining processes, being unable to resolve disputes by themselves would likely damage their capacity to work together in resolving day-to-day issues.

According to the IRA, the first phase of collective bargaining involves direct negotiation among the parties (a bi-partite procedure); however, if an agreement is not reached, the matter is sent to the MOL for conciliation. On the other hand, the Minister of Labor can intervene at his or her discretion. If the MOL cannot reach an agreement after 14 days, the possibility of a strike is contemplated and/or the dispute is sent to the Industrial Court (IC) for conciliation and adjudication. Thus, bi-partite bargaining is combined with mechanisms for third-party intervention, even though bi-partite agreements predominate.⁷

Reinforcing the bi-partite aspects of collective bargaining means that the MOL should avoid direct intervention in this process as much as possible. If a third party is to intervene, one should favor conciliation over IC adjudication to foster an agreement between the parties.

Proposals to rationalize the conciliation function now exercised by the MOL and the IC leave it either in a strengthened MOL Conciliation Unit or the IC (Pegus 2003). This author favors integrating the function into the IC, which is better shielded from the vagaries of the political process.⁸

That the IC, a third-party, can put an end to the collective-bargaining process,⁹ even if both parties do not agree with the resolution, could be viewed as major drawback. However, in practice, most collective bargaining comes to an end by a bi-lateral agreement. Over the

⁶ The Chilean case is a good example of how bi-partite bargaining can guarantee low levels of social conflict, even amid a transition from dictatorship to democracy (Cortázar 1996).

⁷ This emphasis in bi-partite collective bargaining and labor relations should be accompanied by an amendment of the procedures for the recognition of trade unions, to make it more expeditious.

⁸ Certain proposals give the IC more autonomy (Pegus 2003).

⁹ The resolution can only be appealed on a point of law.

last 20 years, the IC awards on pay have averaged only two or three per year, representing less than 3 percent of all collective agreements (George-Marcelle 1999).¹⁰

Recommendation 2.

Reinforce the bi-partite aspects of collective bargaining.

In addition to collective bargaining, the IRA refers to the settlement of disputes by negotiation, conciliation, and arbitration. Labor legislation does not permit workers of non-unionized firms to go directly to the IC without registering with a union (except in the case of retrenchment and severance payments). Therefore, the more than 70 percent of workers who are not unionized have two options: 1) remain without a mechanism with which to settle disputes with employers (in which case they may end up perceiving labor rules as unfair, thereby affecting the social legitimacy of labor legislation); or 2) be forced to belong to a union (in which case they may perceive a lack of due respect for the right of workers not to unionize).¹¹

Recommendation 3. *Authorize non-unionized workers to go directly to the Industrial Court, without having to register with a union.*

Retrenchment and Severance Benefits Act

The RSBA regulates the conditions under which an employer can terminate a worker's contract. When a worker is dismissed for reasons of behavior, there are no severance payments. When the cause is retrenchment—that is, when there is a surplus of workers— the employer must give 45-days notice¹² and severance pay (for service of less than five years, he or she is entitled to two weeks per year worked; for service of five or more years, he or she receives three weeks of pay for the fifth and each succeeding year worked). In cases of unfair termination of contract, the IC may increase compensation.¹³ When an employer proposes to terminate the services of five or more workers for the reason of redundancy, s/he must give formal notice of termination to each worker, the recognized majority union, and the MOL (which may initiate a conciliation process).¹⁴

¹⁰ Information in this publication was complemented by a meeting held at the IC.

¹¹ That union workers may have more resources with which to defend themselves at the IC should not imply leaving non-unionized workers without access to the judiciary system.

¹² In lieu of giving notice, the employer can also pay for these days.

¹³ The court might also decide on reinstatement; however, that seldom occurs.

¹⁴ One shortcoming of the RSBA is that it does not adequately deal with workers who lose their jobs because of bankruptcy.

The most frequent effects of severance payments on the labor market are well known (Heckman and Pagés 2000). They increase the cost of firing and therefore contribute to job security; however, they also increase the cost of hiring. The net result is lower employment and turnover rates. To this one must add the increased power of incumbent workers, who pressure for higher wages, thereby reducing employment creation. Also affected is the composition of employment: a bias against younger and unskilled workers and expansion of the informal sector.

That it is costly for the employer to fire a worker and for the worker to quit (s/he would lose the right to severance pay) may induce them to maintain a relationship that they would rather avoid. This situation does not contribute to good labor relations or productivity growth.

How high is the cost of job-security regulation in Trinidad and Tobago? The expected discounted cost of dismissing a worker, in multiple of monthly wages, is between two and three. That is higher than Barbados, Belize, Guyana, Jamaica, and the Caribbean average. It is also higher than Brazil, Paraguay, Uruguay, and the developed-country average. However, it is lower than the remainder of Latin American (LA) countries and the LA average (Heckman and Pagés 2000).

Alternatives include 1) maintaining the current defined benefits system or 2) moving, at least in part, to a defined contribution system. Under the first alternative, the MOL (1997) proposes to change the current severance-pay system to a funded one. Employers would contribute to a fund from which workers would be paid when their contract is terminated because of redundancy (including bankruptcy), retirement, and quitting (under certain special conditions).¹⁵ The new benefits formula is not yet defined. The fund would be administered by the public sector.

For these stated reasons, this author believes it is not a good idea to increase the cost of terminating the employment relation. Thus, if the reform is applied and benefits are extended in cases of bankruptcy, retirement, and the worker quitting (under special conditions), it is recommended that the notice period and/or severance payments associated with retrenchment be reduced to avoid increasing the total cost of labor.¹⁶ In addition, funds should not have to be administered by the public sector; within regulations the law would determine, they could be administered by private institutions (e.g., banks or insurance companies).¹⁷

If a more significant reform is possible, this author recommends creating a defined contribution system, administered by the private sector, to substitute for part of severance

¹⁵ Workers must have labored at the firm for at least 10 years.

¹⁶ For workers currently under contract.

¹⁷ They would have to be strongly regulated in terms of the types of assets in which the funds could invest.

payments, whereby distribution would be the total amount of the fund created,¹⁸ and access to those benefits would be permitted not only in cases of retrenchment and bankruptcy, but also when workers retire or quit.¹⁹

This transformation should be made without increasing the total cost of labor.²⁰ Since a portion of the benefits would be received in cases where the worker quits or retires, as well as retrenchment, the notice period and/or severance payments associated with retrenchment would need to be reduced; this, in turn would reduce the marginal cost of firing and insider strength.

How would these reforms affect employment?²¹ In cases of bankruptcy and workers retiring or quitting, as well as creation of a fund, payments would reduce the degree of uncertainty associated with this benefit. Workers would perceive them more as part of their remuneration than as a tax on labor; thus, they would be willing to accept lower wages,²² thereby inducing increased employment.²³ The precise estimate of employment growth would depend first on the exact reduction of the cost of labor as workers perceive less uncertainty associated with this benefit and demand lower wages. The greater this change, the larger the effect on employment. The same is true with respect to reducing the effect of insider strength on wages. In addition, the higher the elasticity of labor demand with respect to labor costs, the greater the effect.²⁴ A process of transitioning from one system to the other would be required. It would be possible that past seniority would benefit from the new one.

¹⁸ This fund could take the form of an individual or collective savings account. In the latter case, there is risk pooling among workers; however, the higher the cross-subsidies among worker groups (e.g., old and new ones), the higher the employment costs (because low-risk workers are less willing to pay) (IDB 2003). Also, collective programs have problems of moral hazard and informality. Compared to a funded, defined benefits system (as that proposed by the MOL), a defined contribution system reduces the risk for firms when there is an aggregate or systemic shock because it puts a ceiling on the amount to be paid, which facilitates firm adaptation and reduced risk of bankruptcy. It also increases the likelihood of increased wages for workers with seniority. On the other hand, it does not guarantee a certain number of weeks of severance payment per year of seniority.

¹⁹ In contrast to the MOL proposal, all workers—not only those with more than 10 years of service with the firm—would have access to the fund if they quit.

²⁰ For workers currently under contract.

²¹ It is assumed that reforms are applied without increasing the cost of labor of those currently under contract.

²² It is assumed that workers are generally risk averse. It is also assumed that, given the uncertainty in severance payments, workers prefer some payments in case they retire or quit more than job security, with higher payments only in certain cases of retrenchment (when companies do pay). These assumptions cannot be proved correct (they are derived from interviews with workers, employers, and labor experts).

²³ Some elasticity of the demand for labor with respect to wages is assumed.

²⁴ A defined contribution system would likely favor employment because, as argued above, it would reduce firm risk when an aggregate or systemic shock occurs; this, in turn, would make adaptation easier and reduce the risk of bankruptcy.

The type of funds proposed has existed for years in such countries as Brazil, Colombia, Ecuador, and Peru (Heckman and Pagés 2000). More recently, Chile has created a system of individual accounts to protect the unemployed. The employer and worker contribute 1.6 and 0.6 percent of the wage, respectively, to the individual account. When the worker is fired or quits, s/he can draw up to 50 percent of salary each month for up to five months.

Creating a defined contribution system for severance payments could open the way to discussing the creation of defined contribution systems in other areas, such as pensions. This author recommends a partial reform, rather than total elimination of the notice period and severance pay associated with retrenchment, because labor institutions are also social institutions, and most societies find that pursuit of a certain degree of job security, and specifically severance pay, is an ingredient that makes social consensus possible.²⁵

Recommendation 4. Create a defined contribution system, administered by the private sector, as a substitute for part of severance payments, and permit workers access to those benefits when they quit or retire.

Enforcement

A law written in a code, but not applied in practice, is irrelevant from the perspective of this analysis. The rules of the game matter, inasmuch as they affect the players' behavior. Those rules relevant for the working of labor markets are of two types: formal (laws and contracts) and informal (conventions and norms and codes of behavior of players, including those of the public sector). The type of enforcement results largely from the informal rules of the game that the MOL applies in this area.

It is generally agreed that enforcement of labor legislation is weak in Trinidad and Tobago.²⁶ This is clearly the case for minimum wages and appears to be so for other areas. It has been argued that the new minimum wages, put in place in 1998, were not enforced, which reduced the negative effect they would have had on employment (Strobl and Walsh 2003): nonetheless, greater capacity of the State to enforce legislation is a necessary part of the road to development.

Clearly, more resources should be dedicated to this task (Pegus 2003). However, if the Government of Trinidad and Tobago wants to succeed and obtain significant results from resources invested in this area, the issue is not only one of resources but also of design.

Enforcement institutions in LAC have basically followed a labor-police approach; that is, they have focused on finding out who is not complying and applying sanctions; the

²⁵ This author believes this is the case for Trinidad and Tobago.

²⁶ At least, this was the conclusion reached by this author after interviewing labor and business leaders.

efficacy of this approach has been limited (e.g., insufficient number of and inadequately trained inspectors lacking the tools to perform their job). Many analysts have concluded that enforcement should take a prevention and promotional perspective—educating businesses and workers—with the active cooperation of labor and business associations (Tokman and Martínez 1997).

Like many other LAC countries, Trinidad and Tobago has limited resources available to dedicate to enforcement. This suggests that the labor-police approach would never be strong enough to enforce legislation. Viable solutions require the active cooperation of society and the creation of social norms that favor compliance with labor legislation. For example, cooperation among labor and business associations could take the form of tripartite sponsored public campaigns aimed at compliance with labor legislation. Businesses would be more willing to listen to this message when the leaders of business associations play an active role in promoting these practices.²⁷

Recommendation 5. *Develop a prevention and promotional approach to enforcement, seeking the cooperation of labor and business associations.*

Minimum Wages

Before 1998, when the Government of Trinidad and Tobago introduced a national minimum wage, minimum wages had covered only a small proportion of the country's labor force. In 1998, the minimum daily wage was set at TT\$ 7.00 and was increased four years later to TT\$ 8.00 then to TT\$ 9.00; currently, there is talk of increasing it to TT\$ 10.00. Before inducing another increase, however, one should ask whether the present level of TT\$ 8.00 is high or low.

Minimum Wage versus Minimum Income

One can address the issue from two perspectives: minimum wage and minimum income. First, one can consider the living requirements of the worker and his or her family.²⁸ This author believes that living requirements are relevant to defining minimum income, which includes not only the wages but also all transfers that a family may receive. Even if one were to determine a minimum wage that would guarantee a worker's living requirements, that objective would be attained only in cases where workers find jobs at that salary. If the living minimum wage were too high, many workers—from the perspective of job creation—would

²⁷ Chile successfully applied a collaborative approach to enforcing labor legislation, not only at the national level, but also in specific sectors, including forestry (Cortázar 1996).

²⁸ In preparing this chapter, those interviewed frequently presented the issue in this way.

be unemployed or underemployed, and the objective of guaranteeing a living minimum income for all workers would not be attained. Thus, it is convenient to distinguish between the concepts of minimum wage (used to guarantee access to employment) and minimum income (used to guarantee access to more adequate living standards). This distinction is especially important for Trinidad and Tobago's dual economy, where surpluses in the oil and gas sectors can provide the resources needed to increase the minimum income of the poor without necessarily increasing their minimum wage.

Minimum Wages and Productivity

This analysis discusses the minimum wage based on how it affects employment, competitiveness, and growth. One should recall that, in an open economy, evolution of wages must be closely linked to that of productivity.²⁹ If wages outpace productivity, firms lose their competitiveness and jobs are eliminated. Thus, from this viewpoint, the relevant question is this: Is the present level of the minimum wage consistent with labor productivity at full employment?

Several indicators suggest that Trinidad and Tobago's minimum wage is higher than what would guarantee full employment. First, Strobl and Walsh (2003) show that the potential costs of the minimum wage (when fixed at TT\$ 7.00) would have been large in terms of employment if compliance had been achieved.³⁰ While lack of compliance reduced the potential costs of a minimum wage, it also lowered the potential benefits that the policy aimed to achieve. Second, employment surveys indicate that government and state-enterprise employees earned more than the minimum wage in 2002; however, one out of four private-sector workers earned less than the minimum wage per month, as did 43 percent of own-account workers (CSO 2003).³¹ Third, when viewed as a proportion of per-capita income,³² Trinidad and Tobago's minimum wage is high when compared with that of many countries in the LAC region.³³

However, minimum wages not only affect unemployment and under-employment; they also directly affect lower public-sector wages (especially those of daily paid workers) and push the wage structure of other public-sector workers upward. In addition, some

²⁹ In a closed economy, employment depends more on the level of internal demand. Wage increases may contribute to employment, even if they grow faster than productivity, because they contribute to spending. In an open economy, that relation is not as strong.

³⁰ The current minimum wage (in real terms), when compared with average productivity, is similar to the one considered in that study.

³¹ Although some workers may be part-time, the conclusion still holds.

³² It is assumed that per-capita income is a proxy for average labor productivity.

³³ When compared to per-capita national income, even though the country's minimum wages are similar to those of Brazil, they are 80 percent higher than those of Mexico.

studies have suggested that minimum wages significantly affect the rest of the labor market by shifting the entire wage structure upward and negatively affecting formal-sector employment (Rambarran 1998).³⁴

From the above discussion, one could infer that reducing the minimum wage would be a convenient way to guarantee full employment.³⁵ However, this author believes that would not be feasible from a political point of view.³⁶ Instead, growth of the minimum wage should be minimal over the short term and at the rate of labor productivity over the longer term. To create a point of reference for the minimum wage policy, basic statistics of GDP and employment growth may suffice to provide an order of magnitude of the wage readjustment that should not be surpassed.

Some government officials have taken an opposing view, recommending the creation of a new minimum wage that is nearly four times higher than the national one for workers in the heavy-construction sector. However, the grounds for this policy proposal are unclear. Why should the law consider a higher wage for a specific sector? Are workers in that sector in greater need than the rest? Should less productive workers in that sector—but more productive than in other sectors of the economy—be able to continue working there? On the other hand, if a new minimum wage were applied to this particular sector, workers in other sectors would press for their minimum wage. Thus, the question is this: Why would it be desirable to have sector-specific minimum wages?

From another perspective, if minimum wages were established for specific sectors, an incentive for collective bargaining and union affiliation would disappear. Thus, the tradeoff of stronger government intervention in the labor market would be the development of a weaker civil society (Box 3-1).³⁷

If the Government of Trinidad and Tobago wants to redistribute income in favor of the poor, it should do so through increasing the minimum income, not the minimum wage. Monetary subsidies and benefits—in the form of education, training, health, and housing—are effective ways to reduce inequality and exclusion.

³⁴ Some could argue that having higher minimum wages that are not enforced is a sensible solution from a political perspective; that is, higher minimum wages carry a political dividend, while not enforcing them avoids the costs of higher unemployment and under-employment. However, the downside to this strategy is that enforcement will improve as the country develops. Also, it is important to have a long-term consensus that wages in an open economy should grow at the same rate as labor productivity. Moreover, even if not enforced, minimum wages variously affect growth rates of the rest of the wage structure.

³⁵ Although the minimum income could continue to grow.

³⁶ When discussing training policies, this author suggests politically feasible ways to reduce the minimum wage.

³⁷ It is not the purpose of this chapter to analyze wage determination in the public sector; it should be noted, however, that deep reforms are needed in this area, which is characterized by too many workers, poorly paid workers (especially professionals), inflexible job definitions, poor evaluation systems and seniority rules for promotion, and lack of performance-related pay.

Box 3-1. Effects of a Dual Economy and Informal Sector

Trinidad and Tobago is characterized by a dual economy and a significant informal sector. The country's modern and productive oil and gas sector co-exists with the rest of the more traditional economy. If wages in either sector grow faster than productivity, jobs will be destroyed. Therefore, the rationale for maintaining collective bargaining at the firm level remains. However, wages in the oil and gas sector will likely be much higher (in absolute terms) than in the traditional sector because of higher productivity. The other recommendations also hold in the case of a dual economy: bi-partite bargaining and the proposal to create a defined contributions system for severance payments.

The effects of the reforms proposed in this chapter are limited to the formal sector—a crucial part from the perspective of investment and growth. Analyzing the opposite direction of causality, many of the author's recommendations would contribute to reducing the degree of informality in the country's labor market. For example, when productivity outpaces wage growth, formal labor relations are more likely to emerge.

Recommendation 6. Increase minimum wages, in real terms, as little as possible over the short term, and at the growth of labor productivity over the longer term. Avoid sector-specific minimum wages.

Training

It is generally agreed that vocational training could play an important role in the development of Trinidad and Tobago.³⁸ While the country has many public and private training institutions and government spending is increasing in this area, the current work force needs strengthening in key learning and skills, particularly in technology-related subjects. To this end, training institutions must be made more efficient and effective, and critical public goods must be satisfied.

Toward More Efficient Institutions

It has been argued that Trinidad and Tobago's public training institutions are characterized by a public-servant mentality that does not contribute to the active and adaptive behavior required of more efficient institutions (Werum 2003). More basically, there is no clear reason why public institutions should supply training. Once subsidies and other incentives to direct the training process are put in place, the private sector could easily supply courses. Indeed, ample evidence in LAC (IDB 2001) and other world regions (Blanchflower and Lynch 1994; Dolton, Makepeace, and Trebel 1994) supports the privatization of training.

In the near future, public institutions will likely remain as such. Even so, one can act at the margins to facilitate the expansion of private institutions. In addition, one can work

³⁸ This section does not discuss secondary education.

to create a more adequate incentives structure for public institutions (e.g., by linking the budget and pay to performance) (IDB 2001).

Recommendation 7. *Promote the development of private training institutions and improve the incentive structure of public training institutions.*

Toward More Effective Training

Even more crucial to the success of training policies is effective training that is relevant to the needs of the labor market. A degree of consensus in LAC (IDB 2001), as well as other world regions (Elias, Hernaes, and Baker 1994; Groot, Hartog, and Oosterbeek 1994), is that the best way to attain this objective is through demand-driven training programs.

Historically, most LAC countries have charged the State with deciding which abilities the labor market will require. Based on projected demands for various sectors and the qualifications needed to fill them, state-run institutions have developed their training programs. However, with today's increasingly integrated world economy and high-speed technological change, fast-changing job requirements make public-institution surveys inadequate for anticipating training needs.^{39,40}

One alternative to the state-run approach to anticipating labor-market needs is the dual approach,⁴¹ whereby training institutions provide students theoretical content and firms offer them practical experience as trainees.⁴² Whenever the Government spends on training, it must not only require both public and private institutions to provide rigorous course standards; it must also require that they obtain, in advance of announcing course vacancies, formal commitment from the firms that will accept the students as trainees. It is generally assumed that firms do not accept trainees in areas where they have no intention of hiring. Thus, when firms are willing to accept students in certain areas or with specific abilities, it indicates a potential need for such workers in the labor market. On the other hand, when training institutions request trainee vacancies from firms, they commonly receive demands from those firms in terms of course content and orientation. Such feedback is useful in assessing the relevance of training.⁴³

³⁹ Definitions used in such surveys are too general to provide training institutions clear guidance.

⁴⁰ It should be noted that, since 2000, some training institutions started using the National Training Agency (NTA) surveys to orient their courses (NTA 2002).

⁴¹ The term dual approach is used broadly here and does not refer to specific aspects of the German training system.

⁴² Programs in Trinidad and Tobago that follow the dual approach include the Metal Industries Company (MIC) and the Trinidad and Tobago Institute of Technology (TTIT).

⁴³ Working in the opposite direction of causality, training institutions can also help firms identify their training needs.

Other ways in which institutions can link training content with labor-market needs include surveys to better understand the employment situation of former students or a closer networking of training institutions and companies, by creating boards or advisory committees in which businesspersons participate. However, it is this author's opinion that such methods are less effective than the dual approach and should be viewed as supplementary to it.

As mentioned above, in addition to a system to obtain information on labor-market needs, an incentives-based structure that links budget and pay with performance is needed.⁴⁴ In this context, performance is defined as the quality of training institutions' response to labor-market requirements.

Finally, because of the velocity of economic and technological change, training tools and machines must be renewed more frequently. This is a costly training requirement that most public institutions cannot afford. The apprenticeship system of the dual approach is better in terms of offering practical experience with the tools and machines that students will encounter in the labor market (not the outdated ones of public training institutions).

Recommendation 8.

Promote the development of a dual-approach training system.

Protecting the Public Good

In addition to efficient and effective training institutions, certain public goods are necessary for success. Firms often do not provide additional training (especially general training) because they cannot collect all the benefits of their investment since workers can move to other companies. This situation leads to the so-called "prisoner's dilemma," whereby firms invest less than the optimum from an overall industry perspective.

Countries pursue various strategies to avoid prisoner's dilemma (Lynch 1994). For example, Germany uses a tri-partite structure, whereby local chambers of commerce use moral persuasion to protect firms' training from excessive poaching by other companies. Japan imposes high costs on employees who leave a firm, while Sweden uses government support. The tax subsidy that France and Australia offer firms that train their workers is commonly used in the LAC region (IDB 2001).

One practical way to stimulate firms' general training of workers, especially low-income workers, is to let firms pay less than the minimum wage to the workers being trained.⁴⁵ (One must recall that Trinidad and Tobago's minimum wage is probably higher than the level

⁴⁴ This system requires monitoring and evaluation.

⁴⁵ Under the National Apprenticeship Program, firms pay less than minimum wage and the Government pays the difference. By contrast, this proposed approach is open to all firms and does not require government funds.

that would guarantee full employment). To avoid abuses by firms, this policy must establish certain minimum requirements with respect to the training provided and limit permissible reductions of the minimum wage.

Recommendation 9. *Authorize firms that train their workers to pay less than the minimum wage.*

With regard to information, an accreditation and certification process is needed so that potential employers can learn about the quality of training workers have received. This process is especially important when many training institutions exist.⁴⁶

Recommendation 10.

Create an effective accreditation and certification system.

Another public good that is crucial for success is the availability of training loans and subsidies. Most students have limited access to the financial system with which to finance their education and training. The justification for subsidies is the Government's desire to favor training of the poorer segments of workers.⁴⁷ Currently, two student-loan funds are in the process of being integrated. In addition, many subsidized programs are available.

For example, the dollar-for-dollar program provides matching funds for students enrolling in tertiary education, primarily in public institutions (Werum 2003). According to the Ministry of Science, Technology, and Tertiary Education (MSTTE), the program cost TT\$ 25 million the first year, TT\$ 55 million the second, TT\$ 75 million the third, and is projected to increase to more than TT\$ 100 million in the near future. Obviously, the focus of this program's design is not lower-class students. The program's stated goal is to increase enrollment in tertiary education. However, enrollment would have increased more rapidly had students with the means to pay for their studies not been subsidized, and many others who did not enter tertiary education because they could not afford the matching funds received a larger subsidy.⁴⁸ The longer middle- and upper-class students receive matching funds, the more likely they will perceive it as their right, making reform more difficult. Thus, reform should carry a sense of urgency.

Recommendation 11. *Provide upper- and middle-class students training loans and poor students training subsidies.*

⁴⁶ The Government of Trinidad and Tobago is in the process of creating the Accreditation Council.

⁴⁷ Another justification is recognizing that training has positive external effects.

⁴⁸ Means-testing is required for the access to subsidies.

Social "Concertacion"49

Trinidad and Tobago's social compact, known as social "*concertacion*," is reflected in many instances, among them at the Minimum Wage Board and the Registration, Recognition, and Certification Board. A few years ago, social partners agreed on Compact 2000 and Beyond, a declaration reflecting their willingness to cooperate to attain several economic and social goals. Unfortunately, the agreement has not been implemented.⁵⁰ It appears that a country's chances for success in social "*concertacion*" are greatest when it faces either a great crisis or an opportunity. Vision 2020 could offer Trinidad and Tobago a great opportunity to promote social cohesion and overcome some of the effects of ethnic divisiveness.⁵¹

The first step is to stimulate a social dialogue at the national level and within sectors and regions. In implementing this strategy, it is necessary that the Government, which plays a crucial leadership role, avoid an ideological approach. The most extreme neo-conservative views consider that unions and organizations that represent corporatist interests interfere with the adequate workings of markets and have a cost in terms of social welfare. Conversely, the most extreme neo-corporatist views value social participation at every moment and place.

Rather than debating whether to have social "concertacion", it would be more useful to discuss its purpose and where and how it should occur. Obviously, the answers would vary according to the agenda. For Vision 2020, for example, the purpose would be to build a national consensus with respect to the development strategy. It should occur mainly at the national level, but also within sectors and regions. It should be for wages to grow along with productivity. It should occur at the firm level through bi-partite bargaining. For agreeing on minimum wages, the purpose would be for wages to grow along with productivity. It should occur at the rational level through tri-partite bargaining (the Government must be included at the table because a law is needed). For "concertacion" for training policies, the purpose would be to increase workers' productivity and capacity to adapt to change. It should occur at the national or industry level through tri-partite agreements (a law and subsidies are needed for training low-income workers). As these examples illustrate, deciding where (national, industry, or firm level) and how (bi-partite or tri-partite bargaining

⁴⁹ The author uses this Spanish word throughout the chapter because it captures a complex process that requires: harmonizing, coordination, and reconciliation. As such, in the context of this chapter this word implies that a group of people discussed and negotiated an agreement, with all parts compromising with the objective of reaching consensus.

⁵⁰ This author's interviews with both labor and business leaders revealed that results of the process have been scanty.

⁵¹ Certain authors have argued that Trinidad and Tobago has had, in the past, an industrial relations system characterized by a relatively high degree of open conflict, especially in the State sector (Rambarran 1998).

schemes) "*concertacion*" should occur does not result from ideology or a general proposition, but from the specific agenda.

This more instrumental view of "*concertacion*" leads one to recognize that it is advisable to emphasize social dialogue with regard to Vision 2020. However, in cases where the costs of social "*concertacion*" exceed the benefits, it may be better to accept social non-agreement as the best solution. For example, implementing performance-based pay for teachers may be impossible to achieve through a "*concertacion*" process with the teachers' association. Therefore, one must identify the specific agendas where "*concertacion*" will predominate (e.g., Vision 2020); they must be significant to create and maintain a high degree of social cohesion, but at the same time one must be aware of the areas with greater potential for conflict. The proposition is not one of "*concertacion*," but of "concer-flict."

Recommendation 12.

Have "concertacion" whenever possible and conflict whenever necessary.

Role of the Ministry of Labor

From the 1930s to the 1980s, most LAC countries followed a development strategy that emphasized import substitution, Fordian technology, and a relatively homogeneous labor force (with men as household heads). Governments intervened directly in labor markets to influence wages, employment, and working conditions. They intervened directly in collective bargaining through tri-partite arrangements,⁵² directly trained workers through public institutions, and directly administered the social security and health systems. They also attempted to resolve employment problems through make-work programs or by stimulating specific sectors, according to their labor intensity.

With the shift in development strategy resulting from globalization and technological change, governments changed their emphasis to export promotion, and recognized the existence of more flexible technologies and a heterogeneous labor force (including women and students). They did not renounce their responsibility for the design and enforcement of labor institutions (i.e., the rules of the game); rather, as they began to intervene more indirectly in the labor market to influence wages, employment, and working conditions, they imparted a larger role to the market and civil society.

⁵² The wage policy of the closed-economy labor market, as part of the Keynesian toolkit, was a means to affect aggregate demand. Many LAC countries had compulsory wage readjustments for private-sector workers not covered by collective agreements. Governments used wage policy, together with fiscal and monetary policy, as a way to regulate aggregate demand and employment. To this end, it was recommended that bargaining occur at an aggregate level, using a tri-partite approach to coordinate wage policy with monetary and fiscal policy.

To reiterate the labor-legislation recommendations discussed above, collective bargaining should be maintained at the firm level through bi-partite arrangements; the Government of Trinidad and Tobago should participate in setting the rules of the game but not act as a significant third player in labor relations. It is also recommended that a defined contribution system, administered by the private sector, be created for severance payments. With regard to enforcement, a prevention and promotional approach (with a significant role for labor and business associations) is recommended. Thus, in addition to conducting mandatory labor inspections, the Government could play an indirect role in promoting the activities of social actors. Regarding minimum wages, it is recommended that sectorspecific minimum wages be avoided since they would weaken the role of direct bargaining between labor and businesses.

With respect to training, private suppliers working within a dual-approach framework is preferable. In this context, the Government would play a vital role: providing the institutional framework and incentives to develop training loans for upper- and middleclass students and training subsidies for poor students. With regard to the pension reforms applied in many LAC countries, private-sector administration would not imply that the Government abdicates its role with respect to social security; rather, it would intervene indirectly to guarantee old-age protection. Similarly, with regard to social "*concertacion*," the central focus of civil society's participation would not diminish the Government's crucial role in the process.

Recommendation 13. *Have the MOL intervene indirectly in support of better employment, wages, and working conditions.*

Finally, what should be the MOL's role within the Government? To adequately answer this question, one should start by recognizing that the main determinants of employment and wages are not the specific policies applied by the MOL; rather, they are growth and development. As Table 3-1 shows, the reduction of unemployment in Trinidad and Tobago is closely associated with resumption of growth, not specific employment policies. Thus, the MOL should participate in all economic and social decisions that influence growth and development. It should locate itself at the core of decision-making regarding the evaluation of policies' effects on labor;⁵³ in addition, it should serve as a vehicle for social actors' participation in economic and social decision-making.

This recommended role for Trinidad and Tobago's MOL differs from the role that MOLs often play in LAC countries. Commonly, MOLs prefer to remain as weak government

⁵³ The capacity of Trinidad and Tobago's MOL to evaluate the effects of labor policies and programs on labor must be enhanced.

institutions closely linked to trade unions, distanced from the economic team, and somewhat irrelevant to decision-making. Typically, they only handle grievances—a role that should be reduced—or create special employment programs when things go wrong (Cortázar 1997). If Trinidad and Tobago's MOL has better access to the decisions that significantly affect employment and wages, then it must consistently support the economic and social policies that the economic and social teams (i.e., the Ministry of Finance) implement.

Recommendation 14.

Integrate the MOL as a significant member of the economic team.

Conclusion

The recommended interventions for each of the five topics presented in this chapter are listed in Table 3-3. For each recommendation, the author subjectively assesses 1) the magnitude of its effect on labor-productivity growth and competitiveness, employment creation, and the efficiency of labor markets and 2) the degree of difficulty associated with its implementation.

Although subjective,⁵⁴ this evaluation helps to distinguish among several groups of recommended interventions. The first group consists of the "important and easy" ones (Recommendations 1 and 2). Both simply involve the ratification and reinforcement of existing rules of the game; yet they significantly affect the workings of the labor market. These are a "must."

The second group comprises most of the recommended interventions (Recommendations 3, 5–8, and 10–14). These are either highly important and moderately difficult to implement or are somewhat important and moderately difficult or easy to implement. Here is where most of the job lies.

Finally, the third group includes two recommended interventions (Recommendations 4 and 9). It is estimated that both would have a medium positive effect on the labor market, but would be highly difficult to implement because they involve politically sensitive issues. With regard to Recommendation 4, modifying severance payments and creating a system of individual accounts are politically sensitive and administratively complex. With respect to Recommendation 9, even though it would help to create jobs, especially for youth, creating exceptions is always politically sensitive.

⁵⁴ The author is not in a position to prove that this classification is the correct one; other observers may have a different view.

Recommendation	Potential Effect*	Degree of Difficulty in Implementation*
Labor Legislation		
1. Maintain collective bargaining at the firm level.	Н	L
 Reinforce the bi-partite aspects of collective bargaining. Authorize non-unionized workers to go directly to the Industrial Court, 	Η	L
without having to register with a union.Create a defined contribution system, administered by the private sector, as a substitute for part of severance payments, and permit workers access	Μ	L
to those benefits when they quit or retire. 5. Develop a prevention and promotional approach to enforcement, seeking	М	Н
the cooperation of labor and business associations.	Μ	Μ
Minimum Wages6. Increase minimum wages, in real terms, as little as possible over the short term, and at the growth of labor productivity over the longer term. Avoid sector-specific minimum wages.	Н	Μ
Training 7. Promote the development of private training institutions and improve		
the incentive structure of public training institutions.	Н	Μ
 Promote the development of a dual-approach training system. Authorize firms that train their workers to pay less than the minimum 	Н	Μ
wage.	Μ	Н
 Create an effective accreditation and certification system. Provide upper- and middle-class students training loans and poor 	М	L
students training subsidies.	Н	Μ
Social "concertacion"12. Have "concertacion" whenever possible and conflict whenever necessary.	Н	М
Role of the Ministry of Labor 13. Have the MOL intervene indirectly in support of better employment,		
wages, and working conditions.	Н	Μ
14. Integrate the MOL as a significant member of the economic team.	Н	Μ

Table 3-3. Evaluating the Recommendations: Potential Effect and Difficulty in Implementation

* H = high, M = medium, L = low.

References

- Aidt, T., and Z. Tzannatos. 2002. Unions and Collective Bargaining. Economic Effects in a Global Environment. Washington, D.C.: The World Bank.
- Blanchflower, D., and L. Lynch. 1994. "Training at Work: A Comparison of U.S. and British Youths." In *Training and the Private Sector: International Comparisons*, ed. L. Lynch. Chicago: The University of Chicago Press.
- Cortázar, R. 1996. "A Labor Policy for a New Reality." In *Social and Economic Policies in Chile's Transition to Democracy*, eds. C. Pizarro, D. Raczynski, and J. Vial. Santiago: CIEPLAN-UNICEF.
- ——. 1997. "Los Ministerios del Trabajo en el nuevo marco económico y social." In Administración Laboral y Ministerios del Trabajo en el Siglo XXI, eds. R. Cortázar, A. Espina, J. C. Javillier, D. Martínez, E. Morgado, and V. E. Tokman. Geneva: International Labor Organization.
- CSO. 2003. "Continuous Sample Survey of Population." Port of Spain: Central Statistical Office, Ministry of Planning and Development.
- Dolton, P., G. Makepeace, and J. Treble. 1994. "Public and Private-sector Training of Young People in Britain." In *Training and the Private Sector: International Comparisons*, ed. L. Lynch. Chicago: The University of Chicago Press.
- Elias, P., E. Hernaes, and M. Baker. 1994. "Vocational Education and Training in Britain and Norway." In *Training and the Private Sector: International Comparisons*, ed. L. Lynch. Chicago: The University of Chicago Press.
- George-Marcelle, K. 1999. "Wage Determination: Trends in Industrial Court Judgments." Paper presented at a seminar of the Employers Consultative Association of Trinidad and Tobago.
- Groot, W., J. Hartog, and H. Oosterbeek. 1994. "Returns to Within-company Schooling of Employees: The Case of Netherlands." *Training and the Private Sector: International Comparisons*, ed. L. Lynch. Chicago: The University of Chicago Press.
- Haque, B. 2002. *Trinidad and Tobago: Economic Situation and Prospects*. Washington, D.C.: Inter-American Development Bank.
- Heckman, J., and C. Pagés. 2000. "The Cost of Job Security Regulation: Evidence from Latin American Labor Markets." Working Paper No. 430, Research Department. Washington, D.C.: Inter-American Development Bank.
- IDB. 2001. *Capacitación profesional y técnica: una estrategia del BID*. Washington, D.C.: Inter-American Development Bank.
 - -----. 2003. *Good Jobs Wanted: Labor Markets in Latin America*. Washington, D.C.: Inter-American Development Bank.
- IMF. 2003. Public Information Notice No. 03/85, July. Washington, D.C.: International Monetary Fund.

- MOL. 1997. "Report of the Committee to Study the Proposals for Termination of Employment Benefit Act." Port of Spain: Ministry of Labor.
- ------. 2003. "Occupational Safety and Health Policy. Towards 2020." Port of Spain: Ministry of Labor.
- NTA. 2002. "Labour Market Survey Report, No. 3." Port of Spain: National Training Agency.
- North, D. 1990. *Institutions, Institutional Change and Economic Performance*. Cambridge, UK: Cambridge University Press.
- OECD. 1994. *The OECD Jobs Study*. Paris: Organization for Economic Cooperation and Development.
- Pegus, C. 2003. "Diagnosis Study of Labour Administration in Trinidad and Tobago." Geneva: International Labor Organization and Economic Commission for Latin America and the Caribbean.
- Rambarran, A. 1998. "Labor Market Adjustment in an Oil-Based Economy: The Experience of Trinidad and Tobago." In *Economic Liberalization and Labor Markets*, eds.P. Dabri-Alai and M. Odekon. London: Greenwood Press.
- Strobl, E., and F. Walsh. 2003. "Minimum Wages and Compliance: The Case of Trinidad and Tobago." *Economic Development and Cultural Change* 51(2): 427–50.
- Tokman, V., and D. Martínez. 1997. "Los nuevos contenidos de la Administración del Trabajo y la modernización de los Ministerios del Trabajo en América Latina." In Administración Laboral y Ministerios del Trabajo en el Siglo XXI, eds. R. Cortázar, A. Espina, J. C. Javillier, D. Martínez, E. Morgado, and V. E. Tokman. Geneva: International Labor Organization.
- Werum, R. 2003. *Trinidad and Tobago's Post-Secondary Education System: Bottlenecks in Technical Training Programs*. Washington, D.C.: Inter-American Development Bank.

CHAPTER 4

Deepening and Diversifying International Trade

Anneke Jessen and Christopher Vignoles

In today's global economy, investment moves quickly across borders and continents. As trade barriers come down, competitive exporters stand to gain much. In an increasingly liberalized world economy, however, fierce competition means that only the best will capture the benefits of new markets and business opportunities. Particularly in small open economies, weak export performance can impair a country's development prospects. Export income is needed to cover the cost of imports, reduce foreign debt, and maintain a healthy balance in external accounts, all of which are needed to achieve sustainable levels of economic growth. Successful international insertion, through trade facilitation and related measures, should therefore be a central aim of the Inter-American Development Bank's support strategy for its borrowing member countries, particularly the small island economies of the Caribbean.

Trinidad and Tobago is endowed with vast energy resources, and more than 60 percent of its exports are fuel products. However, the country's energy sector operates virtually independently; the benefits of large energy-sector investments do not easily spill over to the rest of the economy, which lags in terms of growth prospects and wealth (Baptiste, Elías, and Robinson 2004). In this dual economy, external trade plays a dominant role. The ratio of trade to GDP (exports plus imported goods and services divided by GDP) is close to 100 percent—one of the highest in the Western Hemisphere.¹ This high degree of trade openness, coupled with a relatively narrow export base, makes the economy vulnerable to external shocks, such as fluctuations in international fuel prices or policy changes abroad. It also means that any significant expansion or contraction in the country's foreign trade will have an immediate and marked effect on its GDP and balance of payments (Box 4-1). Because oil and gas reserves are state-owned, export performance directly affects government revenues and, therefore, expenditure.

The authors wish to thank Robert Devlin, Carlos Elías, Paolo Giordano, and William Robinson for their valuable comments on an earlier version of this chapter, published in March 2004 by the IDB Institute for the Integration of Latin America and the Caribbean (www.iadb.org/intal/index.asp).

¹ Average for 2000–04, based on International Monetary Fund (DOTS and IFS) and World Bank (WDI) data.

Box 4-1. Trade Flows and Balance of Payments

In 1997–98, Trinidad and Tobago recorded significant trade deficits, which resulted in current account deficits reaching nearly 11 percent of GDP. Trade surpluses recorded in subsequent years positively affected the current account. However, any future downward trend in global energy prices, which would affect the country's oil and gas exports, could easily wipe out today's trade surplus, pushing the current account back into deficit. With regard to the capital account, Trinidad and Tobago—mainly the energy sector—has attracted sizeable inflows of foreign direct investment (FDI) (averaging US\$ 640 million a year) over the past decade. But with growing trade liberalization in the Western Hemisphere and ever-fiercer competition for FDI, the country must maintain healthy export performance and diversify its export supply to ensure sustained balance in external accounts (IMF 2005).

Merchandise Trade

Trinidad and Tobago differs from most other Caribbean islands in that goods account for most of its external trade: 85 percent of total trade and an equal share of exports (average for the period 1990–2003). By contrast, goods account for less than 50 percent of Jamaica's total exports and only 20 percent of exports in Barbados.

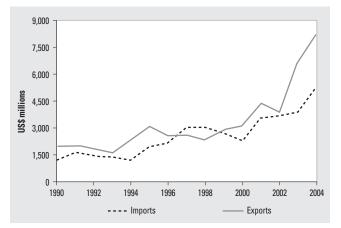
Recent Trends

Over the past decade, Trinidad and Tobago's merchandise trade has been characterized by strong growth and volatility. Between 1990 and 2004, exports grew by an average of 10.6 percent a year, faster than the 7.2 percent growth in world trade. Export growth, while significant in overall terms, fluctuated wildly over the period (from –18 percent in 1996 to +73 percent in 2003). Import growth averaged 10.9 percent a year, and fluctuated almost as strongly

(from +62 percent in 1995 to -14 percent in 2000). Such volatility is mainly related to variations in international fuel prices. Figure 4-1 illustrates the country's vulnerability to such price shocks.

Trinidad and Tobago relies heavily on the United States as a destination for its merchandise exports (Figure 4-2). Between 2000 and 2004, nearly 60 percent of its exports went to the U.S. As





Source: See Annex I, Tables AI-1 and AI-2.

regards other export destinations, there is a clear trend toward a growing concentration on regional markets. Over the past decade, the country has more than doubled its exports to the Caribbean Community (CARICOM), taking advantage of opportunities offered by preferential access to that market. Since 2000, exports to CARICOM have averaged 19 percent of total exports, up from 12 percent in 1990. Today, Trinidad and Tobago

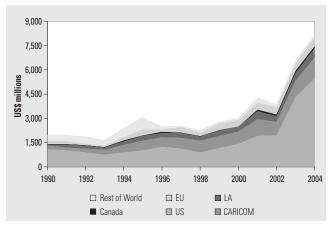


Figure 4-2. Merchandise Exports by Destination, 1990–2004

exports more than twice as much to CARICOM as to the European Union (EU) and more than 10 times what it sends to Canada. Latin American countries absorb about 9 percent, while sales to the rest of the world have declined in both absolute and relative terms.

Import sources are more diversified, with about 31 percent from the U.S., 24 percent from Latin America, 21 percent from the EU, and 19 percent from the rest of the world. CARICOM and Canada each supply less than 3 percent of Trinidad and Tobago imports.

Trinidad and Tobago's partners in the Free Trade Area of the Americas (FTAA) negotiations, which are currently on hold, now account for nearly 90 percent of the country's exports and 60 percent of imports. After the U.S., the country's main export markets in the Western Hemisphere are Jamaica, Barbados, Guyana, Dominican Republic, and Canada, in that order. Export penetration into Latin American markets remains weak, despite the size and potential opportunities that those markets offer. The country exports three times as much to Jamaica (population of 2.6 million) as to the Andean Community and the Southern Common Market (Mercosur) combined (population of 337 million); it exports more to Barbados (population of 270,000) than to the six Central American countries combined (population 37 million) (Annex I, Tables AI-1 and AI-2).

Product and Sector Composition

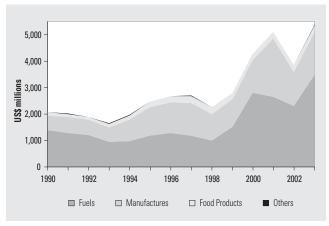
Despite recent attempts at export diversification, oil and gas account for about 60 percent of Trinidad and Tobago's total exports (average for the 2000–03 period) (Figure 4-3).² Over the

Source: See Annex I, Table AI-1.

² Throughout the analysis, the authors often use period averages since, in the context of strong year-to-year fluctuations in fuel prices and thus export income, they represent trends more accurately than do single years.

last decade, that share has not declined appreciably; trends in international fuel prices, to a great extent, have explained annual variations. Over the past two decades, the country has witnessed large fluctuations in such prices, with price hikes generating increased investment, consumption and economic growth, and subsequent price falls leading to output contraction, declining per-capita income, high unemployment, rising current





Source: IDB Integration & Regional Programs Department using UN-COMTRADE.

account deficits, and loss of foreign-exchange reserves. An additional challenge is that oil and natural gas reserves are finite. This challenge is more acute with respect to oil than to natural gas. By some estimates, crude oil reserves will last only another decade unless new reserves are found. By contrast, proven natural gas reserves are abundant and, at current levels of production, should last at least another 50 years (DOE 2003).

Manufactured goods increased their share in total exports from 30 percent in 1990–93 to 34 percent in 2000–03. Most of these exports are natural-gas-based products (ammonia, methyl alcohol and urea). Sector diversification has remained limited; in 2003, for example, only six products accounted for 66 percent of the value of total manufactured exports. Food products, accounting for 5 percent of total exports, grew by only 2 percent in 2000–03. The share of agricultural raw materials and ores and metals in total exports was negligible.

Fuels dominate sales to all of Trinidad and Tobago's major export destinations, accounting for nearly 66 percent of exports to the U.S. and 50-60 percent of exports to CARI-COM, Latin America, and the EU. There are, however, notable variations in the sectoral composition of exports to each of these markets. Food exports, for example, account for a larger share of exports to CARICOM (17 percent) and the EU (8 percent) than to the U.S. (1 percent). Conversely, manufactured goods account for a larger share of sales to the U.S. and EU (35 percent) than to CARICOM (25 percent).

Of the more than 2,000 products Trinidad and Tobago exported during 2001–03, the top 20 accounted for 84 percent of total exports (in value terms); 10 of them were fuel products (Table 4-1). Aside from the effects of fluctuating commodity prices, the share and composition of the top 20 in total exports has remained constant over the years. The share is somewhat lower (72 percent) in exports to CARICOM, where the top-20 list includes a

	World		CARICOM	
Product Ranking	Product Group	Share (%)	Product Group	Share (%)
1 2 3 4 5	Fuel oils, not elsewhere specified Liquefied natural gas Petroleum oil, crude Ammonia, anhydrous/solution Motor/aviation spirit	18.5 11.5 10.6 8.6 7.0	Fuel oils, not elsewhere specified Motor/aviation spirit Kerosene, including jet fuel Flavored waters (non-alcoholic) Liquefied natural gas	24.4 17.0 8.5 3.9 2.3
6 7 8 9 10	Methyl alcohol (methanol) Coal tar distillates Float/sub drill platform Kerosene, including jet fuel Pure reduction processed iron	5.3 3.4 3.2 3.1 2.7	Rum and tafia Other detergent (retail packaged) Lubricants (high petrol content), etc. Portland cement Liquefied propane	2.1 1.6 1.4 1.3 1.2
11 12 13 14 15	Other liquefied gas hydrocarbon Urea (fertilizer) Lubricants (high petrol. content), etc. Other light vessels, fire floats, cranes Liquefied propane	1.5 1.5 1.3 1.2 1.2	Paper diapers and sanitary towels Cigarettes (tobacco) Sweet biscuits, etc. Glass bottles and jars, etc. Liquefied butane	1.2 1.1 1.0 0.9 0.8
16 17 18 19 20	Liquefied butane Flavored waters (non-alcoholic) Other parts earth-moving machines Rum and tafia Raw cane sugar	1.0 1.0 0.7 0.6 0.4	Oil cake (soybean) Paper sacks (more than 40 cm. wide) Wooden doors and frames Toilet paper (cut to size) Cereal (roasted and puffed)	0.8 0.7 0.7 0.7 0.7 0.6
Top 20 Others	2,317	84.1 15.9	1,653	72.1 27.9

Table 4-1. Top 20 Exports to the World and CARICOM, 2001–2003

Source: IDB Integration and Regional Programs Department, using UN-Commodity Trade Statistics Database. Note: SITC revision 3, leaf level of aggregation.

number of food and manufactured items that are not among the main products exported to the world.

As a competitive exporter of a range of fuel products, Trinidad and Tobago should continue to exploit its comparative advantage in this sector in the coming years.³ However, strong volatility —the downside of relying excessively on the fuels sector—is evident, along with the longer-term problem of diminishing reserves. Thus, export diversification, aimed at achieving more stable and sustainable export revenues, is a priority.

The best strategy for achieving export diversification is to expand the supply of non-fuel products that face growing world demand, and to secure better market access for

³ Complementary industries—beginning with oil and gas and later moving up the value chain to more sophisticated manufactured products and services—could be developed.

these products through trade liberalization agreements with current and potential trade partners. This recommendation highlights the importance of effectively adapting Trinidad and Tobago's export supply to demand conditions in importing countries—a determinant of any country's export performance. Shifting export supply toward products for which world demand is growing increases a country's capacity to expand exports over time; conversely, a country whose exports face stagnant or declining demand in world markets has little growth opportunity.

The authors use two indicators to analyze the supply and demand conditions for Trinidad and Tobago's exports. This analysis can help determine the level of competitiveness of the country's merchandise exports. The indicators are not perfect and should therefore be used cautiously. Rather than resulting in definitive judgments about the country's export performance, the analysis should serve as a motivation for more in-depth research.

Trade Competitiveness and Specialization

Winners and Losers

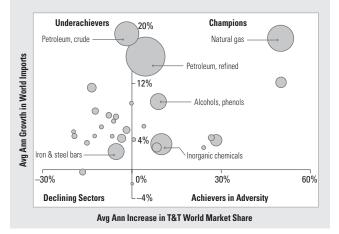
Trinidad and Tobago's top 30 exports can be divided into four categories (Figure 4-4):

- *Champions* (upper-right quadrant). Champions are the winners in growing markets. Global demand for these products is expanding (for some goods, faster than the average growth in world trade), and Trinidad and Tobago has increased its share in world exports. Promotional efforts should focus on further expanding supply (particularly for non-fuel goods) and capturing new export markets (e.g., Latin America).
- Achievers in Adversity (lower-right quadrant). Achievers in Adversity are winners in declining markets. Trinidad and Tobago has increased its share of world trade but demand for these products is declining. Niche marketing strategies may be the best way to expand opportunities in otherwise declining export markets.
- Underachievers (upper-left quadrant). Underachievers are losers in growing markets. These products face increasing world demand, but Trinidad and Tobago has been unable to maintain its market share because its exports have either declined or grown less dynamically than world trade. Supply factors, rather than weak demand, are the bottleneck, and promotional efforts should aim to eliminate these.
- *Declining Sectors* (lower-left quadrant). Declining sectors are the losers in declining markets. These products face both supply- and demand-side bottlenecks. World demand has stagnated or declined, and Trinidad and Tobago has been unable to maintain its share in a shrinking market. Efforts to promote products in this sector may be the least cost-effective in terms of expanding export revenues.

Categorizing a country's exports in this way can help identify the varying degrees of global competitiveness that the country's exports have achieved, types of demandand supply-side constraints facing the various export products, and, based on these results, potential export-promotion strategies.

As Figure 4-4 shows, most of Trinidad and Tobago's top 30 exports are either Champions or Underachievers. Repeating the analysis for all 223 product groups exported during the 1998–2003 period results in the following classification (Table AI-3):⁴

Figure 4-4. Competitiveness of Top 30 Exports, 1998–2003



Source: IDB Integration and Regional Programs Department, using UN-Commodity Trade Statistics Database (aggregated at SITC 2 three-digit level).

Note: Top 30 exports by category (in descending order by export value): *Champions* (12)— Petroleum, refined; Natural gas; Inorganic chemicals; Alcohols and phenols; Pig iron; Residual petroleum products; Fertilizers; Civil engineering parts; Printed matter; Tobacco; Feed stuffs; and Measuring and analyzing instruments. *Achievers in Adversity* (1)—Fabrics woven of manmade fibers. *Underachievers* (16)—Petroleum oil, crude; Iron and steel bars; Paper and paperboard; Non-alcoholic beverages; Alcoholic beverages; Cereal preparations; Soap; Edible preparations; Heating and cooling equipment; Lime and cement; Articles made from plastics; Glassware; Preserved fruits; Fresh fish; Manufactured wood products; and Furniture and furniture parts. *Declining Sectors* (1)—Sugar and honey. Average annual growth of natural gas and residual petroleum products exceeded 50 percent.

- Champions: 78 product groups (representing 70 percent of total export value),
- Achievers in Adversity: 14 product groups (less than 1 percent of exports),
- Underachievers: 120 product groups (29 percent of exports), and
- Declining Sectors: 11 product groups (1 percent of exports).

The analysis suggests that Trinidad and Tobago has achieved a high level of international competitiveness in its fuel exports, but that it lags other world exporters in food and manufactured goods. To obtain more specific data, the analysis can be repeated at the sector level (e.g., focusing on non-fuel products or agricultural goods exclusively) or for individual export markets. In all such research, the level of product aggregation is important. These authors have used an intermediate level of aggregation (Standard International Trade Classification [SITC] three-digit, product-group level). At this or higher levels of aggregation, some important winners or losers may be overlooked. Conversely, if one applies a more detailed level of product data, trade flows may be more sensitive to policy interventions (e.g.,

⁴ The 223 total excludes 13 product groups that were exported during the period but not at the beginning (1998) or end (2003) of it. For those 13 groups, it was not possible to establish trends.

restrictive trade policies in the importing country or industrial policies in the exporting country). Such interventions distort trade and may lead to erroneous conclusions about competitiveness.⁵ One should also note that the analysis does not capture potential Champions, that is, products not yet exported that could become important foreign-exchange earners in the future.

Export Specialization

Revealed comparative advantage (RCA), an indicator of international trade specialization, is another way to analyze Trinidad and Tobago's export performance. RCA measures a country's level of specialization in a particular product by dividing that product's share in the country's total exports by its share in world exports. The link with competitiveness is based on the assumption that, if a given product's share in the country's exports is greater than its share in world exports (i.e., if RCA > 1), then the country is specialized in, and therefore a relatively efficient producer of, that product. Here, too, the level of aggregation is important (for consistency, the authors use the three-digit level of the SITC).

Of the 232 product groups Trinidad and Tobago exported to the world in the period 2000–03, the country was relatively efficient in 24 groups (RCA > 1) (Table 4-2a). In four of these, it did not have comparative advantage in the early 1990s, but developed one over the decade, while another 14 groups increased their RCA over the period.⁶ Together, the 24 product groups accounted for more than 90 percent of the country's total exports in value terms. For the 208 remaining product groups, Trinidad and Tobago did not show any particular specialization (RCA < 1), although, in five of these groups, it did so at the start of the decade.⁷

Trends in RCA can help identify emerging advantages and disadvantages in exports, thereby pointing to areas where promotional efforts might generate positive returns. These trends also highlight variations in export performance across markets. For example, in its exports to CARICOM over the past decade, Trinidad and Tobago became specialized in nine new products and increased existing RCA in three others. In this market, the country is relatively specialized in 44 product groups (Table 4-2b). This, along with the number of processed food products exported to CARICOM, suggests that Trinidad and Tobago has

⁵ To analyze Trinidad and Tobago's competitiveness, the authors first measured global demand by calculating the average annual growth in world imports between 1998 and 2003. Then they measured the average annual increase in Trinidad and Tobago's world market share, taking its exports of product k as a share of world exports (*Xik* \div *Xw*) for the same period.

 $^{^{6}}$ In this analysis, increase in RCA is defined as above 10-percent growth, decrease indicates a contraction in RCA of more than 10 percent, and no change means that RCA changed by less than +/– 10 percent.

⁷ Among these broader product groups, certain products could have an RCA greater than 1; one could identify these by repeating the analysis at a more disaggregated product level.

		R	CA
Product	Share (%) 2000–2003	1990–1993	2000–2003
Inorganic chemicals, oxides	8.6	26.2	32.9
Alcohols, phenols, phenol-alcohols	5.6	10.7	23.9
Other residual petroleum products	2.6	3.0	18.0
Pig iron, spiegeleisen, sponge iron	2.5	6.6	17.7
Petroleum products (refined)	32.2	15.6	13.7
Gas (natural and manufactured)	14.8	1.8	11.2
Other non-alcoholic beverages	1.0	6.1	10.1
Iron and steel bars, rods, angles	3.8	11.5	10.1
Fertilizers (manufactured)	1.5	10.4	6.1
Ships, boats, and floating structures	3.6	0.1	5.1
Sugar and honey	0.5	6.1	3.0
Margarine and shortening	0.1	2.6	2.8
Paper and paperboard	1.2	1.5	2.5
Petroleum oils (crude)	11.3	7.6	2.5
Wheat meal and flour	0.1	0.1	2.1
Cereal preparations of flour	0.6	2.2	2.0
Soap, cleansing and polishing preparations	0.5	2.4	2.0
Lime and cement	0.3	3.4	1.8
Sugar, confectionery and other preparations	0.1	1.9	1.7
Alcoholic beverages	0.8	1.4	1.6
Glassware	0.3	1.9	1.6
Other edible products and preparations	0.4	1.1	1.3
Preserved fruits and fruit preparations	0.3	0.8	1.2
Tobacco (manufactured)	0.3	0.1	1.1
Share of exports with $RCA > 1$	92.9		

Table 4-2a. Comparative Advantage in Exports to the World, 1990–1993 to 2000–2003

Source: IDB Integration and Regional Program Department, using UN-Commodity Trade Statistics Database.

Note: Products are ranked by RCA 2000–2003, in descending order.

successfully exploited its preferential access to the CARICOM market to develop export competitiveness in new products.⁸ At the same time, however, RCA values are declining for various products, a trend that merits attention in light of the planned opening of CARICOM markets to greater external competition.

In the U.S. market, Trinidad and Tobago gained RCA in five new product groups and expanded existing RCA in another five. In exports to Latin America, four new product groups achieved RCA while four increased their existing RCA. Similarly, in exports to the

⁸ Such competitiveness has been aided by the preferences themselves. For some products, however, it appears that Trinidad and Tobago could have used CARICOM as a springboard for exports to other markets.

		R	CA
Product	Share (%) 2000–2003	1990–1993	2000–2003
Gas (natural and manufactured)	4.7	4.1	11.5
Tobacco (manufactured)	1.2	0.0	8.5
Other non-alcoholic beverages	3.9	10.3	8.4
Petroleum products (refined)	53.7	5.4	6.4
Paper and paperboard (cut to size)	4.4	4.2	4.8
Soap, cleansing and polishing preparations	2.0	5.5	3.6
Iron and steel bars, rods, angles	1.7	9.7	3.2
Chocolate and other preparations with cocoa	0.3	5.8	3.1
Cereal preparations of flour	2.5	4.3	3.1
Preserved fruits and fruit preparations	1.1	3.8	3.0
Fertilizers (manufactured)	0.5	4.3	2.9
Sugar confectionery and other preparations	0.4	5.1	2.9
	2.1	2.7	2.5
Alcoholic beverages Glassware		5.0	
	0.9 0.2	2.2	2.4 2.4
Undergarments of textile fabrics			
Lime and cement	1.4	6.3	2.2
Manufactured wood products	0.9	2.6	1.9
Fish (fresh, chilled)	0.4	1.7	1.8
Margarine and shortening	0.3	2.2	1.8
Tea and mate	0.0	0.1	1.8
Animal feed	0.9	1.8	1.7
Other crude minerals	0.1	0.6	1.6
Woven fabrics (using manmade fibers)	0.6	0.3	1.5
Edible products and preparations	1.5	1.5	1.5
Printed matter	1.0	3.0	1.5
Wire products and fencing grills	0.2	1.4	1.4
Coffee and coffee substitutes	0.1	5.6	1.4
Iron nails, screws, nuts, bolts	0.1	1.7	1.4
Paints, pigments, and varnishes	0.5	2.7	1.3
Articles made from plastic	1.4	2.0	1.3
Other miscellaneous manufactured articles	0.2	1.3	1.2
Fixed vegetable oils (soft, crude, refined)	0.2	3.8	1.2
Crustaceans and mollusks (fresh, chilled)	0.4	0.9	1.2
Wheat meal and flour	0.3	0.0	1.2
Women's outer garments	0.2	0.8	1.2
Iron structures and parts	0.7	1.8	1.1
Electricity distribution equipment	0.3	1.1	1.1
Furniture and parts	0.8	1.1	1.1
Prepared vegetables, roots and tubers Iron and steel wire	0.2	1.1	1.1
	0.0	1.3	1.1
Component articles of textiles	0.2	1.2	1.0
Disinfectants, insecticides, fungicides	0.3	0.7	1.0
Other residual petroleum products	0.1	2.1	1.0
Prepared meat and edible offals, fish extracts	0.3	0.8	1.0
Share of exports with $RCA > 1$	93.2		

Table 4-2b. Comparative Advantage in Exports to CARICOM, 1990–1993 to 2000–2003

Source: IDB Integration and Regional Program Department, using UN-Commodity Trade Statistics Database. Note: Products are ranked according to the RCA 2000–2003 descending order.

		Glo	bal RC	A		Intra-regional RCA
RCA Trend	World	CARICOM	U.S.	EU	Latin America	CARICOM
Increase	14	12	10	9	8	33
Food/tobacco	7	5	1	2	2	4
Crude materials	4	4	5	4	1	13
Manufactured goods	3	3	4	3	5	16
No Change	2	10	0	0	2	13
Food/tobacco	2	5	0	0	0	5
Crude materials	0	0	0	0	2	1
Manufactured goods	0	5	0	0	0	7
Decrease	8	22	4	7	4	24
Food/tobacco	1	7	2	3	0	2
Crude materials	4	5	2	3	2	8
Manufactured goods	3	10	0	1	2	14
No RCA*	208	175	181	166	164	149

Table 4-3. RCA Trends by Destination, 1990–1993 to 2000–2003

Source: IDB Integration and Regional Programs Department, using UN-Commodity Trade Statistics Database.

Note: Increase = RCA increased by more than 10%; No Change = RCA changed by no more than \pm 10%; Decrease = RCA contracted by more than 10%.

* Indicates number of products for which there was no RCA in 2000–03; includes some products for which RCA existed in 1990–93 but was later lost.

EU, 16 product groups (five of them new ones) enjoyed a high degree of specialization. (Table 4-3 summarizes the RCA analysis for the five major markets;⁹ Table AI-4 presents more detailed RCA data for these markets.)

The same analysis can be done at the sub-regional level, by measuring a product's share in a country's intra-regional exports by its share in total intra-regional exports. Trinidad and Tobago's exports to CARICOM appear to be highly specialized relative to intra-regional trade, with 70 product groups (of the 219 exported during the period) showing an RCA greater than 1. Of these, 28 did not have RCA at the start of the period. As Table 4-3 shows, Trinidad and Tobago has taken advantage of existing preferences in CARICOM to become specialized in such sectors as manufacturing and machine and transport equipment (Table AI-5 in Annex I provides detailed, intra-regional RCA data).

As mentioned earlier, the two measures used to determine the competitiveness of Trinidad and Tobago's exports—winners/losers and RCA—may be subject to significant

⁹ RCA is calculated as follows: RCA (*Xijk*) = (*Xijk* \div *Xij* total) \div (*Xwjk* \div *Xwj* total); where *Xijk* equals exports of country *i* to country/region *j* of product *k*, *Xij* total equals total exports of country *i* to country/region *j*, *Xwjk* equals exports of the world to country/region *j* of product *k*, and *Xwj* total equals total exports to country/region *j*. RCA measures how important each product or product group is in the exports from one market to another versus the total importance of that product or product group in world exports to the destination market. In this case, RCA was measured at the SITC revision 2, three-digit product group level of aggregation.

margins of error by not isolating policy-induced advantages from real ones or because of the particular time periods chosen. The preferences Trinidad and Tobago enjoys in its major export markets may distort the analysis at all levels of product aggregation. These rather crude measures should therefore be viewed only as broad indicators of export competitiveness.

One can nevertheless draw some important conclusions from the above analysis of trade flows, product composition, and export competitiveness:¹⁰

- Trinidad and Tobago is a successful exporter of fuels. Export revenues generated from the fuels sector, while fluctuating significantly, have increased substantially in recent years. Although oil exports face bleak long-term prospects, natural gas will likely generate sizeable export earnings for several decades.
- The country is also competitive in a number of non-fuel products, but these still account for a small share of total exports. Though many exported products are Champions and specialization in new products has increased, over half of all products exported are either Underachievers or in Declining Sectors, and the total number of products with RCA remains small.
- At the same time, the country has exploited its CARICOM preferences to establish an important presence in that market. Penetration into the more protected markets of Latin America has been less successful.
- Thus, the country can respond successfully to new market opportunities, but should do more to optimize its response. Export diversification is needed to reduce dependence on fuel products (and the attendant risk of fluctuating export revenue). Export promotion should not only seek to identify promising products and foster innovation among local producers and exporters; it should also target new markets and those where export performance remains sub-optimal. Overall competitiveness in the economy needs strengthening, particularly in areas vital to export performance, including communications, investment attraction, and transport infrastructure and services. Competitiveness is crucial in light of the changing market-access conditions that exporters face (i.e., future conditions will reduce current preferences, which have facilitated export growth in some of the country's most important markets).

Market Access

Trinidad and Tobago's exports enjoy relatively favorable access to EU and North American markets. Apart from those goods that enter duty-free under most favored nation (MFN) rules,

¹⁰ While alternatives, such as looking at specialization in production rather than in exports, are available, they are more demanding of data and have other inherent drawbacks.

many products face zero or reduced tariffs under the Cotonou Agreement (EU), CARIBCAN (Canada), Caribbean Basin Initiative (U.S.), and Generalized System of Preferences. Exports to CARICOM face zero tariffs and are protected from foreign competition by the Community's common external tariff (CET). More than half of Trinidad and Tobago's exports (in value terms) enjoy some form of preferential treatment.¹¹

In all of these markets, however, preferences are being eroded by global tariff reductions resulting from the Uruguay Round of multilateral trade talks, and by such bilateral trade initiatives as the EU's "Everything but Arms" initiative for least developed countries, U.S. and Canadian free trade agreements (FTAs) with Latin American countries, and CARICOM's agreement with the Dominican Republic. This trend in preference erosion is likely to continue in the coming years because of further trade liberalization expected under the World Trade Organization (WTO) and between countries in the Western Hemisphere, as well as the conclusion of an Economic Partnership Agreement (EPA) with the EU, which would reduce Trinidad and Tobago's market access advantages in Caribbean markets. In such a context, questions of export performance and competitiveness become even more relevant. Many Caribbean countries, including Trinidad and Tobago, have sought to expand and diversify their export supply by moving into services, one of the fastest growing sectors in the world economy.

Services Trade

In Trinidad and Tobago, unlike other Caribbean islands, services still account for a relatively small share of total exports (12 percent) and GDP (7 percent).¹² These shares have fluctuated considerably over the years, with no apparent upward trend. Despite moderate growth in the past, services constitute an important source of export revenue and jobs, with significant potential. Unfortunately, scarcity of reliable services data—resulting from a system deficient in data collection and dissemination—severely limits the scope of analysis on services trade.

Recent Trends

During the 1990–2003 period, services exports grew at an average annual rate of 5.8 percent in value terms, just below the world's average rate of 6.5 percent.¹³ Over the period, annual

¹¹ This estimate is based on data from the IDB Regional Programming Paper for CARICOM (GN-2035-I) (for exports to the EU and Canada) (IDB 1999), the U.S. Trade Representative's Fourth Report on the CBI (for exports to the U.S.) (USTR 2001), and calculations of the share of Trinidadian exports that go to CARICOM (for exports to that sub-region).

¹² 2003 figures. Services exports, as a share of total exports, for Jamaica, Barbados, and Organization of Eastern Caribbean States (OECS) were 60, 80, and 79 percent, respectively; as a share of GDP, they amounted to 24, 40, and 39 percent, respectively.

¹³ Derived from WTO trade database.

growth rates fluctuated significantly. In 1993, for example, export earnings contracted by 22 percent because of poor performance in the commercial-services sector. In 1998, they expanded by 23 percent as the result of a large signature bonus received by the Government.¹⁴ The importance of certain sectors within the country's services portfolio has changed over time. From 1990–95 to 2000–03, the share of transportation earnings in total services exports declined from 50 to 35 percent. The cause was not a drop in earnings, but strong growth in travel services, which increased their participation in services exports from 24 to 37 percent. Over the period, commercial and government services maintained their respective shares of approximately 25 and 4 percent (Figure 4-5).

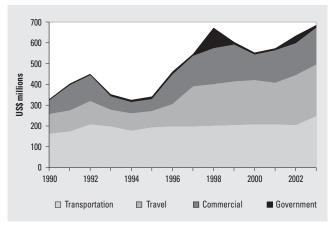
Services sectors are also important sources of employment in Trinidad and Tobago. In 2004, 65 percent of all employed Trinidad and Tobago nationals worked in services-related industries, while another 16 percent were employed in the construction industry.¹⁵ The largest sub-sectors were community, social, and personal services (30 percent of all jobs) and whole-sale and retail trade (18 percent). Of the nearly 60,000 net jobs created in 2000–04, 40,000

were in services-related sectors; over the same period, the agricultural sector lost more than 10,000 net jobs.¹⁶

Travel Sector: Tourism, Education, and Health

As Figure 4-5 shows, the importance of travel in total services exports is growing. In 1995–2003, travel earnings increased by an average of 16 percent a year, compared to about 3 percent for transportation and commercial and

Figure 4-5. Services Exports by Area, 1990–2003



Source: IDB Integration and Regional Programs Department using IMF-BOPS and CSOTT.

government services. Receipts from personal travel tripled, reaching US\$ 200 million in 2003; business travel grew at a slower rate. Over the period, 50 percent of all tourist arrivals were from the U.S. and Canada, 22 percent from the Caribbean, and 20 percent from Europe.

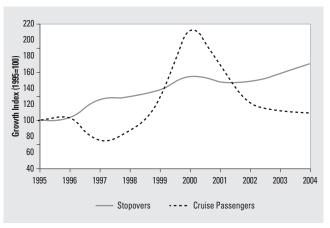
¹⁵ Services-related sectors include wholesale and retail trade; transport, storage, and communications; financing, insurance, and real estate; and community, social, and personal services.

¹⁴ In 1998, a signature bonus of US\$ 58 million was received from the U.S.-based Exxon Oil Corporation in exchange for rights to explore two offshore oil blocks.

¹⁶ See Core Labor Standards (CLS) database, International Labor Organization (ILO).

Figure 4-6. Growth in Visitor Arrivals, 1995–2004

Such strong growth in travel receipts is partly a result of concerted efforts to develop the country's tourism industry.¹⁷ Infrastructure improvements to harbors have facilitated the entrance of larger cruise ships, and targeted marketing and promotion of cultural resources and eco-tourism have offered attractive alternatives to the Caribbean beach tourism product. Results of these strategies have been mixed.



Source: IDB Integration and Regional Programs Department using CSOTT.

Over the past decade, cruise passenger arrivals have been volatile, with strong growth in the late 1990s and a steady decline since 2001. At the same time, stopover arrivals have doubled over the last decade, reaching 443,000 visitors in 2004 (Figure 4-6).¹⁸

Potential growth sectors in the tourism industry include yachting. In the 1990s, yacht arrivals increased fivefold, reaching 3,200 in 2000. Comparative advantages to develop this sector include the country's geographical location south of the hurricane belt, protected and well-developed marinas like Chaguaramas Bay, and a variety of related services (e.g., enter-tainment, food, repairs, and shipbuilding). However, it is important for the sector to maintain an edge in price competitiveness and availability of related services, given the potential for increased competition across Eastern Caribbean destinations (UN-ECLAC 2002).

Trinidad and Tobago's travel sector also has growth potential in education- and health-related services. The St. Augustine campus of the University of the West Indies attracts many student visitors to Trinidad. While earnings from student travel have been marginal in recent years, there is potential to attract additional regional and extra-regional tertiary-level students. The health-services industry also has growth potential, given the country's proximity to North American markets, favorable climate, educated work force, well-developed domestic health infrastructure, and well-trained health practitioners. Spa and wellness treatment, alternative medicine, surgery, and rehabilitation are all areas that could be developed as additional sources of foreign exchange (World Bank 2005).

¹⁷ Trinidad and Tobago boasts a wealth of natural and cultural resources; Trinidad is an internationally renowned center for music and dance, while Tobago offers some of the Caribbean's best diving locations.

¹⁸ In 1997–2004, stopover visitor arrivals during February Carnival celebration grew an average of 6 percent annually.

Transportation Sector: Air and Maritime

Between 1990 and 2003, transportation services exports grew moderately, at 3 percent a year. Passenger fares were the largest contributor to earnings, representing an average of 80 percent of transportation and 33 percent of total services exports. A major player in the regional airline market is Trinidad and Tobago's national carrier, British West Indian Airways (BWIA), which has faced financial difficulties as a result of a worldwide decline in air-travel in recent years. BWIA required a US\$ 13 million bailout loan from the Government, which regained control of the company in 2004 and implemented a restructuring plan to reduce operating costs. The country has two international airports: the newly-renovated Piarco Airport (Trinidad) and Crown Point Airport (Tobago). Both are owned and operated by the government-controlled Airports Authority of Trinidad and Tobago.

The maritime transport sector is also important, given Trinidad and Tobago's large export-oriented energy and chemical industries and its geographical location as a trans-shipment point. While detailed data of port maintenance and cargo handling fees are not readily available, anecdotal evidence suggests that the sector has grown substantially in recent years. Port of Spain, the country's largest port, services all dry cargo, containers, and passenger traffic. In 2004, it moved 350,000 TEUs of cargo, up from 270,000 in 2001.¹⁹ Smaller ports are located in Point Lisas, Trinidad (mainly for industrial cargo) and Scarborough, Tobago (for inter-island passenger and cargo traffic and international cruise ships) (WTO 2005).

Commercial Sector: Communications, Financial, and Insurance Services

Trinidad and Tobago's commercial-services exports have proven vulnerable in recent years. A healthy 12-percent annual growth rate in 1990–99 gave way to stagnant growth over the next five-year period. This weak performance is primarily attributed to the communications sector, particularly to adjustments in the accounting rate used for incoming telephone calls. Exports of communications services increased by 10 percent a year, reaching US\$ 110 million in the late 1990s; subsequently, they dropped significantly, now accounting for about US\$ 35 million in annual earnings.

The prospects for financial and insurance services are better. In Trinidad and Tobago, the financial sector consists of 10 financial companies, 6 commercial banks, 6 mortgage companies, and numerous credit unions. In 2004, the Government presented a White Paper on the financial system, identifying reforms within a policy framework to establish the country as a Pan-Caribbean financial center (WTO 2005). Although data on the country's trade in financial services is not readily available, there are indications that this sector is an

¹⁹ TEU is the 20-foot equivalent unit used to measure containerized cargo (see UN-ECLAC maritime database).

important player in both domestic and regional markets. Liberalization of financial services in the region has brought benefits to consumers and providers alike through increased transparency, more efficient regulation, and access to new financial markets.

Insurance is an increasingly important segment of the country's services-sector portfolio. Among the services sectors, exports of insurance services performed best, growing fivefold over the last decade. In 2000–03 alone, earnings from insurance services accounted for over half of all commercial-services exports, growing by an average of 33 percent per year. Fortysix registered insurance companies operate in Trinidad and Tobago; the 10 largest control 93 percent of the industry's assets. The country's financial- and insurance-services sectors are focused on the region, where they are competitive, yielding increased foreign-exchange earnings and diversification of services exports.

Prospects for Services Exports

As Trinidad and Tobago continues to diversify its sources of foreign exchange, growth in services exports will be critical, especially since services industries employ two out of every three workers in the country. Historically, growth in travel earnings has fueled total services exports. Thus, it is important to implement strategies to continue developing the industry in a sustainable way (e.g., niche tourism and health services). Transportation services, although a stable source of earnings, have depended largely on BWIA operations. Financial- and insurance-services providers, competitive in regional markets, demonstrate further growth potential.

Given the paucity of detailed, reliable statistics on services trade for Trinidad and Tobago and other Caribbean countries, it is vital to implement a comprehensive system of data collection, management, and reporting in services trade in the region to ensure that policymakers have the most reliable, up-to-date information on which to base their decisions.²⁰ Such a system is critical as Trinidad and Tobago becomes increasingly involved in major external trade negotiations in services, with potentially significant implications for market access in this rapidly growing sector of the world economy.

Policy Objectives: Integration and International Insertion

In the late 1980s, following a prolonged period of economic stagnation and decline, Trinidad and Tobago implemented important policy changes as part of a comprehensive structural reform program. One pillar of this program was the liberalization and deregulation of trade. The country undertook unilateral reforms, increasingly supported multilateral and

²⁰ Throughout the Caribbean, data is scarce and methods of collection and dissemination differ by country.

regional trade initiatives, and became a leading force behind the revitalization of integration in the Caribbean region. Today, Trinidad and Tobago's trade policy is formulated within the context of its CARICOM and WTO memberships, as well as existing and planned trade arrangements with countries in Europe and the Americas. (Annex II provides an overview of the major agreements and preferential arrangements governing the country's external trade relations).

CARICOM Membership

Trinidad and Tobago is a founding member of CARICOM. Established in 1973, CARICOM fosters economic integration, cooperation, and foreign policy coordination among its now 15 members. With a population of 15 million and a combined GDP of US\$ 40 billion,²¹ the Community (excluding The Bahamas) is currently in the process of establishing a Caribbean Single Market and Economy (CSME), which includes the right of establishment; free movement of goods, services, capital, and skilled persons within the sub-region; growing harmonization of economic and regulatory policies; and a common external tariff and trade policy. Thus, in the area of trade, CARICOM membership has important implications for Trinidad and Tobago.²²

Preferential Access to and Participation in CSME

CARICOM's free trade area in goods, in place since the early years of the integration process, allows virtually free and preferential access to the sub-regional market for all Trinidad and Tobago exports that meet CARICOM rules of origin. Current efforts focus on eliminating the few remaining non-tariff barriers. However, intra-regional trade remains somewhat constrained, accounting for only 17 percent of the Community's total exports and 11 percent of imports. Inefficient regional transport facilities are a major bottleneck to the free flow of goods, as are the small size of the regional market and similar product specialization in some countries. Only a few companies in the region, many of them from Trinidad and Tobago, have managed to overcome these constraints and establish a lasting presence in the sub-regional market.

Indeed, among all CARICOM countries, Trinidad and Tobago appears to have benefited most from intra-regional trade liberalization and the tariff preferences resulting from application of the CET to extra-regional imports. In 1990–2004, Trinidad and Tobago exports to CARICOM grew faster than the country's total exports. The country is the origin

²¹ Calculations are based on IMF (World Economic Outlook) and WB (World Development Indicators) databases.

²² For detailed overviews of progress achieved in CSME implementation, see Brewster et al. (2003) and INTAL (2005).

of about 70 percent of all intra-group merchandise exports, and has taken advantage of its CARICOM trade preferences to raise its market share in virtually all of the group's countries (Table 4-4). It is not certain whether Trinidad and Tobago can maintain its share of the CARICOM market once that market opens up to greater external competition. This will depend, to a large extent, on its ability to move successfully toward freer trade. In this regard, the FTAs that CARICOM recently signed with the Dominican Republic and Costa Rica should help test, and gradually strengthen, the resilience of Trinidad and Tobago exporters.

The main CSME provisions related to services trade, right of establishment, and movement of capital and labor were to have been in place by the end of 2005 (Trinidad and Tobago, Barbados, and Jamaica have complied with this deadline, but other member states are lagging). To reduce CSME transaction costs, member countries have also sought to deepen the process of harmonizing and upgrading regulatory frameworks within CARICOM. The aim is to identify key areas affecting investment decisions and other sectors of economic activity where regional harmonization is most urgent. To date, lack of technical and financial resources has precluded concrete progress in this area, but member states believe it is vital to fulfilling a major CSME objective: strengthening the international competitiveness of Caribbean economies.

		om Trinidad US\$ millions)	•	rom World nillions)	Trinidad a Market S	5
CARICOM Country*	1990–92	2002–04	1990–92	2002–04	1990–92	2002–04
Antigua & Barbuda	0	72	1,001	1,803	0.0	4.0
Bahamas, The	23	92	7,030	17,184	0.3	0.5
Barbados	213	670	1,954	3,438	10.9	19.5
Belize	7	38	730	1,471	1.0	2.6
Dominica	34	61	350	624	9.7	9.7
Grenada	59	172	329	695	18.0	24.8
Guyana	110	318	991	1,677	11.1	18.9
Haiti	17	17	1,604	3,842	1.0	0.5
Jamaica	133	1,139	5,519	11,715	2.4	9.7
St. Kitts & Nevis	0	75	776	690	0.0	10.9
St. Lucia	29	176	728	1,293	4.0	13.6
St. Vincent &						
the Grenadines	63	123	400	824	15.7	14.9
Suriname	163	214	1,551	1,957	10.5	10.9
CARICOM	851	3,167	22,963	47,214	3.7	6.7

Table 4-4. Trinidad and Tobago's Share in CARICOM Countries' Imports

Source: IDB Integration and Regional Programs Department, using IMF-DOTS.

Note: Values represent totals for the period.

* Montserrat and Trinidad and Tobago are not included in CARICOM data.

By fully participating in the CSME, Trinidad and Tobago—one of the strongest economies in the sub-region—not only stands to benefit from the opportunities offered by that market; it can also use that market as a springboard for greater global insertion, thereby penetrating external markets more effectively. The country has made full and timely implementation of the various CSME provisions an important part of its trade policy agenda. To date, the implementation process across the region has been slow, perhaps understandably, given the many member states in the group and their varying levels of development. In light of the changing external context, however, government leaders increasingly recognize the need to do more to accelerate the process, and the past year has witnessed encouraging signs in this area.

Trade Policy Coordination and the CET

By signing on to the Treaty of Chaguaramas in 1973, Trinidad and Tobago committed itself to progressive coordination of its trade policies with those of its CARICOM partners.²³ In line with the group's common market objective, member countries agreed to establish a common external tariff.²⁴ Twenty years later, they began a four-phased implementation of the CET, to have been completed by 1998. The process involved a substantial reduction in external protection levels from an average of 20 percent to 10 percent for CARICOM as a whole.²⁵ In Trinidad and Tobago's case, maximum import duties for industrial products were lowered from 35 percent to 20 percent, while protection for agricultural goods was reduced to a maximum of 40 percent. The pace of implementation has varied greatly among CARICOM countries, with revenue concerns holding back the process in some of the smaller islands. Trinidad and Tobago was one of only two countries to have met the 1998 deadline for full implementation of the CET; by mid-2005, all countries except Antigua and Barbuda and St. Kitts and Nevis had implemented it.

The CET has some inherent problems that will remain, even after its full implementation across CARICOM. First, while considerably lower than a decade ago, CARICOM tariffs remain relatively high, particularly in the food and manufacturing sectors, where many products are still highly protected from external competition. This raises concerns about trade diversion and is not conducive to the development of internationally competitive, local industries. Second, even when uniformly applied throughout CARICOM, the CET will

²³ The Treaty's Common Market Annex, Article 34 (External Trade Policy) states that "Member States shall seek a progressive coordination of their trade relations with third countries or groups of third countries...Member States undertake to transmit to the Secretariat particulars of any trade or aid agreements entered into after the entry into force of this Annex."

²⁴ Ibid., Article 31.

²⁵ Unweighted average tariff rate.

remain uncommon because, in its current form, there is broad scope for tariff suspensions and reductions, as well as national derogations from the CET. This not only complicates the region's joint negotiating efforts vis-à-vis third partners, but also—given the implementation of rules of origin to avoid trade deflection—creates additional transaction costs and reduces transparency of market access for exporters targeting the CARICOM market. Third, the level of tariff dispersion in the CET remains high, resulting in higher efficiency costs and further complicating the group's market access negotiations with other countries and regions. Table 4-5 illustrates these three problems.²⁶

In addition to a somewhat uncommon CET, CARICOM's common trade regime has other loopholes that weaken the Community's external projection as a single market. CARICOM's founding treaty sought no more than a progressive coordination of members' external trade policies (which, in the absence of a common services regime, focused exclusively on trade in goods), and allowed members to freely negotiate bilateral trade agreements with third countries. The revised treaty of 2002 goes somewhat further toward establishing a common trade policy, but falls short of fully committing member states to this goal. By creating a common services regime, the treaty extends CARICOM's capacity to negotiate and implement joint services agreements with third parties. Moreover, it reduces the flexibility that individual member states have to negotiate bilateral trade agreements by obligating members who negotiate such accords to seek approval of the relevant CARICOM Ministerial Council.²⁷ It does not, however, expressly prohibit the negotiation of such agreements and thus is at odds with the principle of a customs union, which requires a truly common trade policy to be effective.

While not fully congruent with CARICOM's integration objectives, this somewhat loose common-policy commitment has not necessarily been detrimental to Trinidad and Tobago. As one of the Caribbean countries most eager to access new markets and build

²⁶ Trinidad and Tobago's unweighted average applied tariff is 7.9 percent, lower than the CARICOM CET of 10.1 percent (Table 4-5). Trinidad and Tobago's weighted tariff, at 5.5 percent, is even lower. This figure, however, is somewhat misleading for two reasons. First, Trinidad and Tobago imports large quantities of products needed in energy production at zero tariffs. This pushes the weighted tariff to low levels, masking high import protection in some manufacturing and agricultural industries. Second, the weighted tariff does not consider the potential trade that could have occurred in the absence of high protection in certain product sectors. Therefore, despite a low weighted tariff, Trinidad and Tobago remains a highly protected economy in many respects.

²⁷ The Revised Treaty (Chapter V, Article 80) states: "The Member States shall coordinate their trade policies with third States or Groups of states. The Community shall pursue the negotiation of external trade and economic agreements on a joint basis in accordance with principles and mechanisms established by the Conference. Bilateral agreements to be negotiated by Member States in pursuance of their national strategic interests shall: (a) be without prejudice to their obligations under the Treaty; and (b) prior to their conclusion, be subject to certification by the CARICOM Secretariat that the agreements do not prejudice or place at a disadvantage the position of other CARICOM States vis-à-vis the Treaty. Where trade agreements involving tariff concessions are being negotiated, the prior approval of COTED shall be required." Belize obtained certain derogations from these provisions with respect to negotiating trade agreements with "neighboring economic groupings" (CARICOM 2001).

			Tari	ff (Simple Av	erage, %)	
HS Section	Product Group	CET	Trinidad & Tobago	Barbados	Guyana	St. Kitts & Nevis
01	Live animals	24.9	24.3	53.3	27.1	11.5
02	Vegetables	18.2	16.2	28.0	18.4	13.2
03	Animal/vegetable fats	26.7	24.0	32.1	25.8	21.9
04	Processed foods/tobacco	19.7	16.2	34.2	25.0	16.1
05	Mineral products	4.8	3.0	6.9	6.2	2.4
06	Chemicals/industrials	5.4	2.3	6.6	6.1	5.6
07	Plastics/rubber	7.4	6.3	9.1	8.7	6.7
08	Animal hides/skin	8.2	5.8	9.6	9.2	7.6
09	Wood/wood articles	9.6	6.9	10.6	9.5	9.7
10	Paper/cellulose material	7.3	5.2	8.9	8.0	8.1
11 12	Textiles Footwear/miscellaneous	10.4	7.9	10.8	10.8	11.1
	articles	16.6	15.2	16.2	16.0	18.5
13	Stone/glassware	8.8	8.4	9.6	8.8	9.8
14	Precious and semi-precious metals	20.1	147	20.7	20.0	1.4.4
1 -	in o cons	20.1	14.7	29.7	28.6 6.7	14.4
15	Base metals	5.6	4.6	6.8		6.2
16	Machinery/electrical equipment	6.5	4.9	7.8	7.5	7.7
17	Motor vehicles/vessels	9.6	7.2	10.0	9.4	9.7
18	Precision instruments	11.5	9.9	14.4	14.2	10.8
19	Arms/munitions	38.1	22.9	47.7	44.7	46.8
20	Miscellaneous manufactured	10.0		16.2	15.0	10.2
2.1	articles	16.2	15.7	16.2	15.8	19.3
21	Art/antiques	20.5	20.0	20.0	20.0	25.0
	Average tariff	10.1	7.9	13.1	11.0	9.4
	Standard deviation	14.7	12.3	26.4	12.9	12.1

Table 4-5. CARICOM: CET and National Applied Tariffs, 2003

Source: IDB Integration and Regional Programs Department, using UN-TRAINS.

Note: In 2002, the average tariff and standard deviation were 5.9 and 7.9 percent, respectively, for the Central American Common Market (CACM) and 7.0 and 0.0 percent for Chile.

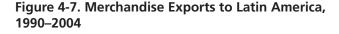
new trading relationships, Trinidad and Tobago has positively exploited the loophole to begin free-trade negotiations with third partners, subsequently urging the remaining CARICOM countries to join in. This may have improved the dynamism of CARICOM's relations with neighboring Latin American countries, which might otherwise have progressed more slowly. It is interesting to note, for example, that the recent FTA concluded between CARICOM and Costa Rica began as a bilateral negotiation between Costa Rica and Trinidad and Tobago, and was extended to the rest of CARICOM through Trinidad and Tobago's persuasion. One might, however, also argue that CARICOM membership, by committing participating countries to progressively stronger trade policy coordination, may at times have prevented Trinidad and Tobago from moving on the external trade front as fast as it could have done on its own.

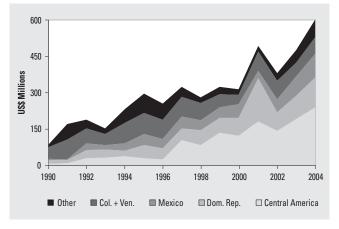
The constraints imposed by CARICOM's "not so common" trade policy on national policymaking should be weighed against the obvious benefits that preferential access to the CARICOM market, creation of the CSME, and functional cooperation provide Trinidad and Tobago. Another advantage is that foreign policy coordination has given the countries a stronger voice in international trade negotiations. As experience in the FTAA process has shown, the voice of 14 countries, however small, is stronger than that of one small country on its own. The creation of the Caribbean Regional Negotiating Machinery (RNM) to formulate and implement joint Caribbean negotiating strategies has facilitated a more efficient pooling of the region's scarce human, technical, and financial resources and thus led to more effective participation in the multiple external negotiations. For Trinidad and Tobago, the added benefit is this: As one of the strongest economies in the group, it is better able than most other member countries to shape regional positions in the negotiations.

Growing Links with Latin America

Eager to capture new markets, Trinidad and Tobago's business sector has been an important driving force behind CARICOM's efforts to negotiate new trade agreements with neighboring countries. Five such agreements concluded in the past decade (Colombia, Costa Rica, Cuba, Dominican Republic, and Venezuela) (Annex II), have given Trinidad and Tobago improved, preferential access to important markets in the region. Because the first two agreements are

limited in scope and the last three were concluded only recently, it is too early to determine their overall effect on bilateral trade flows. As Figure 4-7 shows, Central America and the Dominican Republic are already among the top destinations for Trinidad and Tobago merchandise exports, and the potential for further trade development is promising. At the same time, Colombia and Venezuela have seen their share in Trinidad and Tobago's total merchan-





Source: IDB Integration and Regional Programs Department using UN-COMTRADE.

dise exports to Latin America decline significantly in recent years.²⁸ In all these markets, Trinidad and Tobago's exports are strongly concentrated in fuel products and manufactured goods related to the oil sector.

Considering the size and growth potential of the Latin American market, Trinidad and Tobago clearly has an opportunity to expand trade relations with these countries. The Association of Caribbean States, established in 1994 with headquarters in Port of Spain, aims to facilitate closer relations among its members, which include all Caribbean and Central American countries, as well as Colombia, Mexico, and Venezuela. The Association's primarily consultative character, nevertheless, limits its role in fostering trade among member countries. It is not a negotiating forum, and does not cover the whole of Latin America. Improved penetration of Latin American markets, particularly more remote ones in South America, will therefore require a concerted effort by both the Trinidad and Tobago government and private sector, in terms of improved market analysis, promotional activities that target new Western Hemisphere markets, and efforts to gain better access to these markets. This is particularly important in light of the current impasse in FTAA negotiations.

FTAA Process and Western Hemisphere Markets

Negotiations for a hemisphere-wide FTA were officially launched in 1998. At that time, the goal was to have a balanced and comprehensive, WTO-consistent agreement by January 2005, covering trade in goods and services, investment, government procurement, dispute settlement, intellectual property, subsidies, competition policy, and anti-dumping and countervailing duties. The agreement was to take into account the needs, economic conditions, and opportunities of smaller economies in the region and was to coexist with bilateral and sub-regional agreements (e.g., CARICOM) to the extent that rights and obligations under these agreements were not covered by or exceeded those of the FTAA. The latter would have had important implications for CARICOM in that, unless substantial progress toward the CSME was made prior to the FTAA's entry into force, the CARICOM economic integration process could risk being overtaken (and made somewhat redundant) by a hemisphere-wide trade initiative.

FTAA negotiations stalled in 2003 and have made virtually no progress since then, despite repeated commitments to continue the process. Partly as a result, new bilateral agreements have proliferated among individual or groups of FTAA countries, including an FTA between the U.S. and Chile and a recently concluded agreement between the U.S. and five Central American countries, plus the Dominican Republic (CAFTA-DR). The U.S. is also

²⁸ There is no reliable information on Trinidad and Tobago's services trade by destination and origin.

negotiating bilateral agreements with Colombia, Ecuador, and Peru, while Canada hopes to expand its FTA with Costa Rica to other members of the Central American Common Market (CACM). These and other developments are putting pressure on CARICOM countries to seek alternative arrangements to the FTAA with their Western-Hemisphere partners to prevent deterioration of their access to these markets. For Trinidad and Tobago, which conducts most of its trade in the Western Hemisphere, seeking alternative arrangements to the FTAA, or a revival of those talks, is particularly important. CARICOM has already sought to accelerate discussions with Canada and is exploring a possible trade agreement with Mercosur; however, it has yet to decide whether to enter into bilateral negotiations with the U.S. Nonetheless, a new trade agreement with the U.S. is imperative if CARICOM wants to maintain its preferences under the U.S.-Caribbean Trade Preference Act (set to expire in 2008 unless the FTAA or a comparable FTA between the U.S. and beneficiaries of the Caribbean Trade Preference Act enters into force earlier).

Whatever the configuration of future trade agreements in the Western Hemisphere, they are likely to further erode the current preferences Trinidad and Tobago enjoys in U.S., Canadian, and Caribbean markets, as well as in those Latin American countries where it already has an FTA. The prospect of tougher competition makes it all the more urgent for Trinidad and Tobago exporters to exploit their current window of opportunity in these markets. At the same time, access to U.S. and Canadian markets would be more secure under a reciprocal trade agreement with these countries because it would no longer depend on unilaterally-applied preferences; rather, it would depend on contractually-agreed rules. In addition, exports that do not currently enjoy preferences or enter duty-free under MFN rules in these markets would gain improved access; consequently, their share in Trinidad and Tobago exports could increase. A similar trend would apply to any new agreement CARI-COM signs with Latin American countries, although competition from other countries in the region would be tough if the agreement is hemisphere-wide.

In any such agreement, Trinidad and Tobago will attempt to gain better market access for its services exports. At the same time, it must liberalize its import market for both goods and services; this will have important consequences for import-competing industries and fiscal revenues, but potentially large benefits for consumers and the economy as a whole, particularly given that the country sources most of its imports from Western-Hemisphere markets. The gains from trade liberalization²⁹ could be substantial for a small, dynamic exporter like Trinidad and Tobago. But the adjustment process will be difficult, even if the country succeeds in negotiating longer transition periods for its own market opening.

²⁹ Potential gains from trade liberalization exceed those from trade creation because liberalization can also facilitate structural reforms and their subsequent locking in, help build a more secure and transparent business environment, and promote higher inflows of FDI.

Relations with Europe

Along with its African, Caribbean, and Pacific (ACP) partners, Trinidad and Tobago is currently engaged in negotiations with the EU that will fundamentally alter current provisions governing EU-ACP trade. The ACP-EU Partnership Agreement, signed in Cotonou in June 2000,³⁰ foresees the entry into force of Economic Partnership Agreements between the EU and ACP countries by January 1, 2008 at the latest. These will include the progressive, twoway elimination of tariff and non-tariff barriers to trade, leading to the full implementation of reciprocal free trade by 2020. EU-ACP negotiations began in September 2002, and, in their first phase, focused on the general objectives and principles of the EPAs and issues of common interest to all ACP countries. Since 2003, bi-regional negotiations have been conducted between the EU and selected ACP groups. EU-CARIFORUM negotiations, involving CARICOM plus the Dominican Republic on the Caribbean side, were launched in April 2004. During this second phase of negotiations, the principal negotiators on both sides (the Caribbean RNM Director General and the European Commission Director of DG-Trade) held three meetings (one in July 2004 to establish priorities for EPA negotiations and the others in November 2004 and May 2005 to advance regional integration elements of the negotiations). At a ministerial meeting in September 2005, the parties launched the third phase of negotiations with the aim of producing a draft EPA by December 2006 and a final agreement by December 2007. Meanwhile, the unilateral trade preferences granted by the EU to imports from ACP countries under Lomé IV have been extended through the end of 2007.31

The EPAs will be comprehensive agreements covering trade in both goods and services, as well as such related areas as competition policy, intellectual property rights, technical barriers to trade, and sanitary and phytosanitary measures. In a note explaining the EU's negotiating strategy, the European Commission recognizes that, although EPAs seek to establish a stable, predictable, and transparent framework for bi-regional economic and trade relations, they require difficult social and economic adjustments in ACP countries, including CARICOM. The Commission therefore considers it "essential that EPA negotiations and implementation be accompanied by appropriate flanking policies of the ACP and that appropriate EU support measures be included in regular EDF [European Development Fund] financing."³² To this end, the Commission has approved a €50 million

³⁰ Details are available at http://europa.eu.int/comm/development/body/cotonou/index_en.htm

³¹ Lomé IV is the cooperation agreement that governed EU-ACP relations in the 1990–2000 period, prior to Cotonou.

³² See European Commission, "Explanatory Memorandum, Commission Draft Mandate" (April 2002), available at www.europa.eu.int/comm/trade. Since its creation in 1957, the EDF has provided substantial aid to ACP countries (see Treaty of Rome, Articles 131 and 136).

trade-related assistance program (Trade.Com) for ACP countries that complements the trade assistance already provided through the National and Regional Indicative Programs with these countries.

Since CARICOM countries (including Trinidad and Tobago) already enjoy duty-free access to the EU market for most of their merchandise exports, benefits of the agreement for CARICOM will largely depend on 1) the degree to which remaining non-tariff restrictions to such trade will be eliminated; 2) the extent to which the EU opens up its services market to CARICOM; 3) the timeframe and scope of reciprocal trade liberalization, which should allow CARICOM countries enough time to adjust to both increased competition and declining tariff revenues; and 4) how generous and effective the EU's financial assistance in support of CARICOM's adjustment to freer trade will be. The stakes in EPA negotiations are high. The resulting agreement will provide the basis for trade relations and development assistance between the two regions for years to come; it will also likely influence any agreement that CARICOM—and hence Trinidad and Tobago—subsequently signs with other developed countries.

Trinidad and Tobago's trade relations with the EU will not only be shaped by a future EPA. New trade arrangements entered into by the EU with third countries (either bilaterally or multilaterally) could weaken CARICOM countries' position in the EU market and thus erode the benefits of an EPA. Deterioration in relative market access is already under way as a result of the EU's decision to grant all least-developed countries duty-free access to its markets by 2005. The Cotonou Agreement states that, in response to this problem, the parties "agree to examine all necessary measures in order to maintain the competitive position of the ACP states in the Community market during the preparatory period." This implies a commitment, on the European side, to consult with the ACP group prior to implementing new (unilateral or reciprocal) liberalization measures. It does not, however, guarantee CARICOM continued preferential status in the EU market, either in the transition phase or following EPA implementation.

Another factor influencing CARICOM-EU trade relations is the EU's recent eastward enlargement. Since most trade between the EU and the 10 new members is already liberalized, and because CARICOM and East European exports to the original EU overlap little, enlargement has not significantly diverted trade from Caribbean countries or eroded CARICOM's existing trade preferences in the EU market. Moreover, upon joining the EU, new members assumed all EU commitments included in the Cotonou Agreement; consequently, they have begun to offer CARICOM the same preferences it already enjoyed in the EU of 15. This—along with accelerated economic growth expected in the new member countries as a result of enlargement—translates into important export opportunities for CARICOM, not only in the goods sector, but also (and perhaps mainly) in services (e.g., tourism). It is important, however, to note that, since joining the EU, new members are also party to, and influence, EPA negotiations. Thus, for both political and economic reasons, Caribbean countries (including Trinidad and Tobago) should increase their engagement with new EU members to facilitate inter-regional dialogue, information-exchange, and business links.

WTO Membership

Trinidad and Tobago has been a contracting party of the General Agreement on Tariffs and Trade (GATT) since October 1962 and a WTO member since March 1995. The country accords MFN treatment to all its trading partners. As a result of the Uruguay Round of multilateral trade negotiations, it has bound most of its industrial tariffs at a ceiling rate of 50 percent, with certain products bound at 70 percent. All its agricultural tariffs are bound, mostly at 100 percent. Other duties and charges are bound at 15 percent. There is a substantial gap between bound rates and applied tariffs, which are set in accordance with the CET and national exceptions included therein (Table 4-5). Non-tariff barriers, such as quantitative restrictions, import surcharges, and import licenses, have been progressively dismantled, in line with Uruguay Round commitments.

Under the General Agreement on Trade in Services (GATS), Trinidad and Tobago has made commitments in a number of services sectors, including tourism, business, education, health, recreation, culture, sports, transport, and financial services. It has also made commitments across sectors on commercial presence and the presence of natural persons. In addition, the country has made offers in subsequent WTO negotiations on telecommunications and financial services.

Currently, Trinidad and Tobago faces two challenges in the WTO: 1) full implementation of Uruguay Round Agreements and 2) participation in the Doha Development Round. With regard to the Uruguay Round, Trinidad and Tobago is probably the most advanced, among CARICOM countries, in implementing its obligations—a difficult process involving many legislative and institutional changes, some of which are handled at the regional, rather than national, level in CARICOM. The country has made progress in such areas as domestic anti-dumping legislation and regulations to conform to the WTO Anti-dumping Agreement; adoption of new Patent and Copyright Acts; and amendments to legislation on trademarks and industrial designs to conform to the Agreement on Trade-related Intellectual Property. It has also put in place legislation on trade secrets and unfair competition. There are, however, some pending implementation issues (e.g., remaining import surcharges on certain agricultural products and application of MFN tariffs or other duty charges that exceed bindings).³³

³³ For a comprehensive overview of the major trade policy instruments applied by Trinidad and Tobago, see WTO (2005).

With regard to the Doha Development Round, negotiations, launched in November 2001, cover many areas, the most prominent of which are agriculture and services.³⁴ Countries also want to achieve further reductions in tariffs and non-tariff barriers on industrial products and reach agreement on new issues, including trade facilitation. Implementation issues resulting from the Uruguay Round Agreements are also on the agenda.³⁵ After a breakdown in negotiations at the 2003 ministerial meeting in Mexico, a package of framework agreements to guide future negotiations was concluded in August 2004, giving renewed impetus to the talks. Since then, however, negotiations have moved slowly, with agriculture one of the main stumbling blocks in the talks. At the December 2005 ministerial meeting in Hong Kong, WTO members resolved some issues related to agriculture and non-agriculture market access, and agreed to finish the negotiations by the end of 2006. It is not certain whether this deadline can be met, given that the Hong Kong meeting also left many unresolved issues. Throughout the negotiations, Trinidad and Tobago has joined with its CARICOM partners to promote special and differential treatment for developing countries, the less-than-full-reciprocity principle in formulating modalities for tariff reduction, and increased participation of developing countries in global services trade.

Multiple Negotiations: What Priorities?

Given the current impasse in FTAA negotiations, EPA and WTO negotiations have assumed a prominent place on CARICOM's trade policy agenda. Although Europe commands only a small share of Trinidad and Tobago's total trade, EPA negotiations are important because their outcome will influence any other agreements CARICOM signs with developed countries in the coming years. Active participation in the WTO is also important, not least because multilateral negotiations, particularly in agriculture, will affect both the pace and outcome of future trade negotiations in the Western Hemisphere. Nonetheless, given the dominance of this latter region in its trade, Trinidad and Tobago should view with some concern the deadlock in the FTAA talks and absence of significant progress to date in alternative arrangements between CARICOM and its FTAA partners. While other Latin American countries are moving swiftly to conclude bilateral FTAs with each other and North America, CARICOM countries have been far less active on this front. For Trinidad and Tobago, which aims to establish itself as a regional economic hub and integrate more fully with the rest of the hemisphere, the group's current focus on EPA negotiations may therefore appear unbalanced. A stronger focus on Western Hemisphere markets may be

³⁴ In both agriculture and services, countries seek substantial improvements in market access; in agriculture, they also seek elimination of distorting domestic support measures.

³⁵ Developing countries, in particular, have experienced problems in implementation and have requested revisions of commitments undertaken in that earlier round of multilateral negotiations.

warranted; Trinidad and Tobago should be in favor of intensifying CARICOM's current talks with Canada and Mercosur and seeking a new agreement with the U.S.

Policymaking Process: Institutional Players

The Government of Trinidad and Tobago is responsible for trade policy formulation, negotiation, and implementation. Its policymaking framework includes a diverse group of government agencies, and allows for the participation of both civil society actors and regional institutions (CARICOM Secretariat and RNM).

Formulation

The Ministry of Trade and Industry (MTI) has primary responsibility for formulating policy, subject to Cabinet approval. The MTI's objective is to develop promotion strategies for both trade and investment. In this effort, it is assisted by the Ministries of Finance, Agriculture, Planning and Development, and Foreign Affairs, as well as the Chambers of Industry and Commerce, Trinidad and Tobago Manufacturers' Association, and Central Bank.

Negotiation

Two separate yet cooperative mechanisms—one national and one regional—have primary responsibility for negotiating international trade agreements. MTI is the primary national entity, with support from the Technical Coordinating Committee (composed of five subject-specific subcommittees) and the Standing Advisory Committee on Trade and Trade-related Matters (composed of private-sector, academic, and labor-movement leaders). RNM, the primary regional entity, is responsible for coordinating and representing the negotiating positions of CARICOM members; it works closely with national ministries and other relevant entities. All positions presented by the RNM in the various negotiations must be approved by the Community's Council on Trade and Economic Development, comprising Ministers of Trade and Foreign Affairs of all CARICOM countries. While benefiting from this regional pooling of resources, Trinidad and Tobago often sends its own national representatives to the negotiations to work alongside RNM officers.

Institutional players also include embassies and trade missions that represent Trinidad and Tobago around the world. The country has embassies or high commissions in Belgium, Brazil, Canada, India, Jamaica, Nigeria, United Kingdom, the U.S., and Venezuela. In addition, it has permanent missions in Geneva (covering WTO, UNCTAD, and other multilateral agencies) and New York (United Nations).³⁶ Foreign missions play a crucial

³⁶ Details on Trinidad and Tobago's Permanent Mission to the United Nations are available at www3.itu.int/ missions/trinidad-tobago/index.html.

role in establishing and maintaining strong trade relationships. Given the importance of strengthening commercial links with Latin America, Trinidad and Tobago may want to consider the potential benefits of expanding its diplomatic presence in that region, perhaps jointly with other Caribbean countries.

Implementation

Responsibility for implementing trade policy is divided among four state agencies: MTI, Ministry of Legal Affairs, the Custom and Excise Division of the Ministry of Finance, and the Tourism and Industry Development Company (TIDCO). At the regional level, the CARICOM Secretariat plays a lead role. With regard to export promotion, TIDCO is responsible for increasing market access for Trinidad and Tobago exports. The country's manufacturers association is also instrumental in opening foreign markets to its member companies. Free trade zones are another important element in the export promotion strategy. Under the Free Trade Zone Act of 1988,³⁷ businesses operating in Trinidad and Tobago's free trade zones enjoy exemptions from custom duties, licensing requirements, and property-ownership restrictions. Free trade zones promote economic development through private investment in infrastructure and high-skilled, value-added jobs. In 1993–2004, exports from these zones increased from US\$ 6 million to US\$ 101 million (WTO 2005). Although questions have been raised regarding the consistency of free trade zones with the WTO Agreement on Trade-related Investment Measures, Trinidad and Tobago is not currently required to take any action on its investment incentives regime.

Trade and Integration: Challenges and Strategies

To sustain export growth into the future, Trinidad and Tobago must meet multiple challenges. Not only must it diversify both its products and markets and better target resources and interventions within a business-friendly environment; it must also create efficient social safety nets to soften the effects of adjustment. Meeting these challenges will require a strong policymaking process, effective regional cooperation, and supportive donor strategies to help the country succeed in an increasingly competitive global environment.

Export Growth and Diversification

Trinidad and Tobago's biggest trade challenge is to maintain high export growth. Given that most of the country's exports are now based on finite energy reserves, the only way

³⁷ The Free Trade Zone Act of 1988 was amended in 1995 and 1997.

to achieve sustainable export growth into the future is through export diversification into non-fuel activities. Diversification efforts should mainly target products and services that face growing worldwide demand. Although private companies are the main actors in this process, the Government can support it through targeted assistance to TIDCO and other public entities charged with assisting private-sector development (in such areas as nichemarket and specialized product development, consumer and market surveys, and training in product development and innovation). The government can also support development of the tourism industry and other services sectors, including further liberalization of the telecommunications market.

A related challenge is to diversify and gain improved access to export markets, both in the Western Hemisphere and beyond. Except in cases where the Government owns the export product (such as Trinidad and Tobago's oil), it is companies, not governments, that trade. Thus, Trinidad and Tobago's companies must do most of the work to reduce the country's dependence on traditional export markets in North America, Europe, and English-speaking Caribbean countries. But the Government can help by negotiating and implementing trade agreements that offer Trinidad and Tobago exporters increased access to both existing and new markets and by supporting market intelligence programs and private sector-led export promotion campaigns through TIDCO and its foreign missions.

Heavy Negotiating Agenda

For Trinidad and Tobago, active participation in all current negotiations between CARI-COM and its various trade partners is both vital and difficult. Though large by CARICOM standards, Trinidad and Tobago's trade ministry is tiny compared to those of most other countries. With just a dozen or so trade specialists (compared to 100–300 in U.S., Canadian, and EU agencies), MTI is struggling to complete the necessary tasks to secure an effective voice in negotiations: market and sector analysis to determine the country's competitiveness vis-à-vis its trade partners, studies on the implications of trade liberalization on local export and import-competing industries, review of partner countries' offers in negotiations, and preparation of national offers. Creation of the RNM has eased some pressures on CARICOM governments in terms of technical preparation for negotiations, but the RNM can only be effective if member states contribute actively to the process.

Effective participation in complex trade negotiations requires significant human, technical, and financial resources. It would be unrealistic to greatly expand the trade policymaking apparatus of a small country like Trinidad and Tobago, given the country's already oversized public sector (as many believe is the case). However, through better resource allocation, institutional strengthening, and external support, the Government can expand its available resources without increasing its size. Under the FTAA Hemispheric Cooperation Program (HCP), Trinidad and Tobago has prepared a National Strategy for Strengthening Trade-related Capacity. It calls for support in such areas as institutional strengthening, database development, financial assistance for participation in negotiating meetings, analysis of trade liberalization impact, and resources to educate and facilitate the participation of civil society. Based on these general needs, the Government has identified such sector-specific projects as strengthening negotiating techniques in market access, developing databases for non-tariff barriers to facilitate agricultural negotiations, and conducting studies to help policymakers enact fiscal reform. Some of these needs will likely be addressed through donor-financed trade capacity-building programs. In addition, Trinidad and Tobago and its CARICOM partners could further strengthen their efforts to pool resources at the regional level, not just through continued support to such mechanisms as the RNM, but also through greater cooperation at the level of embassies and foreign trade missions.

It will be important for Trinidad and Tobago to regularly re-assess and, if necessary, modify its various integration and market-opening strategies, including the ways in which it uses such alliances as CARICOM to promote its national development agenda. For a small country with scarce resources, political and economic cooperation with neighboring countries brings many benefits (but also certain costs).³⁸ Pooling resources at the regional level is one way to overcome the constraints of small size. Establishing clear priorities for policy intervention is another: since the Western Hemisphere accounts for so much of Trinidad and Tobago's total trade, perhaps that region is where most of the country's negotiating efforts and resources should go.

Implementation of Agreements

Once trade agreements are negotiated and signed, Trinidad and Tobago must ensure their effective and timely implementation in order to reap the benefits (and mitigate the costs) for its economy. This involves complicated revisions to the country's legal and administrative apparatus. The GATT Uruguay Round agreements illustrate the difficulty of that process; 10 years after their signing, Trinidad and Tobago is still in the process of implementing them. In the coming years, the country must also complete implementation of its agreements with Costa Rica, Cuba, and the Dominican Republic. With the WTO/Doha and EPA nego-

³⁸ CARICOM membership has conferred many benefits on Trinidad and Tobago, including privileged access to neighboring markets and the benefits derived from pooling scarce resources across the region (e.g., greater leverage in international fora and cost savings). Over the long term, however, preferences may prove to have been a mixed blessing unless Trinidadian companies use them to upgrade the quality, as well as the quantity, of their export supply. At times, CARICOM membership may have hindered the country from pursuing a more aggressive marketopening strategy vis-à-vis external trade partners. At the same time, there is room to expand cooperation among CARICOM members in various strategic areas related to trade and economic integration; like other countries in the group, Trinidad and Tobago could benefit from this as it confronts the many challenges of globalization. In addition, timely implementation of the CSME will likely provide the country significant benefits. All of this points to the importance of Trinidad and Tobago developing and maintaining a clear CARICOM-membership strategy.

tiations scheduled for completion in December 2006 and 2007, respectively, and with new agreements likely to emerge between CARICOM and other FTAA countries, Trinidad and Tobago will face significant difficulties in securing effective implementation without committing more resources to this endeavor. To reiterate, this should be achieved, not through an expansion of government (an unrealistic option for Trinidad and Tobago), but through public-sector reform, permitting a more efficient allocation of existing resources, and use of external assistance where possible. As with the negotiating effort, certain implementation issues might be handled more efficiently—and at lower cost—at the regional, rather than national, level; Trinidad and Tobago should explore such possibilities with its CARICOM members as soon as possible.

Achieving Competitiveness in a Liberalized Trading Environment

Product and market diversification, and the benefits deriving from free trade, will be neither achievable nor sustainable without a business-friendly environment, particularly one that encourages and rewards innovation, initiative, and risk-taking, while at the same time offering transparent laws and regulations and a stable macroeconomic environment.

Both the Government and private sector must prepare for the significant changes that will result from trade liberalization, not only within the country but also in the global economy. In the coming years, production and investment strategies in the Western Hemisphere will likely change significantly. A similar global process is already under way, and Trinidad and Tobago will have to compete more fiercely for both markets and capital. The country's heavy reliance on a few export products based on finite natural resources, along with its dependence on the U.S. market, underscores the need to diversify. Once trade barriers come down, Trinidad and Tobago's import-competing sectors will have to adjust to greater competition at home; some traditional exporters will be unable to compete once their preferences disappear. The country's significant presence in the CARICOM market, for example, is certain to come under attack once the group lowers its tariffs on imports from Europe and North America.

The government must play an active role in this transition by facilitating productivity and export growth through prudent macroeconomic management; infrastructure improvement (services, transport, and research and development); and concerted efforts, working with the private sector, to diversify exports. The MTI has identified export diversification as critical to reducing oil-revenue dependence and vulnerability to external shocks; to facilitate diversification, the Ministry has outlined various crucial elements: investment, information gathering and dissemination, support for innovation, development of the small and medium enterprise (SME) sector, competitiveness programs, and creation of a conducive business environment.

Sharing Costs and Benefits

Creating efficient social safety nets and related services to soften the impact of adjustment is critical to the Government's efforts to support the transition to free trade. Equally important are the ways in which the benefits of free trade are distributed among the country's population. Export diversification, access to new markets, regional cooperation, and a strong policymaking process should all greatly improve the country's growth prospects. But higher growth is a means to an end, not an end in itself. Any strategy to increase and diversify exports should have as its ultimate goal the equitable and sustainable economic development of the country's population, which requires, but is not solely based on, growth.

To maximize trade gains for most of its citizens, should the Government target and support specific export industries—those that produce the highest value added, create the most jobs, and pay the highest salaries? Or should it follow a more market-based approach, aimed at improving the general business climate without picking winners, and designing appropriate social and fiscal policies to encourage better distribution of trade gains? While in-depth answers to these questions exceed the scope of this chapter, the authors wish at least to raise the issues. The Government's Vision 2020 addresses certain issues; continued debate will be needed to inform the Government's trade and integration strategies in the coming years.

IDB Support and Donor Coordination

The Bank's strategy for Trinidad and Tobago should support the country's efforts to achieve higher growth and development within an increasingly liberalized and competitive global economic environment. In 2003, the Bank approved a Trade Facility loan in the amount of US\$ 5 million to improve the country's international trade performance through strengthening its technical and institutional capacity to formulate, negotiate, and implement trade policy. The program aims to finance institutional reorganization, specialized training and studies, integrated information systems, and a trade assistance program to provide publicand private-sector agents with the necessary information and tools to understand the effects of trade liberalization. This operation, which targets many government-identified needs in trade capacity-building, is expected to help the country address challenges arising from its multiple trade liberalization efforts.

The Bank also approved a US\$5 million Public Sector Facility loan in 2003. This project should assist the Government (albeit indirectly) in addressing problems related to free-trade negotiation, implementation, and adjustment. The Facility focuses on public-sector reform and strengthening of human resources and information management systems, including the Central Statistical Office.

Finally, in 2005, the Bank approved a US\$ 1.5 million loan to finance a comprehensive Information and Communication Technology (ICT) project. It is designed to assist Trinidad and Tobago in implementing its National Information and Communication Plan, which focuses on the legal and regulatory framework, e-government, human capital development, connectivity, and ICT enterprise development.

In addition to national programs, Trinidad and Tobago benefits from various Bankfinanced regional projects. One example is ongoing support to RNM in preparing regional negotiating positions and training national trade officials. The Bank has also supported the CARICOM Secretariat with technical work related to member-state implementation of WTO commitments, harmonization of investment and government procurement rules in the region (including trade-related issues), revisions to the CET, and the creation of the Caribbean Court of Justice to oversee implementation of intra-regional liberalization commitments. In the area of training, IDB-INTAL, jointly with the WTO Secretariat, is executing an intensive program of courses for Caribbean trade negotiators in areas related to negotiation and implementation of multilateral agreements.

Additional Bank support aimed at enhancing the competitiveness of the Trinidad and Tobago economy would complement these programs and help the country address remaining development bottlenecks. Careful coordination between national- and regionallevel interventions would be crucial to maximizing the potential benefits of such support. Support to the private sector, particularly in areas that foster innovation, competitiveness, and increased capacity to access both traditional and new markets, should complement the IDB's public-sector programs. The Multilateral Investment Fund (MIF) is already active in Trinidad and Tobago. The Bank's other private-sector arms—Private Sector Department (PRI) and Inter-American Investment Corporation (IIC)—are looking to expand their interventions in the country. A Private Sector Strategy is under preparation to inform all such Bank interventions in the coming years.

The Bank's support to Trinidad and Tobago in the area of trade and integration should be closely coordinated with that of other multilateral institutions and bilateral donors, including the Caribbean Development Bank, World Bank, WTO Secretariat, European Commission, Canadian International Development Agency, U.S. Agency for International Development, UK Department for International Development, Food and Agriculture Organization of the United Nations, and such specialized agencies as the World Intellectual Property Organization. As part of its National Strategy for Strengthening Trade-related Capacity, Trinidad and Tobago may wish to consider setting up a mechanism by which its trade ministry and other relevant agencies—as well as donors—can regularly access updated information on the trade and integration-related assistance programs currently under way in both the country and CARICOM.

Annex I. trade data

(Annex Tables AI-1 through AI-5 appear on the following pages.)

lable AI-1. Exports to world and selected Partners, 1990–2004	I. EXPO		vvoria	and	elected	L'ALL	Jers, I.	77-066	104										
																Avg	Avg Annual Growth (%)	Growth	(%)
(US\$ mn)	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	90-04	9095	95-00 00-04	00-04
World	1,986	1,982	1,858	1,629	2,427	3,056	2,500	2,544	2,264	2,805	3,041	4,285	3,851	6,601	8,178	10.6	9.0	-0.1	28.1
United States	1,071	992	905	762	913	1,014	1,220	1,117	903	1,162	1,424	1,920	1,941	4,281	5,457	12.3	-1.1	7.0	39.9
Canada	28	35	34	33	74	46	56	23	26	42	32	98	92	166	115	10.5	10.2	-7.2	37.7
CARICOM	231	217	210	270	427	591	619	658	693	756	746	1,035	826	1,029	1,288	13.1	20.7	4.8	14.6
Latin America	88	173	191	154	233	299	257	327	283	328	316	497	384	480	606	14.8	27.7	1.1	17.7
FTAA	1,418	1,416	1,340	1,219	1,648	1,950	2,153	2,124	1,905	2,289	2,518	3,550	3,242	5,955	7,466	12.6	9.9	5.2	31.2
EU (25)	178	187	106	81	214	355	159	338	236	410	408	392	440	473	508	7.8	14.8	2.8	5.7
Rest of World	389	378	413	329	565	751	189	81	123	106	115	343	169	173	204	-4.5	14.1	-31.3	15.4
Shares (%)	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	9004	90–95	95-00 (00-04
World	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100.0	100.0		100.0
United States	54	50	49	47	38	33	49	44	40	41	47	45	50	65	67	51.2	43.7	42.2	57.9
Canada	-	2	2	2	m	2	2	-	-	2	-	2	2	c	-	1.8	1.9	1.4	1.9
CARICOM	12	11	11	17	18	19	25	26	31	27	25	24	21	16	16	19.6	15.0	25.1	19.0
Latin America	4	6	10	6	10	10	10	13	12	12	10	12	10	7	7	9.4	8.8	11.2	8.8
FTAA	71	71	72	75	68	64	86	84	84	82	83	83	84	06	91	82.0	69.5	79.8	87.6
EU (25)	6	6	9	2	6	12	9	13	10	15	13	6	11	7	9	9.1	8.7	11.8	8.6
Rest of World	20	19	22	20	23	25	∞	c	Ð	4	4	∞	4	m	2	8.8	21.8	8.4	3.9
																	(contin	(continued on next page)	(t page)

Table AI-1. Exports to World and Selected Partners, 1990–2004

Copyright © by the Inter-American Development Bank. All rights reserved. For more information visit our website: www.iadb.org/pub

Table AI-1. Exports to World	Expoi	rts to \	Norld	and Se	lected	Partn	ers, 19	9020	and Selected Partners, 1990–2004 (continued)	tinued)									
CARICOM																Shar	Share (%)	AAGR (%)	(%)
(US\$ mn)	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	00-06	00-04	90-00 00-04	0-04
Bahamas, The	m	13	5	2	4	4	4	2	m	10	21	20	24	30	38	1.4	2.7	23.6	15.1
Barbados	74	65	64	71	71	87	87	94	127	151	155	274	178	215	269	19.3	22.2	7.7	14.8
Belize	2	2	4	4	4	ß	4	ß	5	4	ŋ	8	10	12	16	0.8	1.0		30.6
Guyana	27	30	42	59	61	82	88	109	84	76	69	93	82	104	131	13.4	9.7	9.7	17.4
Haiti	9	9	0	-	0	∞	9	9	9	8	24	4	S	9	7	1.3	0.9		26.0
Jamaica	56	41	31	69	120	213	215	210	237	245	261	356	292	370	464	31.3	35.4		15.5
OECS	21	21	21	28	128	142	149	157	167	195	159	206	178	221	276	21.9	21.1		14.9
Suriname	43	38	42	37	38	52	67	72	64	68	53	75	56	70	88	10.6	6.9		13.7
Total	231	217	210	270	427	591	619	658	693	756	746	1,035	826	1,029	1,288	100.0	100.0	12.5	14.6
L.A. (US\$ mn)	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	00-06	00-04	0 00-06	00-04
Bolivia	0	0	0	0	0	0	0	-	-	-	0	0	0	0	0	0.1	0.1		17.2
Dom. Rep.	16	11	34	33	24	55	45	51	62	62	76	180	78	66	124	17.7	24.4	17.1	13.1
Central America	6	11	32	34	39	31	27	104	84	136	123	183	143	193	241	23.7	38.7	30.5	18.4
Col. + Ven.	47	83	63	45	86	89	80	82	72	54	39	80	77	57	69	28.0	14.1	-2.0	15.4
Chile	4	∞	9	6	18	18	17	-	2	-	-	0	0	0	9	3.2	0.3	-8.8 -0.8	41.8
Ecuador	4	6	10	∞	7	∞	7	m	7	0	2	-	4	2	9	2.5	0.8	-6.5	34.7
MERCOSUR	4	44	19	m	22	41	39	34	6	26	11	14	21	45	56	9.6	6.4	9.7	50.1
Mexico	S	m	26	19	30	45	38	48	42	43	58	32	54	79	98	13.5	14.1	28.4	14.4
Peru	0	m	0	m	∞	11	m	4	m	4	7	9	9	m	2	1.7	1.1	60.3	-7.7
Total	88	173	191	154	233	299	257	327	283	328	316	497	384	480	606	100.0	100.0	13.6	17.7
Source: IDB Integration and Regional Programs Depar	tion and R	egional Pro	grams Depai	rtment usin	tment using IMF-DOTS.														

Note: 2003–2004 are IMF estimates.

Copyright © by the Inter-American Development Bank. All rights reserved. For more information visit our website: www.iadb.org/pub

																Avg	Avg Annual Growth (%)	Growth	(%) י
(US\$ mn)	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	90-04	90-95	95-00	00-04
World	1,230	1,647	1,430	1,387	1,212	1,968	2,147	3,028	3,009	2,743	2,353	3,561	3,660	3,902	5,235	10.9	9.6	3.6	22.1
United States	502	656	602	546	564	878	818	1,581	1,354	1,104	808	1,323	1,242	1,171	1,289	7.0	11.8	-1.6	12.4
Canada	73	83	74	68	67	87	78	80	105	134	99	91	104	66	132	4.3	3.6	-5.4	18.8
CARICOM	71	73	69	50	54	75	82	96	106	132	89	121	92	103	110	3.2	1.1	3.6	5.4
Latin America	188	325	219	287	124	308	532	502	579	631	781	880	767	965	1,116	13.6	10.4	20.5	9.4
FTAA	834	1,137	963	952	809	1,348	1,511	2,259	2,144	2,001	1,744	2,415	2,205	2,338	2,647	8.6	10.1	5.3	11.0
EU (25)	207	261	238	278	190	340	380	457	491	353	258	668	622	723	1,616	15.8	10.5	-5.3	58.1
Rest of World	189	249	230	156	213	280	257	312	374	390	351	478	833	840	972	12.4	8.2	4.6	29.0
Shares (%)	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	90-04	90–95	95-00	0004
World	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100	100.0	100.0	100.0	100.0
United States	41	40	42	39	47	45	38	52	45	40	34	37	34	30	25	37.5	42.2	42.9	31.2
Canada	9	ß	5	ß	9	4	4	m	m	Ŀ	m	m	m	m	c	3.5	5.1	3.6	2.6
CARICOM	9	4	5	4	4	4	4	m	4	ß	4	m	m	m	2	3.4	4.4	3.8	2.8
Latin America	15	20	15	21	10	16	25	17	19	23	33	25	21	25	21	21.3	16.4	21.8	24.1
FTAA	68	69	67	69	67	68	70	75	71	73	74	68	60	60	51	65.7	68.1	72.2	60.7
EU (25)	17	16	17	20	16	17	18	15	16	13	11	19	17	19	31	18.4	17.1	14.9	20.8
Rest of World	15	15	16	11	18	14	12	10	12	14	15	13	23	22	19	15.9	14.8	12.9	18.6

Table AI-2. Imports from World and Selected Partners, 1990–2004

172 Anneke Jessen and Christopher Vignoles

lable AI-2. Imports from Worl	Impo	rts troi	n wor	σ	Selec	ted Pa	and Selected Partners, 1990–2004	1990-		(continued)	(
CARICOM																Shar	Share (%)	AAGR (%)	(%)
(US\$ mn)	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	00-06	00-04	0 00-06	00-04
Bahamas, The	0	0	0	0	0	0	0	0	2	0	-	22	2	m	m	0.3	6.0	1	33.8
Barbados	18	21	20	18	18	16	16	16	24	38	27	23	31	31	33	25.9	28.1		5.7
Belize	4	m	S	2	2	2	m	2	S	m	2	16	4	4	2	3.7	6.0		17.1
Guyana	4	9	7	9	7	10	12	14	11	12	6	16	16	19	20	10.9	15.7	10.1	21.3
Haiti	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.1	0.1		30.0
Jamaica	34	34	31	20	21	20	19	17	18	18	14	20	17	21	22	27.5	18.4		12.2
OECS	4	-	-	0	2	∞	∞	10	13	10	9	6	10	10	11	7.5	9.1		15.8
Suriname	∞	9	4	4	0	19	25	37	34	50	30	13	12	15	15	24.2	16.5		15.0
Total	71	73	69	50	54	75	82	96	106	132	89	121	92	103	110	100.0	100.0		5.4
L.A. (US\$ mn)	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	00-06	00-04 9	90-00 00-04	004
Bolivia	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0.0	0.0		
Dom. Rep.	2	2	2	2	-	m	2	4	9	m	2	4	4	S	9	0.7	0.5		23.4
Central America	4	∞	S	9	7	11	6	16	17	24	20	30	28	37	39	2.9	3.4	17.9	18.1
Col. + Ven.	110	236	144	239	36	204	411	361	385	469	646	586	459	611	744	72.4	67.5		3.6
Chile	-	-	0	0	0	-	-	-	2	2	2	4	4	7	9	0.3	0.5		30.1
Ecuador	0	0	0	0	0	0	6	14	19	18	10	-	4	4	ß	1.6	0.5		16.5
MERCOSUR	99	72	58	34	99	73	80	75	101	61	67	207	215	264	281	16.8	22.9		43.2
Mexico	4	9	7	S	6	14	20	29	48	50	32	44	42	22	23	5.0	3.6		-7.4
Peru	0	0	m	-	4	-	-	-	-	m	2	4	11	16	13	0.4	1.0		55.7
Total	188	325	219	287	124	308	532	502	579	631	781	880	767	965	1,116	100.0	100.0		9.4
Source: IDB Integration and Regional Programs Depar	tion and R	egional Proc	jrams Depai	tment usinc	tment using IMF-DOTS.														

Table AI-2. Imports from World and Selected Partners. 1990–2004 (continued)

Source: IDB Integration and Kegional Programs Department

Note: 2003-2004 are IMF estimates.

Copyright © by the Inter-American Development Bank. All rights reserved. For more information visit our website: www.iadb.org/pub

Code	Product Group	T&T EX Share AAGR 1998–2003	World Trade Growth 1998–2003	Category
	Food and Live Animals			
001	Live animals, chiefly for food	-0.6%	0.1%	Underachiever
011	Meat, edible meat offals (fresh, chilled)	-17.0%	4.7%	Underachiever
012	Meat and edible offals (salted)	28.2%	6.4%	Champion
014	Meat and edible offals (prep./pres.), fish	-6.6%	7.1%	Underachiever
022	Milk and cream	-20.1%	3.1%	Underachiever
023	Butter	-14.1%	1.7%	Underachiever
024	Cheese and curd	-5.9%	4.8%	Underachiever
025	Eggs and yolks (fresh, dried, or other)	12.2%	3.7%	Champion
034	Fish (fresh, live or dead; chilled)	-12.4%	4.7%	Underachiever
035	Fish (dried, salted, or in brine)	-3.2%	1.5%	Underachiever
036	Crustaceans and mollusks (fresh, chilled)	-11.3%	3.7%	Underachiever
037	Fish, crustaceans, and mollusks (preps.)	-8.7%	4.0%	Underachiever
041	Wheat (including spelt) and meslin	4.7%	1.0%	Champion
042	Rice	34.1%	-5.0%	Achiever in Adversity
043	Barley (unmilled)	-6.3%	4.1%	Underachiever
044	Maize (corn) (unmilled)	40.6%	4.0%	Champion
045	Cereals (unmilled) (no wheat, rice, barley)	-19.5%	2.3%	Underachiever
046	Wheat meal and flour	-7.8%	-3.8%	Declining Sector
047	Other cereal meals and flours	-0.1%	4.1%	Underachiever
048	Cereal (prep.) and flour preps.	-7.8%	7.6%	Underachiever
054	Vegetables (fresh, chilled, frozen/pres.)	-0.9%	4.3%	Underachiever
056	Vegetables, roots and tubers (prepared)	18.6%	3.2%	Champion
057	Fruit and nuts (not including oil nuts)	-11.6%	4.5%	Underachiever
058	Fruit (pres.) and fruit preps.	-6.5%	4.6%	Underachiever
061	Sugar and honey	-16.6%	-0.3%	Declining Sector
062	Sugar confectionery and other sugar	-16.1%	6.8%	Underachiever
071	Coffee and coffee substitutes	-24.5%	-8.5%	Declining Sector
072	Сосоа	-4.9%	8.0%	Underachiever
073	Chocolate and other cocoa preps.	-10.9%	6.6%	Underachiever
074	Tea and mate	67.4%	-2.6%	Achiever in Adversity
075	Spices	-9.3%	3.3%	Underachiever
081	Feed stuff (for animals)	11.8%	3.7%	Champion
091	Margarine and shortening	0.4%	3.2%	Champion
098	Edible prods./preps. (not elsewhere spec.)	-6.1%	6.7%	Underachiever
	Beverages and Tobacco			
111	Non-alcoholic bevs. (not elsewhere spec.)		11.4%	Underachiever
112	Alcoholic beverages	-1.8%	5.4%	Underachiever
121	Tobacco (unmanufactured)	100.0%	-1.1%	Achiever in Adversity
122	Tobacco (manufactured)	24.3%	3.1%	Champion

Table AI-3. International Competitiveness of Exports, 1998–2003

Code	Product Group	T&T EX Share AAGR 1998–2003	World Trade Growth 1998–2003	Category
	Crude Materials (except fuels)			
211	Hides and skins (except furskins)	145.6%	2.5%	Champion
222	Oil seed and oleaginous fruit	-1.5%	7.8%	Underachiever
223	Oil seed and oleaginous fruit	-26.3%	-0.7%	Declining Sector
232	Natural rubber latex, natural rubber	100.0%	6.8%	Champion
233	Synthetic rubber latex, synthetic rubber	-100.0%	5.2%	Underachiever
244	Cork (natural, raw, and waste)	-41.1%	9.3%	Underachiever
245	Fuelwood (excluding wood waste)	-47.9%	10.2%	Underachiever
246	Pulpwood (including chips and wood)	-25.4%	0.7%	Underachiever
247	Other wood (rough)	34.0%	4.4%	Champion
248	Wood (simply worked)	-21.9%	2.3%	Underachiever
251	Pulp and waste paper	-22.5%	5.2%	Underachiever
263	Cotton	-57.5%	-1.5%	Declining Sector
264	Jute and other textile bast fibers	100.0%	0.5%	Champion
265	Vegetable textile fibers and waste	-29.4%	9.7%	Underachiever
267	Other man-made fibers	21.2%	2.2%	Champion
269	Old clothing and other old textile	20.1%	0.6%	Champion
271	Fertilizers (crude)	-14.4%	-4.4%	Declining Sector
273	Stone, sand, and gravel	-22.3%	3.8%	Underachiever
277	Natural abrasives (not elsewhere spec.)	-2.4%	0.3%	Underachiever
278	Other crude minerals	17.1%	2.0%	Champion
281	Iron ore and concentrates	100.0%	5.6%	Champion
282	Iron waste and scrap metal	29.2%	14.5%	Champion
288	Non-ferrous waste and scrap base metal	2.4%	3.5%	Champion
289	Ores and concentrates of precious metals	-19.8%	3.9%	Underachiever
291	Crude animal materials (not elsewhere spe	c.) 35.2%	0.3%	Champion
292	Crude vegetable mat. (not elsewhere spec.)) -9.1%	2.8%	Underachiever
	Mineral Fuels			
322	Coal, lignite, and peat	-16.7%	4.0%	Underachiever
333	Petroleum oils (crude)	-1.8%	18.9%	Underachiever
334	Petroleum products (refined)	4.6%	15.8%	Champion
335	Residual petrol. prod. (not elsewhere spec.)		12.2%	Champion
341	Gas (natural and manufactured)	52.6%	18.2%	Champion
	Animal and Vegetable Fats			
411	Animal oils and fats	-10.2%	0.0%	Underachiever
423	Fixed vegetable oils (soft, crude)	-9.4%	0.8%	Underachiever
424	Other fixed vegetable oils (fluid)	5.9%	5.0%	Champion
431	Animal and vegetable oils and fats	-13.4%	3.9%	Underachiever

Code	Product Group	T&T EX Share AAGR 1998–2003	World Trade Growth 1998–2003	Category
	Chemicals			
511	Other hydrocarbons and their halogen	0.7%	13.6%	Champion
512	Alcohols, phenols, phenol-alcohols	8.9%	9.5%	Champion
513	Carboxylic acids and their anhydrides	-52.6%	7.8%	Underachiever
514	Nitrogen-function compounds	166.2%	12.7%	Champion
515	Organo-inorganic and heterocyclic chem.	92.8%	4.4%	Champion
516	Other organic chemicals	13.7%	5.8%	Champion
522	Inorganic chemical elements, oxides	10.1%	3.5%	Champion
523	Other inorganic chemicals	-0.1%	1.8%	Underachiever
524	Radio-active and related materials	48.7%	8.6%	Champion
531	Synthetic dyes, natural indigo	-38.1%	-1.3%	Declining Sector
532	Dyeing and tanning extracts	-50.7%	4.5%	Underachiever
533	Pigments, paints, and varnishes	-7.2%	6.2%	Underachiever
541	Medicinal and pharmaceutical prods.	30.8%	17.1%	Champion
551	Essential oils, perfume	37.1%	10.7%	Champion
553	Perfumery, cosmetics, and toilet preps.	-18.0%	9.5%	Underachiever
554	Soap, cleansing and polishing preps.	-12.3%	8.1%	Underachiever
562	Fertilizers (manufactured)	8.3%	3.0%	Champion
572	Explosives and pyrotechnic products	52.5%	6.6%	Champion
582	Condensation, polycondensation	4.6%	6.7%	Champion
583	Polymerization and copolymerization	9.6%	6.5%	Champion
584	Regenerated cellulose, cellulose	100.0%	2.6%	Champion
585	Other artificial resins and plastic	14.2%	4.1%	Champion
591	Disinfectants, insecticides, and fungicides	1.3%	2.1%	Champion
592	Starches, inulin, and wheat gluten	-0.6%	5.2%	Underachiever
598	Other miscellaneous chemical products	-4.7%	7.7%	Underachiever
	Manufacturing Materials			
611	Leather	-13.2%	5.4%	Underachiever
612	Manufactured leather mat./composites	54.2%	3.2%	Champion
621	Rubber materials (e.g., pastes)	-12.8%	5.7%	Underachiever
625	Rubber tires, tire casing, etc.	-3.5%	4.4%	Underachiever
628	Rubber articles (not elsewhere spec.)	-27.8%	6.3%	Underachiever
633	Cork (manufactured mat.)	-47.1%	4.7%	Underachiever
634	Veneer, plywood	15.5%	4.2%	Champion
635	Other manufactured wood	-10.2%	5.9%	Underachiever
641	Paper and paperboard	-10.7%	3.9%	Underachiever
642	Paper and paperboard, cut to size	-3.4%	4.3%	Underachiever
651	Textile yarn	10.1%	0.8%	Champion
652	Cotton fabrics (woven)	-10.0%	1.9%	Underachiever
653	Fabrics (woven, of man–made fibers)	0.1%	-1.9%	Achiever in Adversity
654	Textile fabrics (woven, other than cotton)	-23.3%	-0.9%	Declining Sector

Code	Product Group	T&T EX Share AAGR 1998–2003	World Trade Growth 1998–2003	Category
655	Knitted or crocheted fabrics	0.5%	3.7%	Champion
656	Tulle, lace, embroidery, ribbons	-28.0%	4.5%	Underachiever
657	Special textile fabrics	-5.9%	4.1%	Underachiever
658	Component textile articles	-5.2%	8.8%	Underachiever
659	Floor coverings, etc.	9.7%	1.2%	Champion
661	Lime, cement, and construction materials	-19.1%	4.7%	Underachiever
662	Clay construction materials	-11.6%	3.8%	Underachiever
663	Other manuf. minerals	-8.4%	4.2%	Underachiever
664	Glass	-8.4%	6.9%	Underachiever
665	Glassware	-19.5%	5.3%	Underachiever
666	Pottery	-17.8%	1.2%	Underachiever
671	Pig iron, spiegeleisen, and sponge iron	28.4%	4.0%	Champion
672	Ingots and other primary forms of iron	126.5%	7.4%	Champion
673	Iron and steel bars, rods, and angles	-5.1%	2.4%	Underachiever
674	Universals, iron plates and sheets	-17.5%	4.7%	Underachiever
676	Rails and railway-track constructions	-49.3%	-0.4%	Declining Sector
677	Iron/steel wire (coated and non-coated)	-2.9%	3.3%	Underachiever
678	Iron tubes, pipes, and fittings	-2.4%	1.0%	Underachiever
679	Iron and steel castings, forgings	12.5%	4.8%	Champion
681	Silver, platinum, and other metals	-8.1%	2.5%	Underachiever
682	Copper	-42.4%	3.0%	Underachiever
683	Nickel	29.1%	12.5%	Champion
684	Aluminium	7.1%	4.8%	Champion
685	Lead	-100.0%	0.2%	Underachiever
686	Zinc	13.7%	-1.4%	Achiever in Adversity
687	Tin	31.4%	-0.5%	Achiever in Adversity
689	Misc. non-ferrous base metals	99.9%	-1.4%	Achiever in Adversity
691	Iron structures and parts	-1.7%	3.6%	Underachiever
692	Metal storage containers	-2.4%	3.7%	Underachiever
693	Wire products and fencing grills	-4.1%	3.3%	Underachiever
694	Iron nails, screws, nuts, and bolts	-10.8%	5.5%	Underachiever
695	Hand and machine tools	13.5%	3.8%	Champion
696	Cutlery	15.8%	4.7%	Champion
697	Base metal household equipment	-1.9%	7.7%	Underachiever
699	Other manufactured base metal	0.7%	5.2%	Champion
	Machine and Transport Equipment			
711	Steam and other vapor-generating boilers	60.3%	-8.8%	Achiever in Adversity
712	Steam and other vapor power units	-1.5%	-4.5%	Declining Sector
713	Internal combustion piston engines	20.1%	5.8%	Champion
714	Engines and motors (non-electric)	-6.7%	3.2%	Underachiever

Code	Product Group	T&T EX Share AAGR 1998–2003	World Trade Growth 1998–2003	Category
716	Rotating electric plant and parts	7.8%	5.4%	Champion
718	Other power generating machinery	-11.4%	7.2%	Underachiever
721	Agricultural machinery and parts	-6.1%	3.6%	Underachiever
722	Tractors (fitted with or without power)	-36.4%	1.5%	Underachiever
723	Civil engineering and contractor plants	26.6%	4.5%	Champion
724	Textile and leather machinery and parts	37.4%	1.5%	Champion
725	Paper and pulp mill machinery	107.0%	-0.9%	Achiever in Adversity
726	Printing and bookbinding mach. and parts	-4.3%	-0.3%	Declining Sector
727	Food-processing machines and parts	-13.7%	0.9%	Underachiever
728	Mach. and equipment specialized for parts	-26.9%	3.9%	Underachiever
736	Machine tools for metalworking	-17.1%	0.4%	Underachiever
737	Metalworking machinery and parts	20.2%	-0.2%	Achiever in Adversity
741	Heating and cooling equipment and parts	-15.0%	3.7%	Underachiever
742	Pumps for liquids, liq. elevators	4.5%	5.5%	Champion
743	Pumps and compressors, fans, and blowers	-5.6%	6.7%	Underachiever
744	Mechanical handling equip. and parts	-24.7%	2.3%	Underachiever
745	Other non–electrical machine tools	16.6%	4.3%	Champion
749	Non-electric parts and accessories	-2.1%	5.2%	Underachiever
751	Office machines	23.5%	-2.3%	Achiever in Adversity
752	Automatic data-processing machines	-8.2%	4.5%	Underachiever
759	Other parts for office machines	22.7%	5.1%	Champion
761	Television receivers	-21.1%	9.9%	Underachiever
762	Radio-broadcast receivers	34.3%	-0.4%	Achiever in Adversity
763	Gramophones, sound dictation recorders	-1.3%	16.4%	Underachiever
764	Telecommunications equipment and parts	16.3%	8.2%	Champion
771	Electric power machinery and parts	-12.7%	3.5%	Underachiever
772	Elect. app. (e.g., switches, relays)	-2.5%	5.9%	Underachiever
773	Equipment for electricity distribution	0.7%	4.2%	Champion
774	Electric apparatus for medical purposes	-34.0%	8.5%	Underachiever
775	Household type (electric and non-electric)	17.8%	7.8%	Champion
776	Thermionic, cold and photo-cathode	21.2%	8.7%	Champion
778	Electrical machinery and apparatus	2.6%	6.4%	Champion
781	Motor vehicles for passenger transport	-16.5%	7.2%	Underachiever
782	Motor vehicles for goods transport	26.3%	5.3%	Champion
783	Other motor vehicles	-100.0%	1.5%	Underachiever
784	Parts and accessories (tractors and cars)	-10.3%	7.1%	Underachiever
785	Motorcycles and motor scooters	-9.6%	6.1%	Underachiever
786	Trailers and other vehicles (without motor)	24.5%	5.7%	Champion
791	Railway vehicles and associated equipment		4.7%	Champion
792	Aircraft and associated equipment	89.8%	-0.7%	Achiever in Adversity
793	Ships, boats, and floating structures	-37.6%	11.8%	Underachiever

Code	Product Group	T&T EX Share AAGR 1998–2003	World Trade Growth 1998–2003	Category
	Miscellaneous Manufactured Product	ts		
812	Sanitary, plumbing, heating, and lighting	-4.9%	7.6%	Underachiever
821	Furniture and furniture parts	-0.1%	9.2%	Underachiever
831	Travel goods, handbags, and briefcases	-12.6%	4.9%	Underachiever
842	Men's outer garments (textile fabrics)	-10.5%	2.3%	Underachiever
843	Women's outer garments (textile fabrics)	-14.8%	5.5%	Underachiever
844	Undergarments (textile fabrics)	-9.5%	1.1%	Underachiever
845	Outer garments and other articles	-16.5%	5.7%	Underachiever
846	Undergarments (knitted or crocheted)	-13.5%	5.1%	Underachiever
847	Clothing accessories (textile fabrics)	-23.7%	4.2%	Underachiever
848	Apparel arts. and clothing accessories	-10.6%	4.8%	Underachiever
851	Footwear	-28.8%	3.9%	Underachiever
871	Optical instruments and apparatus	26.3%	28.1%	Champion
872	Medical instruments and appliances	-7.9%	10.6%	Underachiever
873	Meters and counters (not elsewhere spec.)	5.5%	5.5%	Champion
874	Meas., checking, and analyzing instrument	s 4.1%	6.1%	Champion
881	Photographic apparatus and equipment	-30.5%	1.9%	Underachiever
882	Photographic and cinematographic supplie	es 10.3%	0.9%	Champion
883	Cinematography film (exposed)	-15.9%	11.8%	Underachiever
884	Optical goods (not elsewhere spec.)	-2.9%	9.1%	Underachiever
885	Watches and clocks	5.3%	1.2%	Champion
892	Printed matter	0.7%	4.2%	Champion
893	Articles made from plastics	-5.2%	7.4%	Underachiever
894	Baby carriages, toys, and games	9.0%	4.3%	Champion
895	Other office and stationery supplies	7.3%	3.3%	Champion
896	Artworks and collector pieces	9.3%	1.4%	Champion
897	Jewelry, goldsmith and other articles	25.8%	6.4%	Champion
898	Musical instruments (parts)	-4.3%	4.0%	Underachiever
899	Other miscellaneous manufactured articles	-17.0%	10.5%	Underachiever
	Commodities (not elsewhere specifie	ed)		
941	Other animals (live), incl. zoo animals	-0.4%	1.3%	Underachiever
951	Armored fighting vehicles	15.6%	3.8%	Champion
971	Gold (non-monetary)	118.6%	-2.0%	Achiever in Adversity

Source: IDB Integration and Regional Programs Department, using UN-Commodity Trade Statistics Database. Memo item:

(1) Total number of product groups exported during the period 1998–2003: 223.

(2) Total number of CHAMPIONS: 78, representing 70% of total exports. Total number of ACHIEVERS IN ADVERSITY: 14, representing 0% of total exports. Total number of UNDERACHIEVERS: 120, representing 29% of total exports. Total number of DECLINING SECTORS: 11, representing 1% of total exports.

Share of Exports with RCA > 1

Code	United States Product Description	Share 2000–2003	RCA 1990–1993	RCA 2000–2003	Movement 90–93 to 00–03
522	Inorganic chemical elements, oxides	15.5%	41.5	68.0	Increase
512	Alcohols, phenols, and phenol-alcohols	6.6%	16.9	51.6	Increase
335	Other residual petroleum products	3.5%	9.4	47.8	Increase
673	Iron and steel bars, rods, and angles	3.3%	8.0	13.1	Increase
341	Gas (natural and manufactured)	20.8%	0.6	12.9	Increase
562	Fertilizers (manufactured)	1.9%	9.7	12.4	Increase
334	Petroleum products (refined)	18.0%	13.7	11.1	Decrease
671	Pig iron, spiegeleisen, and sponge iron	0.9%	0.0	7.5	Increase
793	Ships, boats, and floating structures	1.7%	0.4	5.6	Increase
091	Margarine and shortening	0.0%	11.2	5.4	Decrease
333	Petroleum oils (crude)	23.1%	7.6	3.8	Decrease
111	Non-alcoholic bevs. (not elsewhere spec.)	0.1%	0.8	1.8	Increase
723	Civil-engineering and contractor plants	0.8%	0.1	1.6	Increase
061	Sugar and honey	0.1%	3.3	1.4	Decrease
	Share of Exports with $RCA > 1$	96.5%			
Code	Latin America Product Description	Share 2000–2003	RCA 1990–1993	RCA 2000–2003	Movement 90–93 to 00–03
	Product Description	2000–2003	1990–1993	2000–2003	90–93 to 00–03
671	Product Description Pig iron, spiegeleisen, and sponge iron	2000–2003 4.5%		2000–2003 56.3	
671 673	Product Description	2000–2003 4.5% 9.3%	1990–1993 112.5	2000–2003 56.3 30.4	90–93 to 00–03 Decrease Decrease
671 673 341	Product Description Pig iron, spiegeleisen, and sponge iron Iron and steel bars, rods, and angles Gas (natural and manufactured)	2000–2003 4.5% 9.3% 15.1%	1990–1993 112.5 46.7	2000–2003 56.3 30.4 23.4	90–93 to 00–03 Decrease
671 673	Product Description Pig iron, spiegeleisen, and sponge iron Iron and steel bars, rods, and angles	2000–2003 4.5% 9.3%	1990–1993 112.5 46.7 24.1	2000–2003 56.3 30.4	90–93 to 00–03 Decrease Decrease No Change
671 673 341 522	Product Description Pig iron, spiegeleisen, and sponge iron Iron and steel bars, rods, and angles Gas (natural and manufactured) Inorganic chemical elements, oxides	2000–2003 4.5% 9.3% 15.1% 4.1%	1990–1993 112.5 46.7 24.1 10.0	2000–2003 56.3 30.4 23.4 15.9	90–93 to 00–03 Decrease Decrease No Change Increase
671 673 341 522 334	Product Description Pig iron, spiegeleisen, and sponge iron Iron and steel bars, rods, and angles Gas (natural and manufactured) Inorganic chemical elements, oxides Petroleum products (refined)	2000–2003 4.5% 9.3% 15.1% 4.1% 37.1%	1990–1993 112.5 46.7 24.1 10.0 14.7	2000–2003 56.3 30.4 23.4 15.9 14.7	90–93 to 00–03 Decrease Decrease No Change Increase No Change
671 673 341 522 334 793	Product Description Pig iron, spiegeleisen, and sponge iron Iron and steel bars, rods, and angles Gas (natural and manufactured) Inorganic chemical elements, oxides Petroleum products (refined) Ships, boats, and floating structures	2000–2003 4.5% 9.3% 15.1% 4.1% 37.1% 16.9%	1990–1993 112.5 46.7 24.1 10.0 14.7 0.0	2000–2003 56.3 30.4 23.4 15.9 14.7 7.0	90–93 to 00–03 Decrease Decrease No Change Increase No Change Increase
671 673 341 522 334 793 665	Product Description Pig iron, spiegeleisen, and sponge iron Iron and steel bars, rods, and angles Gas (natural and manufactured) Inorganic chemical elements, oxides Petroleum products (refined) Ships, boats, and floating structures Glassware	2000–2003 4.5% 9.3% 15.1% 4.1% 37.1% 16.9% 0.6%	1990–1993 112.5 46.7 24.1 10.0 14.7 0.0 2.7	2000–2003 56.3 30.4 23.4 15.9 14.7 7.0 4.1	90–93 to 00–03 Decrease Decrease No Change Increase No Change Increase Increase
671 673 341 522 334 793 665 562	Product DescriptionPig iron, spiegeleisen, and sponge iron Iron and steel bars, rods, and angles Gas (natural and manufactured) Inorganic chemical elements, oxides Petroleum products (refined)Ships, boats, and floating structures Glassware Fertilizers (manufactured)	2000–2003 4.5% 9.3% 15.1% 4.1% 37.1% 16.9% 0.6% 2.8%	1990–1993 112.5 46.7 24.1 10.0 14.7 0.0 2.7 25.3	2000–2003 56.3 30.4 23.4 15.9 14.7 7.0 4.1 3.9	90–93 to 00–03 Decrease Decrease No Change Increase No Change Increase Increase Decrease
671 673 341 522 334 793 665 562 672	Product DescriptionPig iron, spiegeleisen, and sponge iron Iron and steel bars, rods, and angles Gas (natural and manufactured) Inorganic chemical elements, oxides Petroleum products (refined)Ships, boats, and floating structures Glassware Fertilizers (manufactured) Ingots and other primary forms of iron	2000–2003 4.5% 9.3% 15.1% 4.1% 37.1% 16.9% 0.6% 2.8% 1.1%	1990–1993 112.5 46.7 24.1 10.0 14.7 0.0 2.7 25.3 1.6	2000–2003 56.3 30.4 23.4 15.9 14.7 7.0 4.1 3.9 3.7	90–93 to 00–03 Decrease Decrease No Change Increase No Change Increase Increase Decrease Increase
671 673 341 522 334 793 665 562 672 512	Product DescriptionPig iron, spiegeleisen, and sponge iron Iron and steel bars, rods, and angles Gas (natural and manufactured) Inorganic chemical elements, oxides Petroleum products (refined)Ships, boats, and floating structures Glassware Fertilizers (manufactured) Ingots and other primary forms of iron Alcohols, phenols, and phenol-alcohols	2000–2003 4.5% 9.3% 15.1% 4.1% 37.1% 16.9% 0.6% 2.8% 1.1% 0.7%	1990–1993 112.5 46.7 24.1 10.0 14.7 0.0 2.7 25.3 1.6 18.0	2000–2003 56.3 30.4 23.4 15.9 14.7 7.0 4.1 3.9 3.7 2.7	90–93 to 00–03 Decrease Decrease No Change Increase No Change Increase Increase Decrease Increase Decrease
671 673 341 522 334 793 665 562 672 512 111	Product Description Pig iron, spiegeleisen, and sponge iron Iron and steel bars, rods, and angles Gas (natural and manufactured) Inorganic chemical elements, oxides Petroleum products (refined) Ships, boats, and floating structures Glassware Fertilizers (manufactured) Ingots and other primary forms of iron Alcohols, phenols, and phenol-alcohols Non-alcoholic bevs. (not elsewhere spec.)	2000–2003 4.5% 9.3% 15.1% 4.1% 37.1% 16.9% 0.6% 2.8% 1.1% 0.7% 0.1%	1990–1993 112.5 46.7 24.1 10.0 14.7 0.0 2.7 25.3 1.6 18.0 1.2	2000–2003 56.3 30.4 23.4 15.9 14.7 7.0 4.1 3.9 3.7 2.7 2.4	90–93 to 00–03 Decrease Decrease No Change Increase No Change Increase Increase Decrease Increase Decrease Increase
671 673 341 522 334 793 665 562 672 512 111 112	Product Description Pig iron, spiegeleisen, and sponge iron Iron and steel bars, rods, and angles Gas (natural and manufactured) Inorganic chemical elements, oxides Petroleum products (refined) Ships, boats, and floating structures Glassware Fertilizers (manufactured) Ingots and other primary forms of iron Alcoholis, phenols, and phenol-alcohols Non-alcoholic bevs. (not elsewhere spec.) Alcoholic beverages	2000–2003 4.5% 9.3% 15.1% 4.1% 37.1% 16.9% 0.6% 2.8% 1.1% 0.7% 0.1% 0.7%	1990–1993 112.5 46.7 24.1 10.0 14.7 0.0 2.7 25.3 1.6 18.0 1.2 0.2	2000–2003 56.3 30.4 23.4 15.9 14.7 7.0 4.1 3.9 3.7 2.7 2.4 2.4 2.2	90–93 to 00–03 Decrease Decrease No Change Increase No Change Increase Increase Decrease Increase Increase Increase Increase

96.2%

Table AI-4. Global RCA versus U.S., Latin America, and EU, 1990–1993 to 2000–2003

Code	European Union Product Description	Share 2000–2003	RCA 1990–1993	RCA 2000–2003	Movement 90–93 to 00–03
512	Alcohols, phenols, and phenol-alcohols	22.0%	29.1	103.2	Increase
061	Sugar and honey	5.0%	78.4	30.9	Decrease
334	Petroleum products (refined)	40.7%	17.1	19.9	Increase
522	Inorganic chemical elements, oxides	3.4%	62.9	14.6	Decrease
341	Gas (natural and manufactured)	16.2%	0.4	13.6	Increase
671	Pig iron, spiegeleisen, and sponge iron	1.8%	2.8	13.0	Increase
673	Iron and steel bars, rods, and angles	2.7%	10.0	5.8	Decrease
111	Non-alcoholic bevs. (not elsewhere spec.)	0.5%	1.9	3.6	Increase
562	Fertilizers (manufactured)	0.5%	24.3	3.1	Decrease
072	Сосоа	0.3%	6.2	2.7	Decrease
712	Steam and other vapor power units	0.1%	0.0	2.5	Increase
793	Ships, boats, and floating structures	1.3%	0.1	2.3	Increase
278	Other crude minerals	0.2%	3.5	1.5	Decrease
081	Feed stuff (for animals)	0.6%	0.0	1.3	Increase
424	Other fixed vegetable oils, liquids	0.1%	0.0	1.3	Increase
112	Alcoholic beverages	0.8%	5.9	1.2	Decrease
	Share of Exports with $RCA > 1$	96.4%			

Table AI-4. Global RCA versus U.S., Latin America, and EU, 1990–1993 to 2000–2003 (continued)

Source: IDB Integration and Regional Programs Department, using UN-Commodity Trade Statistics Database.

Code	Product Description	Share 2000–2003	RCA 1990–1993	RCA 2000–2003	Movement 90–93 to 00–03
689	Misc. non-ferrous base metals	0.0%	0.00	1.34	Increase
043	Barley (unmilled)	0.0%	0.00	1.34	Increase
212	Fur skins (raw)	0.0%	0.00	1.34	Increase
266	Synthetic fibers suitable for spinning	0.0%	0.00	1.34	Increase
267	Other man-made fibers	0.0%	1.60	1.34	Decrease
268	Wool and other animal hair	0.0%	0.00	1.34	Increase
683	Nickel	0.0%	0.00	1.34	Increase
714	Engines and motors (non-electric)	0.0%	0.17	1.34	Increase
341	Gas (natural and manufactured)	4.7%	1.60	1.34	Decrease
655	Knitted or crocheted fabrics	0.0%	1.29	1.34	No Change
677	Iron/steel wire (coated or non-coated)	0.0%	1.58	1.34	Decrease
654	Textile fabrics (woven, other than cotton)	0.0%	0.90	1.34	Increase
044	Maize (corn) (unmilled)	0.0%	1.35	1.34	No Change
656	Tulle, lace, embroidery, and ribbons	0.0%	1.48	1.34	No Change
584	Regenerated cellulose, cellulose	0.0%	1.60	1.33	Decrease
653	Fabrics (woven, man-made fibers)	0.6%	1.53	1.33	Decrease
562	Fertilizers (manufactured)	0.5%	1.60	1.33	Decrease
673	Iron and steel bars, rods, and angles	1.7%	1.54	1.33	Decrease
718	Other power-generating machinery	0.0%	1.57	1.32	Decrease
671	Pig iron, spiegeleisen, and sponge iron	0.0%	0.00	1.32	Increase
334	Petroleum products (refined)	53.7%	1.52	1.31	Decrease
122	Tobacco (manufactured)	1.2%	0.15	1.30	Increase
657	Special textile fabrics	0.1%	1.53	1.29	Decrease
652	Cotton fabrics (woven)	0.1%	0.64	1.29	Increase
023	Butter	0.0%	1.59	1.29	Decrease
062	Sugar confectionery and other sugar	0.4%	1.34	1.28	No Change
686	Zinc	0.0%	0.01	1.27	Increase
741	Heating and cooling equipment and part		1.12	1.26	Increase
621	Rubber materials (e.g., pastes)	0.0%	0.79	1.25	Increase
696	Cutlery	0.0%	0.00	1.24	Increase
651	Textile yarn	0.0%	1.54	1.24	Decrease
056	Vegetables, roots, and tubers (prep.)	0.2%	1.25	1.24	No Change
582	Condensation, polycondensation	0.2%	1.03	1.23	Increase
778	Electrical machinery and apparatus	0.3%	1.15	1.21	No Change
431	Animal and vegetable oils and fats	0.0%	0.84	1.21	Increase
111	Non-alcoholic bevs. (not elsewhere spec.		1.08	1.20	Increase
844	Undergarments (textile fabrics)	0.2%	1.08	1.20	Increase
844 845	Outer garments and other articles	0.2%	1.02	1.19	No Change
845 335	Other residual petroleum products	0.2%	1.18	1.19	Decrease
678	Iron tubes, pipes, and fittings	0.1%	1.31	1.18	Decrease
694	Iron nails, screws, nuts, and bolts	0.0%	1.36	1.17	Decrease

Table AI-5. Intra-regional RCA versus CARICOM, 1990–1993 to 2000–2003

Code	Product Description	Share 2000–2003	RCA 1990–1993	RCA 2000–2003	Movement 90–93 to 00–03
583	Polymerization and copolymerization	0.6%	1.04	1.16	Increase
277	Natural abrasives (not elsewhere spec.)	0.0%	0.00	1.16	Increase
773	Equipment for electricity distribution	0.3%	0.79	1.16	Increase
895	Other office and stationery supplies	0.0%	0.35	1.15	Increase
684	Aluminium	0.0%	0.23	1.14	Increase
693	Wire products and fencing grills	0.2%	1.05	1.13	No Change
821	Furniture and furniture parts	0.8%	0.72	1.13	Increase
843	Women's outer garments (textile fabrics) 0.2%	1.10	1.12	No Change
073	Chocolate and other cocoa preps.	0.3%	0.77	1.12	Increase
012	Meat and edible offals (salted)	0.0%	1.12	1.10	No Change
665	Glassware	0.9%	1.28	1.09	Decrease
658	Textile component articles	0.2%	1.08	1.09	No Change
663	Other manufactured minerals	0.1%	1.48	1.09	Decrease
742	Pumps for liquids, liq.elevators	0.0%	0.79	1.09	Increase
662	Clay construction materials	0.1%	1.25	1.07	Decrease
411	Animal oils and fats	0.0%	0.54	1.06	Increase
048	Prepared cereal and flour preps.	2.5%	1.09	1.06	No Change
514	Nitrogen-fixing compounds	0.0%	0.89	1.06	Increase
791	Railway vehicles and equipment	0.0%	0.00	1.06	Increase
635	Other manufactured wood	0.9%	1.31	1.05	Decrease
071	Coffee and coffee substitutes	0.1%	1.38	1.04	Decrease
899	Other misc. manufactured articles	0.2%	0.73	1.04	Increase
642	Paper and paperboard, cut to size	4.4%	0.82	1.04	Increase
762	Radio-broadcast receivers	0.0%	1.50	1.04	Decrease
761	Television receivers	0.1%	1.26	1.04	Decrease
659	Floor coverings, etc.	0.0%	0.06	1.01	Increase
423	Fixed vegetable oils (soft, crude)	0.4%	1.34	1.01	Decrease
522	Inorganic chemical elements, oxides	0.1%	0.98	1.01	No Change
515	Organo-inorganic and heterocyclic	0.0%	1.60	1.00	Decrease

Table AI-5. Intra-regional RCA versus CARICOM, 1990–1993 to 2000–2003 (continued)

Source: IDB Integration and Regional Programs Department, using UN-Commodity Trade Statistics Database.

Note: Products aggregated at the SITC 2 three-digit level. Products are ranked in descending order by RCA 2000–03.

Partner	Arrangement Type	Implementation Status
WTO April 1994 January 1995 (entered into force)	Multilateral trade agreement covering goods, services, and trade-related issues.	Uruguay Round Agreements of 1994 being implemented; Doha Round initiated in 2002
CARICOM July 1973 August 1973 (entered into force)	Broad integration arrangement including Single Market and Economy (CSME), covering free movement of goods, services, capital and skilled persons, CET, right of establishment, macroeco- nomic policy coordination, harmonization of economic policies, and common sector policies (agriculture, industry, services, and transport).	Free trade in goods and CET established; single market partially implemented. Single economy pending.
Venezuela October 1992 January 1993 (entered into force)	Preferential partial-scope agreement with CARICOM, offering improved market access to the Venezuelan market.	In force.
Colombia July 1994 January 1995 (entered into force)	Preferential partial-scope agreement with CARICOM, offering improved access to the Colombian market. Revised May 1998 to include reciprocity for MDCs.	In force.
Dominican Republic August 1998 December 2001 (entered into force)	Reciprocal FTA with CARICOM MDCs (including T&T) and non-reciprocal with LDCs. Trade: free for commodities; MFN for sensitive goods; services: reciprocal, but no timetable set. Includes investment and government procure- ment provisions.	In force since T&T notification in 2002.
Cuba July 2000 December 2002 (entered into force)	Reciprocal trade liberalization (partial scope) agreement with CARICOM, covering goods. Trade liberalization according to positive list approach. Provisions for trade promotion and special treatment of goods from Export Process- ing Zones (EPZs).	In force.

Table All-1. Trinidad and Tobago Trade Agreements

Partner	Arrangement Type	Implementation Status
Costa Rica 2001 (T&T) March 2004 (CARICOM)	Reciprocal FTA with CARICOM MDCs (including T&T) and non-reciprocal agreement with LDCs. Goods trade: free with some exceptions. Also provisions for dispute settlement, application of anti-dumping measures, and enhancement of SPS regulations.	Will enter into force as soon as member states complete administrative procedures for implementation.
EU/ACP Cotonou June 2000 April 2003 (entered into force)	Partnership agreement maintaining non- reciprocal trade preferences for CARICOM (as agreed in Lomé IV) until Dec 2007, and introducing negotiations toward an EPA. Im- mediately abolishes STABEX (compensatory finance scheme to stabilize export earnings), SYSMIN (mineral export assistance scheme), and Rum Protocol.	In force.
EPA between EU and CARIFORUM Signature pending	Reciprocal trade between EU and Caribbean region, with provisions of aid. In January 2008, regional EPA will impose WTO-compatible liberalization provisions to cover essentially all trade. Trade provisions will be imposed over a period of 10-12 years.	Negotiations are expected to conclude in December 2007.
FTAA Signature pending	Reciprocal FTA between 34 Western Hemi- sphere countries. Includes goods and services, government procurement, intellectual property, investment, AD/CVD, dispute settlement, and competition policy.	Negotiations began in April 1998 but are currently stalled.

Table All-1. Trinidad and Tobago Trade Agreements (continued)

Source: Authors' compilation, based on various information sources.

References

- Baptiste, Michael, C. Elías, and W. Robinson. 2004. Trinidad and Tobago: Economic Situation and Prospects. Mimeograph (February).
- Brewster, Havelock, L. Abugattas, T. Folan, T. Stewart and N. Watson. 2003. *CARICOM* Single Market and Economy: Assessment of the Region's Support Needs. Report for CARICOM Secretariat. Georgetown, Guyana.
- CARICOM. 2001. Revised Treaty of Chaguaramas Establishing the Caribbean Community Including the CARICOM Single Market and Economy. Georgetown, Guyana.
- DOE. 2003. "Caribbean Fact Sheet." Washington, D.C.: U.S. Department of Energy, Energy Information Administration.
- IDB. 1999. *Regional Programming Paper for CARICOM*. Integration, Trade and Hemispheric Issues Division. Washington, D.C.: Inter-American Development Bank.
- IMF. 2004. World Economic Outlook. Washington, D.C.: International Monetary Fund.
- IMF. 2005. *Trinidad and Tobago: Article IV Consultation, Staff Report.* Western Hemisphere Department. Washington, D.C.: International Monetary Fund.
- INTAL. 2005. "CARICOM Report No. 2." Buenos Aires: Institute for the Integration of Latin America and the Caribbean.
- UN-ECLAC. 2002. *Trinidad and Tobago: The Yachting Sector*. Report No. LC/CAR/G.711. Port of Spain, Trinidad.
- USTR (United States Trade Representative). 2001. Fourth Report to Congress on the Operation of the Caribbean Basin Recovery Act. Washington, D.C.
- World Bank. 2005. *A Time to Choose: Caribbean Development in the 21st Century.* Report No. 31725-LAC. Washington, D.C.: The World Bank.
- WTO. 2005. *Trinidad and Tobago: Trade Policy Review*. Geneva: World Trade Organization.

CHAPTER 5

Building Competitive Advantages

Michael Fairbanks, David Rabkin, Marcela Escobari, and Camila Rodriguez

ver the past half century, Trinidad and Tobago has implemented a prosperity-building strategy with relative success. Strong growth has resulted, but the country still lags peak global performers in its income band. What has become clear, however, is that this strategy was designed for a time in which the country no longer lives. The world of relying on the exploitation of natural resources and cheap labor for a country's development is behind us. It is time for a new strategy. The Government's Vision 2020 recognizes the need to develop alternative approaches for improving the country's competitiveness.

After years of steady growth, Trinidad and Tobago's per-capita income has reached US\$11,357 (IMF 2005), which compares favorably with that of other countries in the Latin America and the Caribbean (LAC) region. Low unemployment, a stable macroeconomic environment, and improving educational levels characterize the country. A class of well-qualified, local business leaders thrives to the extent that the country routinely invests in the economies of its Caribbean neighbors.

While the business platform is sound, Trinidad and Tobago firms lack necessary strength. Outside of the energy industry, no healthy clusters have been developed, and few local firms can provide sophisticated services to foreign energy companies. Thus, despite the comparative advantage of abundant oil and natural gas, true competitive advantages remain to be exploited.

The authors gratefully acknowledge the Inter-American Development Bank (IDB) and its country office staff in Trinidad and Tobago, whose close collaboration and support made this research possible. They extend special thanks to William Robinson, Michael Batiste, Juan Belt, and Vashtie Dookiesingh.

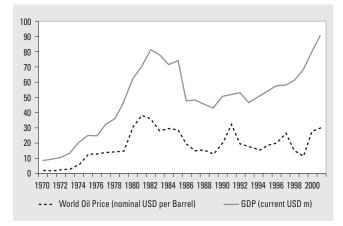
They are indebted to prominent leaders in the Trinidadian business sector, academic institutions, and public agencies for their honest dialogue and close collaboration. Special thanks go to Arthur Lok Jak, Aleem Mohammed, Rolph Balgobin, Tony Paul, Kim Mallieu, Vernon Paltoo, and Roger Traboulay. Their appreciation also extends to the executives at Trinidad and Tobago's Manufacturing Association (TTMA), Tourism and Industrial Development Company of Trinidad and Tobago Limited (TIDCO), Business Development Company (BDC), National Entrepreneurship Development Company (NEDCO), University of the West Indies (UWI) Institute of Business, South Chamber of Commerce, Yachting Services Association of Trinidad and Tobago (YSATT), British Petroleum, Peakes Industries, Associated Brands, and S. M. Jaleel.

Operational Context for Firms

Oil-Based Growth Model

Given that Trinidad and Tobago is endowed with vast reserves of natural gas, it is perhaps not surprising that the nation's growth has resulted largely from oil and gas extraction (Figure 5-1). Oil revenue has helped to upgrade infrastructure, spawn a powerful commercial banking sector, and provide the Government an opportunity to create a stable platform in which businesses can thrive. To its credit, the Government has embraced this stability, keeping interest rates low relative to neighboring countries and the nominal exchange rate nearly constant since 1997. Fiscal policy has not been managed with the same success; the effect of oil revenues on public finances has been mixed, sometimes requiring sharp fiscal adjustments to counter the Government's oil-driven spending sprees (Figure 5-2) (see chapter 1).

Figure 5-1. Gross Domestic Product and Oil Prices, 1970–2001



Source: International Financial Statistics (IMF 2003).

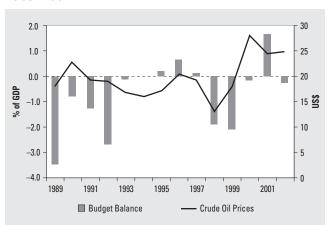


Figure 5-2. Budget Balance and Oil Prices, 1989–2002

Source: International Financial Statistics (IMF 2003).

Oil income, however,

has not led to the development of world-class companies. While foreign investment has been consistently high, sophisticated upstream energy industries (e.g., geological modeling, information processing, deep-sea drilling, and equipment manufacturing) have developed little, and downstream industries have focused on low-end commodity goods (e.g., Poly-

Box 5-1. Comparative versus Competitive Advantage

Trinidad and Tobago lacks successful firms that innovate, upgrade, and export complex products by staying abreast of customers' needs. Such competitive firms can charge premium prices for their products, which they can then invest in workers' skills. They can, in turn, pay workers higher salaries, leading to a virtuous cycle of national prosperity.

Like the energy industry itself, Trinidad and Tobago's manufacturers have used their comparative advantage to generate income. But they have not built the types of products and brands that can lead to wealth in the absence of comparative advantage.

One noteworthy example is Hydro Aluminum, a local smelter that produces alumina from bauxite extracted from nearby Guyana. In this case, the comparative advantages are location and cheap energy. Yet the smelter's production is exported before any downstream products are made. Many such products could be re-sold to locally operating energy companies, creating a competitive advantage. In the words of one prominent banker, "We are basically exporting cheap natural gas."

ethylene Terephthalate [PET] plastic to create inexpensive patio furniture).¹ Oil and gas revenues have financed local consumption but have contributed little to investment in the country's future productive capacity. These revenues have also resulted in excess liquidity, often collecting interest in commercial deposit accounts or aggressively moving overseas (Box 5-1).

Ironically, the scale of Trinidad and Tobago's comparative advantage may have stunted development of its potential competitive advantage. Trinidad and Tobago's non-energy manufacturers, which contribute seven percent of the country's GDP,² have succeeded in exporting to their less efficient Caribbean neighbors. While the country's per-capita income has grown beyond that of its larger neighbors, its other cost advantages, including low energy prices and import duties used to safeguard the manufacturing sector, have allowed Trinidad and Tobago manufacturers to export basic goods at well below the cost of production. The national business model is simple: import raw materials, manufacture low value-added goods far less expensively than neighboring countries, and export those goods to substitute for equally low value-added goods locally produced.

While depletion of oil or gas is not an imminent threat, it is understood that even the largest reserves will eventually dry up. In fact, the interim sense of economic security derived from this oil and gas windfall has created complacency at the expense of physical and social capital depletion; in fact, Trinidad and Tobago has been decapitalizing the country by converting natural resources to currency. Still more troublesome, fluctuating

¹ One oil executive said he would prefer to outsource most of his US\$ 500 million spending to local firms; but, because so few exist, most of his budget goes to Houston-based firms located 4,000 km away.

² International Financial Statistics (IFS).

energy prices and substitutes make Trinidad and Tobago's much enjoyed stability largely dependent on external conditions.

Indeed, the nation's increased dependence on energy resources through recently discovered natural gas means that any price shock would be disastrous to the economy. It took the country more than a decade to recover from the last shocks. At present projections, energy reserves will be exhausted in 20 years. In this pressing context, it is in the nation's best interest to act swiftly to transform its economy by channeling oil and gas rents into sustainable endeavors that will ultimately insulate the country against future swings of fortune.

Seven Forms of Capital: Where Is Trinidad and Tobago?

Like many other countries, Trinidad and Tobago has frequently conceptualized wealth and prosperity as a flow of income representing people's ability to purchase a set of goods and services as measured by purchasing power parity (PPP). However, prosperity equals more than income flows. It also involves an enabling environment that improves productivity; a set of stocks that, with continued upgrading, fosters a nation's ability to produce future goods and services (Fairbanks 2000).

Physical and Social Capital

These authors believe that when viewed within a framework of seven forms of capital a unique and sustainable environment for prosperity can be better considered (Figure 5-3). It allows one to structure decisions and choices to create highly productive environments. These forms of capital can be categorized according to accumulated physical and social stocks. The lower (physical) forms of capital include: 1) natural endowments (e.g., subsoil assets, forests, beaches, and climate), 2) man-made (e.g., buildings, bridges, roads, and telecommunications assets) and 3) financial (e.g., savings and international reserves). The higher (social) forms of capital include: 1) institutional (e.g., legal protection of tangible and intangible property and efficient government departments), 2) knowledge (e.g., international patents and university and think-tank capacities), 3) human (e.g., skills, insights, and capabilities) and 4) cultural (e.g., values, attitudes, and accepted behaviors linked to innovation; as well as tangible articulations of a nation's culture) (Fairbanks 2002).

Most people and nations measure wealth based on physical capital, failing to measure the traits and institutions that ensure the generation of future income. Since the lower forms of capital are either imitable or unsustainable, the only path to a unique and sustainable environment is through an upgrading of the higher forms of capital, which represent the potential for long-term economic growth or future flows. This upgrading of capital represents an economic transition away from spending the flow of excess oil rents toward a long-term investment strategy that creates the conditions for sustained prosperity.

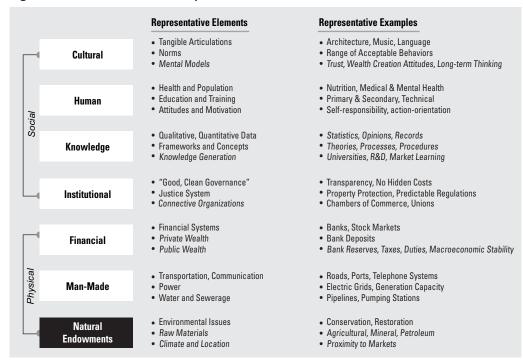


Figure 5-3. Seven Forms of Capital

Trinidad and Tobago has an abundance of physical capital. Beyond its natural endowments of oil and gas reserves, it has developed world-class transportation, sound utilities infrastructure, and a robust financial-services industry. In terms of social capital, however, the country is less developed. Institutional capital consists of clear and transparent rule of law; in this respect, the country outperforms most LAC and Caribbean Community (CARI-COM) countries (Annex I). But the flexibility of those institutions to adapt to changing economic forces and lead the country toward developed-country status is untested. Government institutions have become large bureaucracies, with loosely defined strategies and visions, leading to duplication of tasks and inefficient use of resources. As suggested by its comparatively low ranking in the Public Institution Subindex of the Growth Competitiveness Index, the country needs to focus on shortcomings in the area of public institutions: decision-making favoritism by officials; irregular payments in exports, imports, and public utilities; and issues related to organized crime.

While knowledge and human capital are strong, academic institutions are not well linked to research and development (R&D) efforts to support private-sector innovation; and the perception of innovation's role in company performance is lacking. More importantly, Trinidad and Tobago's historic provision of employment as a form of income redistribution—public-sector employment has fluctuated between 25 and 30 percent of employment (IMF 2003)—has not helped to create a culture that promotes a spirit of innovation and self-determination.

It is in this context that the authorities are determined to undertake deep reforms that will lead the country toward developed-country status. This historic moment provides an opportunity to move from decapitalization to instead converting the lower forms of physical capital (natural resources) into the higher forms of social capital to create sustained returns on investment in the form of a growing number of competitive firms across diversified industries.

Achieving Transformation of Capital

It is these authors' view that upgrading a nation's export competitiveness requires a shared understanding of competitiveness within the nation. Competitiveness is not simply a favorable exchange rate, a positive trade balance, or low inflation. Rather, competitiveness is determined by the productivity with which resources are deployed: human, capital, and physical assets. Since competitiveness relies on the productive deployment of resources, industry sectors and their firms, not nations, compete. More accurately, clusters of related and supporting firms constitute the building blocks of a competitive economy (Fairbanks and Lindsay 1997).

A cluster includes all of the related and supporting industries involved in the production and delivery of a specific set of products or services to a customer.³ Cluster methodologies emphasize the interrelationships among the many industries, suppliers, and businesses that must work together to provide value to a customer. A healthy cluster is one in which actors from up and down the value chain come together to produce and deliver a set of goods to downstream customers.

Once a healthy cluster forms, it must continually become stronger. Aggressive rivalry in one industry spreads through spin-offs or diversification. Information flows freely and innovations spread rapidly via the relationships between customers and suppliers. These strong linkages are critical to the competitiveness of a region or country. In a world of increasing global competition, the sources of competitive advantage are becoming increasingly localized and interconnected, benefiting from the proximity of customers, suppliers, educational institutions, and rivals. Clusters boost localized economies because they involve hundreds of small- and medium-sized enterprises (SMEs), which sell subcontracted services at lower costs with improved flexibility. This flow of services encourages large companies

³ A cluster is not a group of four or five related firms collaborating on an initiative; it is not an association of analogous companies, such as hotels, or an amalgamation of unrelated companies located in proximity to one another. These may all be healthy and even components of clusters, but they should not be confused with a cluster itself.

to support the growth and development of SMEs, which offer the country's largest future source of employment.

Ten Imperatives for Trinidad and Tobago

Trinidad and Tobago now has an enormous opportunity in the form of energy deposits and a steady political and economic climate. At the same time, few Trinidad and Tobago firms leverage local knowledge, inputs, or brands. If oil and gas were to disappear tomorrow, it is hard to imagine that the nation's export sector could survive. Even the relatively large comparative advantages are insufficient to impede sustained competition from outside the Caribbean. It is just such sustained competition that free-trade agreements have been designed to bring.

In the context of developing firms with world-class products, brands, and processes, stability has been achieved; however, the clusters of competitive companies, so vital to economic development, are largely missing. Leisure marine, tourism, and manufacturing (including plastics, packaging, and printing, and food and metal processing) offer immediate prospects, while information technology and information services hold particular promise both as clusters and as enablers for developing other ones. Upstream oil industries, particularly those that leverage technology, are genuinely exciting.

Multilateral organizations can assist this process by supporting key legislation, rationalization, and strengthening of public- and private-sector institutions and supporting the development of competitive clusters. As all stakeholders know, oil and gas will run out one day in the not so distant future. What will remain will depend on the growth of nascent clusters today.

These authors have developed 10 imperatives for Trinidad and Tobago's sustained economic growth:⁴

- 1. Agree that current circumstances offer the best chance to invest in future prosperity;
- 2. Grasp the need to "go micro";
- 3. Improve the competitiveness of key business clusters;
- 4. Improve the conditions for innovation and entrepreneurship;
- 5. Diversify into products with insight;
- 6. Create digital links between the country, its customers, and suppliers;
- 7. Streamline and strengthen private-sector institutions;
- 8. Fast-track and implement key pro-market legislation;

⁴ Annexes I and II present supporting analysis and information.

- 9. Understand that small countries prepared for globalization will benefit; and
- 10. View the energy industry as a market.

It is our judgment that, if Trinidad and Tobago widely communicates, addresses, and follows these 10 imperatives, it could leverage its good fortune to create long-term, sustained economic growth. If they are ignored, free trade and falling energy prices will ultimately return the country to the poverty of its less fortunate neighbors.

1. Agree that current circumstances offer the best chance to invest in future prosperity.

Trinidad and Tobago now faces its third resource-driven economic boom.⁵ In the next three years, income from the exploitation of oil, gas, and related downstream industries is expected to peak, while energy production is projected to double by 2006–07 (CBTT 2002; IMF 2003). Current oil reserves are estimated to last 15–20 years; without new discoveries, natural-gas extraction will likely taper off in about 18 years (IMF 2003).⁶ While proven geological resources confirm the potential for two more decades of resource-dependent growth, building national will to leverage this wealth for international competitiveness remains a challenge. Moreover, oil and gas wealth should also foster private sector investment and therefore result in broad-based wealth creation.⁷

Going forward, the projected increase in extraction capacity will automatically increase revenues from oil and gas reserves as a percentage of GDP (assuming stable international prices) to levels similar to those that resulted from the exogenous increase in world prices during the past oil crisis. With increased extraction, any small change in international prices will have a larger total effect on national income and dependent downstream and upstream industries. Although Vision 2020 calls for achieving developed-country status by the year 2020, without a sizable competitive industry on which to base post-energy growth, maintaining the current upper-middle GDP level will present a challenge. There is much the country must do to create new competitive advantages, but it must act decisively now to leverage its recent good fortune—in the form of oil and gas rents—to create more sustainable, productive capacity.

⁵ The first (1974–75) was led by oil discoveries and the second (1979–80) by natural gas discoveries.

⁶ According to the U.S. Energy Information Agency (EIA) and International Gas Union (IGU), prospecting in the Caribbean has increased reserves, but at a decelerating rate; thus, given the information about the country's unexploited gas reserves, natural-gas exploitation and revenue may slow less, but not rebound, in the coming decade.

⁷ The latest GDP growth that deviated from oil prices was due to new natural-gas discoveries and increased extraction, not an oil-independent growth spurt (Annex II). Dependence on natural-resource extraction for growth has obscured the fundamental absence of firms that offer long-term advantages.

Recent Performance

Despite two devastating oil shocks (1975 and 1981–84), the Government of Trinidad and Tobago has made commendable efforts to build a sound and stable macroeconomic environment, particularly in recent years. Unemployment and inflation, which fluctuated wildly during the oil shocks, have now settled at considerably lower levels. The unemployment rate has been halved—from more than 20 percent during the oil crisis of the mid-1980s to under 10 percent in 2002—and inflation remains low at 4 percent. Monetary policy has been cautious. Although the 1980s oil shock was followed by two waves of devaluation (1985 and 1993), the exchange rate stabilized at TT\$ 6.3 per U.S. dollar after a free-floating regime was adopted in 1993 (IMF 2003). As a result, the economy has experienced consecutive years of positive growth.

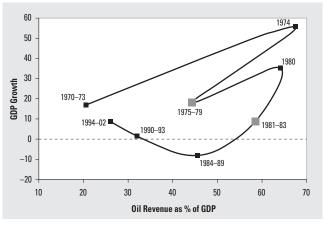
By regional standards, the country's recent economic performance is particularly enviable. To the extent that Trinidad and Tobago's firms export non-energy products, the vulnerability of neighboring markets is an advantage they have exploited. Creating a stable platform among a set of fragile regional competitors is largely enabled by energy's comparative advantage. One has only to examine the nation's results over time to appreciate the relatively minor effect that even current sound macroeconomic policies have had on the development of local firms.

Energy-Sector Vulnerability: The Case for Change

As Figures 5-4 and 5-5 illustrate, GDP dependence on oil-price growth has persisted; oil-led growth and recession form a clear trend line. Resource-driven, boom-and-bust cycles have

affected the country's growth performance and reduced the capacity to build sound policy foundations for growth. Economic policies have favored spending over investment; and investment has been inefficient. From 1973 to 1979, for example, subsidized domestic consumption increased from 18 percent to more than 25 percent of oil windfalls. Over the same period, public investment increased from 12 to 25 percent, but its allocation was highly inefficient; most





Sources: OTF Group, Inc.; World Development Indicators, World Bank (2003); International Monetary Fund (1999, 2003).

funds went to salvage the cash-flow problems of stateowned enterprises (SOEs) or to large capital investments in steel and gas. Moreover, the public sector retained most energy-related revenues.⁸ The private sector's absorption of energy revenues was surprisingly low. Furthermore, the relative short, three-year time frame of such fiscal-response policies permitted policymakers to avoid difficult questions about the consequences of

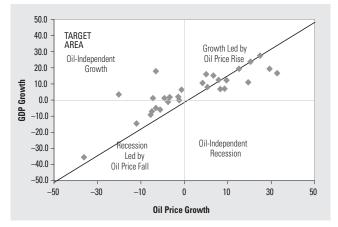


Figure 5-5. Persistent Oil-Price Dependence

Sources: OTF Group, Inc.; World Development Indicators, World Bank (2003); International Energy Agency (2004), International Monetary Fund (2003).

short-term spending on long-term, oil-and-gas revenue management beyond the potential exhaustion of current reserves. In short, Trinidad and Tobago's economic record has been confounded with the history of oil and gas extraction and international prices; each shock has substantially reduced the wealth accumulated from the last increase in resource extraction.

In years to come, increased revenue from oil and gas extraction will accrue to the economy. Given the increase in extraction levels, price fluctuations could have a substantial impact on national income and more precisely, on the dependent, down- and upstream industries. More so, two facts make the situation today even more precarious than in the past:

- Oil and gas production is projected to increase 100% between 2002 and 2006
- Proven energy reserves are expected to be exhausted in as few as 20 years

These painful shocks—seeing how quickly the energy sector's good fortunes can collapse—provide a strong impetus for fundamental change capable of leveraging, over time, the country's newfound gas-based wealth. To learn how to invest its projected oil and gas windfalls more wisely in the years to come, Trinidad and Tobago can learn from oil-producing countries, such as Dubai, that have successfully diversified their economic base, productively invested their oil rents, and responsibly managed their oil windfalls (Box 5-2). In sum, Trinidad and Tobago urgently needs to diversify beyond its current energy-dependent economy and develop comprehensible, cluster-led growth initiatives.

⁸ In addition to the indirect channel of the financial market, revenues from energy-resource exploitation enter Trinidad and Tobago's economy via fiscal income or the balance sheet of partially state-owned enterprises.

Box 5-2. Investing Oil Wealth Wisely: The Case of Dubai

Dubai, once an impoverished desert nation, is today the trading, business, and financial hub of the Middle East. Its conscientious management of oil wealth has built a robust industrial and service-based economy that serves as a model for oil-dependent nations such as Trinidad and Tobago.

In 1966, discovery of oil in the seven principalities that joined in 1971 to form the United Arab Emirates (UAE) created a mass influx of capital into Dubai. The UAE's consistent investment of oil wealth in infrastructure and steadfast focus on export diversification created an economy in which 88 percent of GDP was derived from non-oil sectors.

Early on, Dubai's rulers had a driving ambition to invest oil wealth back into the local economy. Their timely development of port infrastructure made the nation accessible to foreign business. The country also had an open attitude toward expatriates, making it a magnet for entrepreneurial energy from around the world.

UAE regulatory steps encouraged an active business climate and inflows of Foreign Direct Investment (FDI) in the private sector. An early economic liberalization program and welcoming legislative environment for foreign interests contributed to diversification. Utilities and other SOEs were open to greater private-sector involvement, and legislative changes sparked a boom in property ownership by foreign nationals. The nation's booming construction industry was also fueled by developments in tourism and successful free zones.

In addition, Dubai understood the importance of transitioning to a knowledge-based economy. It made technology a centerpiece of its development agenda, and its Internet City now provides the population world-class IT education. In 2003, UAE ranked 19 in the world for Internet penetration and 34 in PC usage.

In sum, UAE's wise fiscal management actively returned oil wealth to the local economy by investing in infrastructure, education, and policies that encouraged export diversification and FDI. Even more important than specific legislation, UAE's leaders shared an ambitious vision for their country and acted decisively to achieve it, eliminating red tape wherever it existed. The result of their foresight and conscientious management was a robust industrial and service-based economy.

Sources: The Economist's Dubai, Facts and Figures (www.economist.com/cities/); Peter J. Cooper, "Why Dubai? Anatomy of a Success Story" (www.ameinfo.com/news/Detailed/28046.html); Christine Haugseth, "Dubai's Success Story Can Be Successfully Applied to Regional Economies" (www.ameinfo.com/news/Detailed/33639.html); Country Profiles, United Arab Emirates (www.nationmaster.com/country/tc/Economy.

2. Grasp the need to "go micro."

The private sector must lead in developing its own future by proactively seeking market opportunities and requesting the Government's support as an enabler, not an architect of the future.⁹ Only firms, not nations, can produce differentiated products that can be exported to sophisticated consumers and sold for a premium. Thus, the only source of real competitiveness that can bring sustained growth and high and rising salaries to a nation's people is a strong private sector. In an economy dominated by oil and gas extraction, Trinidad and

⁹ For example, one would expect one or more key private-sector organizations driving cluster-level initiatives, with the Government encouraging them to take ownership of these initiatives; instead, only the Tourism and Industrial Development Company (TIDCO) promotes cluster initiatives, and then only using few resources.

Tobago has focused on managing the fluctuations in the prices of those commodities, rather than on fostering world-class companies to compete in world markets. This must change if the country is to continue to enjoy rising incomes.

The Government must recognize that it cannot be overly responsible for the private sector's success. This implies taking several practical steps:

- Reduce bureaucracy to enable firms to interact more with customers and less with officials,
- Overhaul the customs department (its inefficiency has been much maligned by both government and private-sector representatives), and
- Reduce public-sector employment.

In facing these challenges, Trinidad and Tobago is in good company. Governments in many countries feel an overriding sense of responsibility for the success of industries but historically have been unable to create an environment supportive of sustainable competitive advantages. In turn, businesses grow accustomed to a lack of real competitive pressure, relying on artificial advantages, such as government protection and subsidies. Breaking this cycle requires government leaders to rethink their fundamental assumptions about the nation's people, companies, and economy. They must begin to change the mindset of their nation, a process which requires time and commitment.

Privatization

Traditionally, the Government of Trinidad and Tobago's policies have focused on creating or maintaining stability, sometimes at the expense *of allowing firms to feel real competitive pressures*. In times of falling oil prices, policies have been less laudable than those in recent years and implemented more with a sense of urgency. This was particularly evident during the fiscal deficits of the early 1990s, when the Government borrowed significantly to maintain spending levels. Ultimately, the nation was forced to undergo rapid privatizations largely believed to have led to a destruction of value, often for both seller and buyer.

But viewed historically, results of the early 1990s represented a positive trend. As recently as the late 1970s, the economy was largely state-run. At that time, the Government decided to nationalize major companies, including those in the energy and agriculture sectors, to reduce unemployment and promote investment. In 1986, pressured by labor unions' delayed wages after the second oil crisis, the Government privatized three firms, giving ownership to workers. As the crisis continued, the Government sustained spending in hopes of a rebound in prices, borrowing heavily from multilateral organizations.

From 1988 to 1995, the sustained oil crisis imposed increasingly stringent fiscal discipline and progressive divestment of public assets; 11 of the 13 major companies were

privatized. The National Investment Company (NIC) was created to reconcile the need to pay wage backlogs and cut the cost of maintaining inefficient SOEs. The scheme was extended in a bid to secure employment economy-wide, proposing compensatory shareholding in divested companies and creation of small private businesses aided by the new Small Business Development Company (SBDC). The Government took these companies off its balance sheet, but continued to subsidize them as job-creation mechanisms. Little was done to bring international knowledge and professional management to these entities.

The other two major companies—Caroni (sugar) and Petrotrin (oil)—which comprise 50 percent of agricultural outputs and nearly 0.5 percent of GDP, remain state-owned, and the Government retains significant interest in the others. Caroni, however, has embarked on a restructuring effort, representing one of the country's most ambitious pledges of reform. It involves not only the uprooting of a major employer, but also substantial restructuring of agriculture. Two new state institutions will carry on long-term divestment of assets. The Estate Management and Business Development Company, Ltd. (EMBD), the new custodian of Caroni real estate, will lease to the new Government-owned Sugar Manufacturing Company of Trinidad and Tobago (SMCOTT). The new corporate scheme, which aims to operate according to private-market mechanisms, should allow for more transparency in business operations. As a first step toward establishing a viable sugar market, SMCOTT will purchase sugar-cane production from farmers at market prices-a departure from Caroni's fixed acquisition prices. However, the divestment plan does not include the potential for competitive, private-sector operation to develop in the sugar industry. The entire restructuring process has been initiated in preparation for the potential disappearance of export markets for the country's sugar, as preferential trade arrangements with the European Union (EU) are set to be gradually phased out during the 2005–2010 period.

In 2002, the new administration issued a policy statement declaring the top priority as the divestment of management and ownership of SOEs, with preference given to local investors. Preferred divestment instruments include the opening of management contracts and stock purchases by current managers and employees. This approach, while socially laudable, failed to address public-sector spending during the aftermath of the latest oil shock. The goal of privatization policy, therefore, remains entrenched in fiscal management, with little if any explicit connection to private-sector development.

Government Spending

By 2002, revenue collection from the country's oil and gas sector grew to 7.32 percent of GDP (TT\$4.3 billion). In 2006–07, production is expected to double, resulting in projected fiscal revenues of 36 percent of total revenues (versus 25 percent in 2002) (IMF 2003). Historically, the country used oil windfalls to maintain a high share of employment in the public sector and develop economic and social infrastructure. But sudden fiscal imbalances

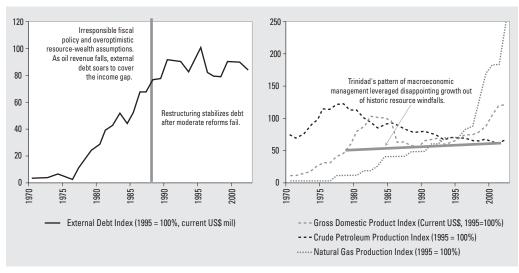
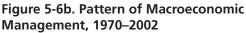


Figure 5-6a. External Debt Index, 1970–2002



Source: International Financial Statistics (2003) and Trinidad and Tobago Ministry of Energy.

Note: Rather than support competitiveness, resource windfalls reinforced government paternalism. Oil revenues have been channeled into high levels of debt rather than growth. The latest economic boom, caused by natural gas production, renews the challenge to leverage natural resources into economic growth.

created during the oil shocks proved this strategy unsustainable. The country's resourcedriven growth created a paternalistic government and a largely complacent society at the expense of a more entrepreneurial one. Government policies exhibited the familiar pattern of over-responsibility for the success or failure of the economy. High and rising debt levels, even in times of increased oil and gas income, renew the need to leverage natural resources for economic growth (Figures 5.6a and 5.6b).

Vision 2020 commits the country to more prudent and strategic fiscal management, implying that the past strategy is unsustainable. It recognizes that the current economic structure that reinforces the country's over-reliance on resource endowments will no longer be viable once the basic factors are exhausted. Further, oil and gas industries are capital intensive, contributing only a modest share of employment to the economy, enjoyed mainly during the set-up period of a new venture.¹⁰ This share is bound to change, given the more constant demand for labor needed in gas extraction, but local private companies must exert effort to leverage this opportunity (see Imperative 10).

Although unemployment has been reduced to 10 percent of the labor force from its recent peak of 20 percent in 1993,¹¹ the energy-sector boom cannot be expected to directly alleviate the country's social development challenges on a forward-looking basis. As a result,

¹⁰ In 2003, oil and gas industries represented only 3.4 percent of total employment.

¹¹ International Financial Statistics (IMF 2003).

the State has progressively adopted a more paternalistic role in distributing oil and gas rents to compensate for welfare losses in other export markets (e.g., agricultural products). While the Government's role in supporting long-term economic development and providing social safeguards is important, further expansion of interventionist policies risks State failures that threaten the goal of sustained growth.

Reaching developed-country status by 2020 implies a significant quickening of economic growth. Sustaining current growth beyond the availability of existing oil and gas reserves demands a minimum growth rate in the non-oil sector of five percent (Government of Trinidad and Tobago 2002), independent of local resource extraction, while not increasing Trinidad and Tobago's external indebtedness. However, current development policies fail to focus sufficiently on creating business development opportunities and truly competitive firms.

A nation's standard of living is defined by its productivity (i.e., how well all of its citizens work to create value for foreign customers and for one another). Governments must aid this process by providing an environment that promotes prosperity and lending a hand where market failures exist. The Trinidad and Tobago government has an important role to play in strengthening the seven forms of capital.¹² Public officials and institutions must support this process in every way possible, except to inhibit competition.

Trinidad and Tobago's firms, however, will play the critical role in the country's future competitiveness. Through such key agencies as the Tourism and Industrial Development Company (TIDCO) and Business Development Company (BDC), the Government can provide critical supporting services and technical assistance. As a positive sign, respected private-sector leaders have played a role in reforming such institutions as TIDCO and driving Vision 2020 efforts. The Government, in turn, needs to make expeditious reforms and encourage this public-private partnership as an enabler for improved competitiveness, not a protector of firms' short-term interests. To reiterate, a stable environment is not the only issue critical to future prosperity. In these authors' view, development of competitive clusters of non-energy industries is also essential (see Imperative 3). Moving the locus of responsibility to the private sector requires a shift in the Government of Trinidad and Tobago's approach.

3. Improve the competitiveness of key business clusters.

Trinidad and Tobago has several nascent clusters based on comparative advantages that it needs to convert and upgrade by building competitive advantages. To date, the dynamics of the environment in which clusters have operated can be summarized as follows:

¹² Prosperity is a function of a nation's stock of the seven forms of capital: natural endowments, man-made, and financial (physical capital); and institutional, knowledge, human, and cultural (social capital).

- Although small market size limits local demand, international firms that have built an enormous local presence create a market opportunity that local firms could serve more profitably.
- Clusters are nearly absent outside the oil sector, but the presence of "easy money" and accessible neighboring markets has almost completely stifled the development of even partially adequate business clusters.
- The Government has succeeded in providing a stabilizing influence, but at the cost of stifling innovation through excessive bureaucracy and over-employment in the public sector.
- Most private-sector organizations serve lobbying roles for government support, instead of providing the necessary insights for member firms to compete internationally or creating a platform of cooperation among its members.
- Trinidad and Tobago is equipped with basic factors and an adequate supply of more advanced factors, such as a literate population.

Another major impediment to private-sector development is crime, which is increasing at an alarming rate. As the Growth Competitive Index suggests, organized crime is one of the country's most notable competitive disadvantages; Trinidad and Tobago ranks 45 out of the 80 countries surveyed on this criteria (Annex I).¹³

Potential Competitive Clusters: Selection Process

Trinidad and Tobago has several nascent clusters that have the potential to provide a high and rising standard of living for its people. Because every cluster has potential, it is imperative that the Government not put itself in a position of choosing "winners" and "losers." Thus, choosing the clusters to support should be an iterative, competitive process. The rewards should be technical support, such as marketing or trade-related assistance, rather than concessionary financing or tax advantages. Furthermore, focused or targeted support—particularly technical support—on key nascent clusters can help unlock economic value and jump-start a virtuous cycle of building competitive advantages.

Experience in other developing countries shows that each cluster selects itself by demonstrating, through a competitive process, the following criteria:

• *Economic impact*—Includes employment potential, contribution to GDP, and positive externalities that may arise due to its development (e.g., linkages with other industries and knowledge spillovers).

¹³ While this chapter does not address crime explicitly, it should be noted that this factor can radically undermine government stability and drive away both foreign and local investment.

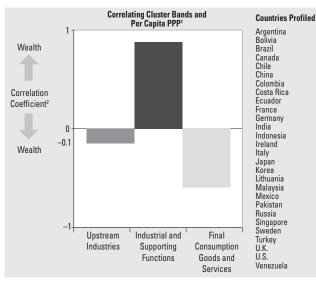
- *Willingness to embrace new ideas and put resources behind them*—Relates to the preparedness of firms within a cluster to work together and the existence and availability of the resources needed to back up the cluster's strategic initiatives.
- *Potential for international competitiveness*—Refers to the cluster's potential to provide products for well-defined niche markets.
- *Critical mass of qualified firms*—Depicted by the necessary human capital and technical know-how of firms within a cluster.
- *Potential to motivate other clusters by their success*—Assessed by asking: How recognized is the cluster within the private and public sectors? Can the cluster's success establish a platform that will yield economic benefits for other clusters? Are the cluster firms' leaders in their own industries?
- *Barriers to cluster success*—Evaluated by these guidelines: Are the strategic initiatives viable without significant additional government support? Do the strategic initiatives require prohibitive capital injections or infrastructure development? Is the industry's structure attractive?

A cluster's economic impact and international competitiveness are a function of the

type of industry in which a country chooses to compete, with greater profits typically accruing to innovation-based industries. As Michael Porter states, a nation's prosperity is "created, not inherited"; its competitiveness depends on an industry's capacity to innovate and upgrade (Porter 1990).

Figure 5-7 shows how trade in industrial and supporting functions (telecommunications, power generation, roller bearings, and instruments) provides a robust environment in which industry can innovate and upgrade. Industrial and supporting functions show an almost perfect correlation

Figure 5-7. Relationship between Cluster Bands and Wealth, 1992



Source: UN SITC Trade Statistics Data Revision 2, World Development Report (World Bank 1994).

¹ PPP, rather than GDP, is used because it estimates exchange-rate changes based on keeping prices of goods in various countries similar by offsetting inflation differentials with changes in the currency exchange rates.

² The correlation coefficient determines the relationship between two properties; coefficients closer to 1 indicate that variations in one variable are perfectly explained by variations in the other. with PPP, while upstream industries and final consumption goods and services reveal a negative relationship with wealth.

This correlation does not mean that Trinidad and Tobago needs to import new clusters of sophisticated firms in industrial and supporting functions. Traditional industries can be upgraded or "reinvented" to develop supporting machinery or outputs of export quality. Thought of another way, supply chains must be fostered locally (versus the current environment of one link in a completely external supply chain).

Supporting Clusters

Selecting clusters for technical and managerial support is perhaps the easiest part for Trinidad and Tobago, since relatively few clusters have promising potential. But once a cluster is selected, it is these authors' view that a five-step process is necessary to mobilize potential participants, identify gaps that inhibit its development, and develop a specific plan of action to upgrade the environment and member firms. This five-step process 1) analyzes the cluster's current situation and constraints, 2) sets detailed objectives, 3) understands customer needs intimately, 4) articulates the cluster's unique positioning, and 5) develops action and investment plans (Figure 5-8).

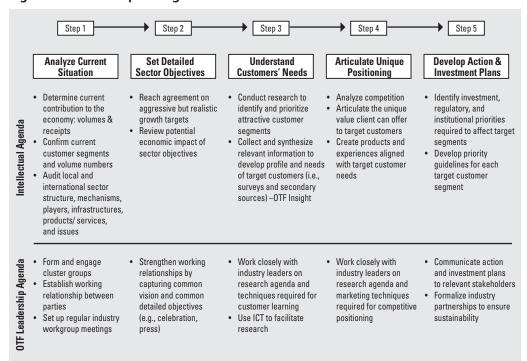


Figure 5-8. Five-Step Change Process

Source: OTF Group, Inc. Methodology.

The initial motivator in this process is an understanding of the global trends and competition that create the impetus for urgency. Next, it is necessary to determine 1) concrete initiatives that create economic incentives for firms to work on collaboratively and 2) rules of engagement to continue this process. Eventually, cluster members, with Government's support, take control of this process and work together to effectively compete in world markets. In these authors' view, an external facilitator can be useful to initiate the process and create the condition for change.

While a full cluster diagnostic has not been done on clusters in Trinidad and Tobago, this chapter advances hypotheses with regard to clusters with high impact and potential that might be further developed to become globally competitive (Figure 5-8). Prospects for export-oriented investment have been identified in the leisure marine, manufacturing, and tourism industries. In addition, strengthening information and communication technologies (ICTs) is an imperative as a potential cluster and an enabler of cluster development (i.e., it provides valuable infrastructure for firms to mine data to better understand their markets and communicate with customers to understand their needs).

Leisure Marine

Trinidad and Tobago's leisure marine cluster has the potential to provide a competitive and differentiated product, especially for pleasure boat building and maintenance operations. North American demand is growing for lower-cost boat-building locations and more so-phisticated Caribbean-service facilities (Price Waterhouse Coopers 2001). The country is poised to capture this niche market by becoming a destination for the leisure-marine community. Chaguaramas harbor, for example, already has a critical mass of skilled craftsmen, specialized businesses, and boat-building facilities. This cluster also builds on its comparative advantage, being the only protected port in the Caribbean outside the annual path of hurricanes. This cluster example—building a competitive advantage atop a comparative one—is a powerful, instructive lesson for the rest of the country's firms.

In the United States alone, yachting is a US\$ 30 billion industry, having doubled over the last decade. In most Caribbean countries, yachting is the second most important element of tourism, even more profitable than cruise ships. The number of yacht arrivals peaked in 2000 at 3,249, but then sharply declined to 1,950 in 2002—a 40 percent decrease—comparable to pre-1996 levels (Figure 5-9). Likewise, direct employment in the cluster, estimated at 1,400 at the end of 2000 (Price Waterhouse Coopers 2001), declined to 1,100 in 2002 (ECLAC 2002).

The reason for such a decline has to do with factors specific to Trinidad and Tobago more so than it does industry trends (other Caribbean destinations, such as St. Vincent and Martinique, have seen sector growth over the past two years). One explanation for this decline may be the business model followed by the country's marinas and boat yards. Unlike most Caribbean marinas and boat yards, which offer a "one-stop shop" for repairs, with quality monitored by each marina, customers in Trinidad and Tobago must shop around for various services and contractors, who in turn must go to where the boat is stationed or parked in order to perform the work. This relatively less efficient business model, coupled with the lack of other tourist at-

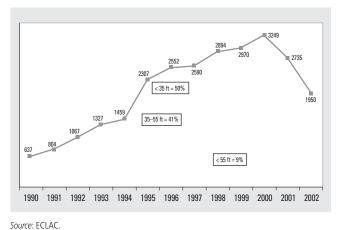


Figure 5-9. Annual Yacht Arrivals, 1990–2002

tractions (e.g., nearby beaches or upscale shopping), has attracted the low-end customer base (less than 35 ft. yachts). Most yachts are live-in boats owned by retirees cruising or sailing around the world. They have low disposable incomes and thus shop around for the cheapest services.

Other challenges are the recent wave of bad publicity associated with the 2000 oil spills in the Chaguaramas harbor and a decline in quality of work.¹⁴ The subsequent drop in yachting arrivals is not surprising since most advertising in this cluster is done by word of mouth. The Yacht Services Association of Trinidad and Tobago (YSATT) estimates more than 200 boats were damaged by the spill. Neither the Government (responsible for patrolling the harbor) nor the oil company was held accountable. After a year and a half of lobbying, only a handful of yacht owners received a small amount of compensation. The effect on the cluster was devastating; the Chaguaramas area was often referred to as the "dirty bay."¹⁵ Negative publicity, compounded by less than stellar customer service, quality of work, and on-time repairs, has led to the lowest-end customers visiting the Chaguaramas area (i.e., those who are price-sensitive and willing to withstand poor-quality and environmental degradation in return for cheap labor and costs of repair).

While several Government-led initiatives have targeted leisure marine services (e.g., TIDCO and YSATT have worked collaboratively on this cluster), area businesses have benefited little beyond tax incentives for extensive growth. The knowledge and coordination needed to sustain such growth locally and build up service sophistication have yet to materialize.

Despite the significant downgrading of this cluster in recent years, opportunities lie ahead. In this respect, linkages with tourism are important. In 2001, more than 90 percent

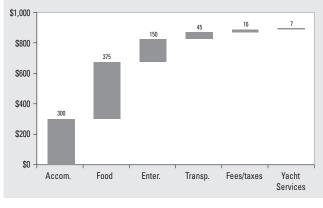
¹⁴ A vessel carrying crude oil developed a crack and started to leak into the Chaguaramas harbor area.

¹⁵ Interview with YSATT executive (Jan. 2004).

of the average expenditure per boat going to Trinidad and Tobago was on food, accommodations, entertainment, and other expenses (Figure 5-10a). The country has the potential to attract high-end charter brokers if it capitalizes on its comparative advantage-proximity to the Grenadines and other islands-to build competitive advantages. The Grenadines and nearby islands have become destinations for high-end yachts because of their pristine beaches and natural environments, but most lack the needed docking space and marinas. Trinidad and Tobago could collect a substantial amount of the approximately US\$ 75,000 per week that high-end cruise boats spend inland on fuel, dockage, electricity, food, and other expenses (Figure 5-10b).¹⁶

However, the overall

Figure 5-10a. Expenditure Per Boat in Regatta, 2001



Source: ECLAC (2002).

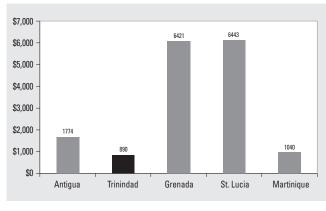


Figure 5-10b. Comparison of Expenditure Per Boat, 2001

Source: ECLAC (2002, 2003).

industry lacks a common vision of its potential and relative competitive position, and its members are highly fragmented. For this cluster's potential to materialize, skills must be upgraded, marinas must be able to accept larger yachts, immigration procedures must be standardized and simplified, and surrounding tourist attractions must be in place. At the firm level, builders (many of which do good work) could benefit from more corporate depth in such areas as market development, improvement of the production process, training, and

¹⁶ Based on industry expert's expenditure estimates for a 115-foot motor yacht with cockpit, including US\$ 18,000 in salaries for a six-person crew (Jan. 2004 interview).

necessary linkages and coordination in the supply chain. With these changes in place, this cluster could reap significant benefits and create profitable links to the tourism industry.

Manufacturing

Although Trinidad and Tobago's manufacturing sector is not a cluster, it encompasses three clusters of increasing sophistication and importance: 1) plastics, packaging, and printing; 2) food processing; and 3) metal processing. Still, most manufacturing occurs at only one point in the supply chain. While many of the country's largest and most successful firms are involved in food processing, downstream oil industries and intermediate goods, they owe most of their success to their access to cheap energy, import barriers and selling to weak neighboring markets.

The plastics, packaging, and printing cluster are a good example of a current raw materials exporter with the potential to upgrade. Some 80–85 firms have worked together to create a world-class packaging cluster. Currently benefiting from low-cost energy, the industry is cooperating to buy PET resin in bulk from the U.S. and is considering build-ing a PET plant in Trinidad and Tobago as a low-cost Caribbean source. These promising plans are made even more exciting by the active involvement of British Petroleum (BP) in facilitating cluster initiatives (such as arranging for the joint purchase of resin).

The key is to move away from cheap food and beverage containers to more sophisticated, higher-value products like plastic drug delivery systems for the pharmaceutical industry. Though the petrochemical and high-end plastic molding segments have highly sophisticated, downstream industries, plastic lawn chairs, unfortunately, are a more common output than custom casing for surgical instruments.

On the positive side, this cluster recognizes the urgent need for industry upgrading, as its largest current threat is loss of the consumer goods manufacturing sector. Industry experts have expressed the need to raise industry standards by increasing R&D expenditures and innovation, especially with respect to production processes; as the way forward, they have cited reverse economies of scale (EOS), mainly quick and flexible runs, and packaging for tropical climates with longer shelf-life and indigenous goods.¹⁷ Currently, a network is developing at the University of the West Indies (UWI) to study these possibilities and areas of innovation. However, over the past two years, the process has stalled for lack of someone (from either the private or public sector) to champion the cluster or at least maintain the momentum.

Likewise, the food-processing industry has succeeded in isolated cases. For example, S. M. Jaleel's Chubby, the first Caribbean brand listed by major retailers (e.g., Wal-Mart,

¹⁷ Based on interview with industry expert from the plastics, packaging, and printing cluster, February, 2004.

Kmart, and Kroger), is currently available in 60 countries on 4 continents.¹⁸ While many food-processing companies were proud and complacent about dominating the Caribbean market, S. M. Jaleel—already the premier soft drink company in the Caribbean—was, by 1993, studying the global market in an effort to create a brand to compete for international market presence. After two years of exhaustive research, the company identified an untapped market segment: soft drinks targeted to 4–10-year-olds. They identified three product characteristics that drove success: 1) kids wanted the right size and fit for their small hands; 2) they were attracted to bright, transparent colors; and 3) they were fascinated by a world of fantasy, hence the need to develop a character around the new soft drink. The result was Chubby, a brightly-colored soft drink in a patented bottle exported worldwide.

This example of a firm investing in upgrading its product and customizing it to a specific consumer segment, for the most part, stands in contrast to Trinidad and Tobago's other food processors, who rely on cost advantages in relation to their Caribbean neighbors. With few local agricultural inputs and current production centered on basic foods, Trinidad and Tobago's firms now need to focus on creating world-class brands. Those centered on high-quality, exotic tastes and premium products may allow this industry to enter markets outside CARICOM. The success of S. M. Jaleel offers promise (for its accomplishments) and raises a question: Can even this successful company survive and thrive in a post Free Trade of the Americas (FTAA) world, where trade preferences have disappeared?

The metal-processing sector is another key industry with significant exports. Initiated by a state investment in a Direct Reduced Iron (DRI) plant and integrated steel mill, this downstream industry has shown healthy development, and companies have taken pieces of the value chain. Caribbean Steel Mills and Centrin Trinidad Steel have mills and re-rollers, and approximately 10 smaller companies produce wire rods for fasteners, wire, bolts, and screws. Metal manufacturers make tanks, drums, truck bodies, and fittings.

Some firms have upgraded the cheap, processed metal available to manufacture and assemble air conditioners and walk-in freezers. These products have a high-quality design and engineering component;¹⁹ they can leverage the comparative advantages of low-cost energy into products that require skill and know-how, and are harder to imitate. However, Trinidad and Tobago's manufacturers in this sector have been caught in the same trap: they failed to invest surpluses generated during the late 1980s and early 1990s (when tariffs and quotas protected the market) in upgrading products and processes to create products embedded with insight and focused on profitable customer segments. As lower-cost producers like China swamp the market for this product, Trinidad and Tobago's firms will no longer be able to compete. Because of the downfall in export markets (Trinidad and Tobago now exports

¹⁸ "Plastic Manufacturers Team Up to Take on the World." *Industry Quarterly*, Issue 1 (Nov. 2002).

¹⁹ Interview with Michael Arttley (Jan. 10, 2003).

2.5 percent of what it did in 1995), one major manufacturer cut production in half in 2002, laid off 60 percent of its labor force, and plans to divest and enter the downstream oil business (Figure 5-11).

Many firms still have time to upgrade and innovate on customer needs to face the competitive threat from FTAA and such export giants as China. As one manufacturer emphasized, "There is a lot

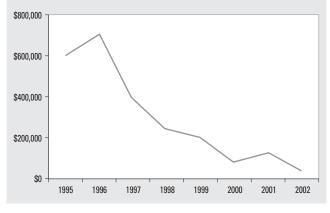


Figure 5-11. Trinidad and Tobago's Air Conditioner Exports to the U.S., 1995–2002

Source: UN Statistical Database.

around customer service and client management, especially down south where that closeness is valued, that the Chinese with a different language and time zone cannot copy."

Tourism

The country has been largely left behind as other Caribbean destinations have become tourism powerhouses. The potential is there: wonderful and unique natural attractions, courteous and educated local people, and a location at the intersection of North and South America. Most promising of all, Tobago is ideally located to provide a self-contained but extensive tourism environment, next to an economy that regularly attracts thousands of highly-paid foreign workers and executives. Despite its unique geographic and economic advantages, the country claims only marginal levels of tourism and tourism income.

The islands of Trinidad and Tobago have followed separate tourism strategies. Tobago's current strategy focuses on ecological tourism—an outstanding choice, given its natural advantages. However, both the targeting of the tourism sector by development policies and enduring tax incentives have done little to develop the cluster in this direction. The most glaring gap is lack of a strong tourism reputation; that is, the island lacks attractive offerings around the profitable nature and adventure segment it seeks to attract. Logistically, Tobago has become perceived as a difficult destination to reach, with no direct air link from the U.S. (its most attractive market). Whether this perception would change if the availability of short, convenient flights from Trinidad were publicized, is unclear. Also, lack of volume reduces the scale of activity, making tourism in Tobago almost twice as expensive as activities in Trinidad.

Still, the cluster has attractive opportunities for development. The captive market of oil-related businesspersons and members of the leisure marine segment can be a starting point for creating appropriate offerings. The Government has tried to address this problem by trying to sway mass, all-inclusive hoteliers to Tobago, while neglecting the more upscale market.²⁰ In these authors' opinion, this is the wrong strategy, which, if successful, will lead to price-based competition and environmental degradation. Tobago's growth potential lies in niche-tourism activities, along the lines of the ecological positioning it has chosen; this requires economic and institutional support under an explicit unifying, strategic vision for the sector.

Trinidad and Tobago's international tourism market, aside from leisure marine activities, is dominated by short-term business-vacation stopovers. Even so, government support organizations are considering attracting the cruise-ship industry and mass tourism. Experience with the tourism cluster in such places as Bermuda and Jamaica indicates that, unless a thorough assessment shows that a country can benefit from cruise-ship arrivals and mass tourism by leveraging these stopovers into other offerings, these market segments usually downgrade the industry by increasing tourist arrivals but decreasing average tourist spending per day. In relation to the business-vacation segment, it is important that necessary facilities, such as convention centers, luxury hotels, and supporting services, be identified and put in place to service this market. These visitors offer a great opportunity to leverage existing business activity for weekend experiences. Success demands a focused strategy that results in a complete experience or package for this market.

Promising market segments include the naturalist market (including birding, hiking, and backpacking). Such activities are consistent with the island's hotel capacity (90 percent of hotels are small scale, which could service this niche market). However, although small hotel owners allude to a substantial amount of cooperation among competitors, their main concern is how to implement destination marketing for a new niche market in Trinidad. Industry insiders from both small and large hotels complain about the disconnect between institutions that support tourism (mainly TIDCO) and the hoteliers. For example, TIDCO tried to boost 2004 carnival arrivals with a promotional strategy initiated in November 2003; but all hoteliers agreed that planning was needed, at the latest, by June 2003.²¹ TIDCO's untimely promotional strategy only widened the divide between the private sector and the institutions meant to support it, by creating the impression that these institutions were out of touch with industry.

The tourism sector attracts little qualified labor, maintains low relative wages for local workers, and has low international quality standards—features critical to introducing a

²⁰ Interview with Vice President, Trinidad and Tobago Hotel and Tourism Association (TTHTA) (Jan. 2004).

²¹ Ibid.

new destination to sophisticated clients. Policymakers have focused on developing tourism as an alternative absorption zone for unemployment as part of the Government's social development effort. Market knowledge and aid to local firms to identify and capture stable niches among the sophisticated clientele of the country and Caribbean region remain a future agenda.

Information and Communication Technologies

For many in the developing world, ICT has become the buzzword for exponential growth. Development of ICT infrastructure and know-how is imperative for positioning industries in world markets. Dramatic opportunities can be developed around specific oil-industry software and data processing, given the proximity to sophisticated demand in Trinidad and Venezuela. According to a BP executive, sourcing these services locally would be extremely attractive to his firm.

TIDCO analysis has suggested implementing call centers in Trinidad as a potential opportunity. Strong indications suggest the demand for such services, especially among North American call center companies wishing to establish near-shore facilities in the Caribbean to complement domestic operations (Price Waterhouse Coopers 2001).²² Call centers are often seen as an entry point for creating a broader ICT platform. Used wisely, they can contribute to building a competitive infrastructure and create demand for technical knowledge that becomes resident in the country and can be leveraged by other industries. These authors believe that software outsourcing may be a realistic near-term goal.

At this point, Trinidad and Tobago's comparative advantages—location, language, and cheap labor—account for its attractiveness in this industry. It is an English speaking island with proximity to the U.S. and the most competitive labor rates in the Caribbean (US\$ 1.25–\$2.00 per hour) (Price Waterhouse Coopers 2001).²³ Telecom rates (a cost levied on all businesses), on the other hand, are among the least competitive in the world. Trinidad and Tobago should only pursue call-center opportunities, with the aim of switching from cheap-labor advantages to high-end processes (e.g., bill payment, back office management, and web hosting) and as an opportunity to improve its telecommunications infrastructure. Through such a program, a business services (versus call center) cluster can leverage an educated population that could later turn its skills into ever higher value-added industries. For now, the most valuable opportunities involve using ICT as enablers to increase com-

²² The North American call-center industry is actively seeking near-shore facilities, such as the Caribbean, rather than expanding offshore operations.

²³ Other potential locations, such as Jamaica, Barbados, and El Salvador, have hourly labor costs amounting to US\$3.50, \$2.50–4.50, and \$2.20–3.50, respectively. While countries like Jamaica have lower per-capita incomes, they also have lower labor productivity, making net costs higher than those of Trinidad and Tobago.

petitiveness in industrial clusters or service-oriented sectors (e.g., tourism, yachting, and engineering services) to achieve state-of-the-art operational efficiency and closer communications with customers abroad.

4. Improve the conditions for innovation and entrepreneurship.

Why have Trinidad and Tobago households, businesses, and entrepreneurs largely chosen not to invest in new activities? Among the various explanations, several deserve special attention here, either because of their economic detriment to cluster development or because, with appropriate strategies, they are easy to remove.

Lack of Insight

In our view, five preconditions are necessary for the development of successful clusters and their willingness to change: 1) tension, 2) moral purpose, 3) leadership, 4) insight, and 5) receptivity. Tension has been growing among private-sector leaders that foresee the fragility in their economy. Trinidad and Tobago's development, evidenced by Vision 2020, is rooted in a sense of moral purpose to turn the nation's wealth into sustainable growth for the average citizen. There is no shortage of successful business leaders throughout the Caribbean. Government leadership around firm-level support is still insufficient, although various ministries have taken leading public positions. (The Government's espoused urgency contrasts somewhat with the insufficient urgency evidenced by its actions: legislation takes time to be approved, red-tape, and Customs are inefficient.)

The country's entrepreneurs encounter a typical constraint: uncertainty regarding where new, profitable activities lie. As illustrated above, investment could pay off in various promising ventures, but fragmented efforts without coherent strategies have, in the end, closed windows of opportunity. Turning information into insight with which to make strategic decisions is the starting point for these clusters. For example, with high-end boat repair services and tourism opportunities, the leisure marine cluster could target more affluent U.S. customers. While perhaps not perfect, this hypothesis could be researched and acted on; such rigor would represent a discontinuous leap for Trinidad and Tobago firms in this cluster.

Coordination Failures

In Trinidad and Tobago, new cluster development is hindered by coordination failures and lack of trust among firms in the same industry. Coordinating cluster firms to catalyze large, mutually beneficial initiatives carries important benefits; these are especially needed when industry players are small and fragmented. Many new firm-level investments require that complementary—and sometimes hefty—investments be made simultaneously. For example, if a Trinidad and Tobago entrepreneur considers setting up a facility in Chaguaramas to build pleasure boats, he or she will need other types of investments (e.g., tourist facilities, advertising and promotional schemes, and infrastructure) to be in place for the business to be profitable. If this entrepreneur wishes to invest in ICTs and set up a high-tech service center, he or she will need a truly competitive package of telecommunications rates, support for training personnel, and adequate real estate and services in place. Such changes in the business environment and complementary investments can define a project's potential profitability.

Limited Access to Support Services

New businesses and entrepreneurs lack the needed inputs—financial, information, technical assistance, and training—for managerial development (UWI 1996). Existing mechanisms often fail to deliver funds and financing for new ventures, especially those of micro and small enterprises. While bank credit has been the major source of channeling funds for new activities, this sector has been particularly affected by fluctuations in the oil sector, resulting in conservative lending practices. While a solid financial sector has resulted, new sources of financing are needed for higher risk projects. Currently, smaller businesses remain constrained by low capitalization, aversion to using financial intermediaries, high administrative costs for small loans, and high interest rates. Current private-sector and international-donor options are often fragmented and uncoordinated.

Government programs and agencies targeting small and micro enterprises (e.g., Investment Development Company [IDC] or SBDC) failed, mainly because of people's aversion to using those services. Lending criteria and required collateral to apply for new loans proved too rigid, and training provided by those institutions was more academic and theoretical than practical. As a result, the National Entrepreneurship Development Company (NEDCO) was set up to help micro enterprises by providing easier financing terms. However, this organization has also fallen short in terms of technical support and business insight. Indeed, such intervention may shelter businesses from market forces. Cluster associations that aggregate lenders under a common cause and produce insights about their industry's opportunities are more likely to deal with financing challenges and improve chances of success.

Beyond the issue of financing, local firms face more critical challenges, including a dearth of professional resources (e.g., gaps in solid training in customer targeting, bookkeeping, and human resources development). Information and technical-assistance linkages are either lacking or extremely weak, and training programs are inadequate and incompatible with the needs of emerging sectors. Government organizations offering business support often overlap and spread their resources too thinly. According to the 1996 National Business Survey, specialized training institutions reach only about 7 percent of entrepreneurs. Much

of the training, like that offered through the Youth Training and Employment Partnership Programme (YTEPP), is not applicable to the problems entrepreneurs face. Furthermore, as suggested by the Growth Competitiveness Indicators (GCI), and confirmed by these authors' interviews with Trinidad and Tobago business leaders and university researchers, R&D collaboration between businesses and the academic community is meager. Other proxies of technological innovation, such as Internet access in schools, ownership of personal computers, international patents, and Government prioritization of ICT, show Trinidad and Tobago at a competitive disadvantage.

Trinidad and Tobago has the potential to diversify its economy and generate long-lasting growth opportunities outside traditional oil and gas exports, as evidenced in the previous examples. However, it is imperative that support for these new ventures start at home, not only from the Government, but also from within the business community. Any effort to address cluster growth and development is contingent on understanding the constraints entrepreneurs face and the failure of current policies and practices to address them.

5. Diversify into products with insight.

The concept of comparative advantage hinges on the endowments of factor inputs available in a given country: labor, capital, and natural resources. Many countries and businesses have tried to compete by undercutting each other's labor costs or exploiting and creating vulnerable reliance on commodities and natural endowments. In an increasingly global economy, factor inputs have become less important as sources of productivity and sustained growth. Countries are no longer constrained by their factor inheritance in creating competitive firms and environments; thus, competitive advantage no longer rests on a country's natural endowments but on its ability to create a business environment, along with supporting institutions that allow the nation's inputs to be used and upgraded in the most productive manner (Porter 1990).

Diversifying into products embedded with insight requires building superior industry structures and product traits that cater to sophisticated (not to be confused with wealthy) customers. Superior industries are characterized by low rivalry and high demand, while weak ones have the opposite traits. At the same time, attractive products embody customer needs; they usually weigh less and are well branded and they are attractive to price insensitive customers. Insight, brand, and focus are the building blocks of world-class strategies.

In this context, Trinidad and Tobago has a long road ahead to fully achieve its competitive advantages. Economic growth and prosperity have centered on natural-resource extraction. Business development has focused on oil and gas extraction and exploitation of readily available resources, without any effort to upgrade inputs or reach more sophisticated consumers. The few industries that have developed outside the oil and gas sector remain largely entrenched in the same pattern: reliance on low labor costs, production of commodity products, and dependence on the lingering artificial advantages from an import-substitution model that the Government followed years ago. In many cases, domestic producers assume that advantages in natural resources and cheap labor will win them leading positions in export markets. However, today's successful nations create wealth by exporting products and services that embody insight into customer needs, technologies and processes, distribution channels, and relative competitive positions.

Dutch Disease in Action

Dutch Disease refers to the deindustrialization and shrinkage of the manufacturing sector that occur in countries whose abundant natural resources constitute the main drivers of growth. Labor and capital are driven from the manufacturing sector, which, along with many positive externalities associated with the sector (e.g., technology and knowledge spillovers, information, and innovation) ceases to develop and expand. Dutch Disease is characterized by three main effects: 1) crowding out of investment in the non-traditional (manufacturing) tradable sector in favor of the tradable natural-resource sector, 2) increased demand for non-tradable services in the economy, and 3) subsequent contraction of the manufacturing sector (Sachs and Warner 1995).

In oil-rich economies like Trinidad and Tobago, the trend has been that capital investment flows into oil extraction because of the nature of the business. When the economy experiences a resource boom, driven by a surge in oil prices or discovery of an oil or gas reserve, the non-tradable sector (services) expands as a result of the exchange-rate appreciation and increased demand for these goods. More resources flow out of manufacturing and into the services sector. As a result, manufacturing becomes less competitive.

Today, Trinidad and Tobago faces its third resource-driven economic boom. Income from the exploitation of oil, gas, and related downstream industries is expected to peak in the next three years, while energy production is projected to double by 2006–07.²⁴ Current oil reserves are estimated to last another 15–20 years, while natural-gas extraction, in the absence of new discoveries, will likely taper by 2020.²⁵

Since the discovery and industrialization of petroleum five decades ago, agriculture's importance has declined in favor of the energy sector, while the service sector has become the growth driver in the rest of the economy. As Figure 5-12 illustrates, this pattern has persisted in recent years. The oil sector now contributes almost one-third of total GDP (TT\$ 25.02 billion), with crude oil accounting for the largest share and oil refining substantially increasing. Since 1998, distribution and financial services have affected national income considerably,

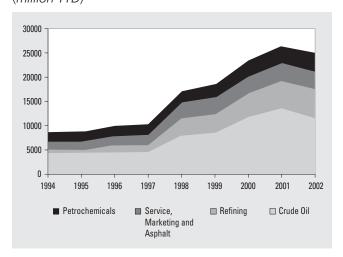
²⁴ Trinidad and Tobago Ministry of Energy.

²⁵ See Footnote 8.

now accounting for nearly 11 percent and 3 percent of GDP growth, respectively. However, growth in non-traditional manufacturing has been disappointing. In 2002, the sector registered a negative growth rate of -2.9 percent, reinforcing the idea that oil and gas dependence has held off growth in non-traditional export sectors (Figure 5-13).

The other category of effect that has branded the shrinkage of manufacturing as a "disease" and source of chronic economic slowdown is the failure of backward and forward linkages to develop because of the squeeze in manufacturing (Sachs and Warner 1995). This is especially true when externalities inherent to the overall sector (e.g., learning by doing effects, information and innovation, and coordination failures) are stronger than those that surface in the sectors that expand as a result of Dutch Disease. Hence, lack of growth in the manufacturing sector also impinges

Figure 5-12. Oil Sector's Contribution to GDP, 1994–2002 (million TTD)



Source: International Financial Statistics.

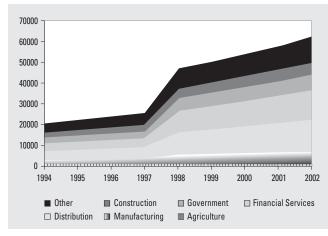


Figure 5-13. Non-oil Sector's Contribution to GDP, 1994–2002

(million TTD)

Source: International Financial Statistics.

on developing other critical features for growth: innovation, complexity, knowledge, and appropriate institutions and behavioral norms.

In this respect, Trinidad and Tobago has lagged. Its dependence on oil and gas exploitation has hindered development of a manufacturing sector that can compete with complex, value-added products in competitive markets. The country's small manufacturing sector either exports cheap oil and gas or penetrates neighboring markets with lowvalue products by undercutting competitors' costs (e.g., food-processing industry). More sophisticated manufacturing of products and processes has not flourished; diversification into more value-added upstream and downstream industries has not even occurred in the oil and gas sector.

Case for Diversifying Up the Value Chain

Current export flows indicate how little value-added production occurs in Trinidad and Tobago. Most exported goods are related to natural resources, and their processing is minimal. No noticeable trend indicates the occurrence of an upgrading process (Figures 5-14a and 5-14b).

The cluster chart that follows further illustrates the implication of these trade patterns in terms of horizontal and vertical development of industries and product types (Figure 5-15). The chart represents all industries in which a country has competitive advantage, by highlighting patterns of competitive industries and their connections over the 1992–2000 period (Porter 1990). Vertical and horizontal divisions among industries, which correspond to Porter's initial categorization, are grouped by end-use application.

Across the top row are upstream sectors, characterized by industries whose primary products are inputs to products in many other industries. With the exception of semiconductors/computers, most of these industries are resource based (e.g., gold, timber, and oil).

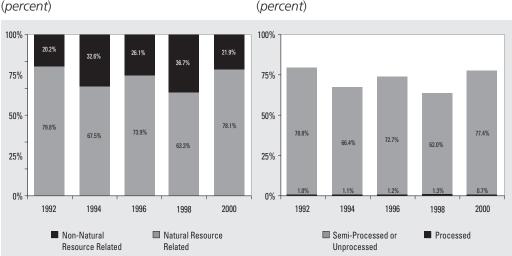


Figure 5-14b. Processing of Natural-Resources Products, 1992–2000 (percent)

Figure 5-14a. Exports Related to

Natural Resources, 1992–2000

Source: OTF Group, Inc Analysis and UN Statistics.

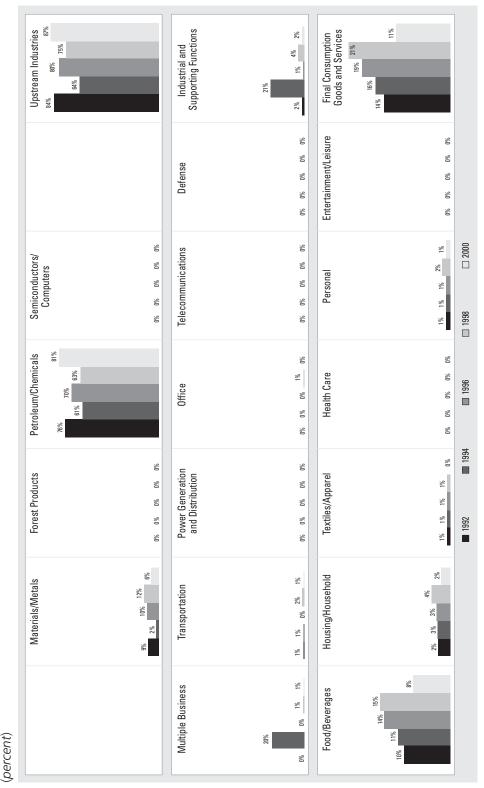


Figure 5-15. Export Distribution by Cluster, 2000

Source: Based on United Nations trade statistics for industries at the five-digit SITC level.

Copyright \odot by the Inter-American Development Bank. All rights reserved. For more information visit our website: www.iadb.org/pub Across the middle row are broad end-use sectors involving industrial or supporting functions. These clusters are centers of complex operations and conduits of innovation and upgrading, characterized by competition based on differentiation as much as costs (e.g., power generators, motor vehicles, and scientific instruments). Across the bottom row are end-use sectors associated mainly with final consumption goods and services, whose competition centers mainly on product differentiation (e.g., breakfast cereals, clothes, and furniture).

The link between these three horizontal stages and productivity upgrading is straightforward. Economies generally begin the upgrading process from positions at the top (upstream industries) or bottom (final consumption goods and services) of the cluster chart. Typically, resource-rich countries begin at the level of upstream industries, while resource-poor ones start from final consumption goods and services. The most successful advanced economies initiate competitive industries from the middle level (industrial and supporting functions), as they gradually upgrade and lay the foundation of an industrial core (Porter 1990).

Local industries have responded precariously to demand patterns and customer needs. They target export markets with basic manufacturing products aimed at customers more concerned about getting the lowest price than paying a premium for value added. If the country wishes to diversify its economic, as well as export, base, it must move away from the bottom end of the value chain toward upgrading industries and products. To tackle the problem, the country must act on a variety of fronts, involving a wide array of coordinated assistance programs and initiatives. While the private sector must lead, both the Government and international institutions have a range of technical and policy-assistance programs available to them.

6. Create digital links between the country, its customers, and suppliers.

Firms in developing countries tend to produce goods, and then look for markets in which to sell them. Little research is done on understanding buyers' needs before pushing products to new buyers. Often, critical customers' needs go unmet, reducing customer loyalty. In addition, the long-term strategic implications of choosing to serve certain buyer segments are little understood. Market knowledge is essential in targeting attractive customers that are willing to pay a premium for products and services that fit their specific needs.

With today's technologies, no informational distance should lie between Trinidad and Tobago firms and their target markets. Although the Central Statistical Office (CSO) and other public institutions have invested in data collection, the national data-collection system is not geared to provide market insight and incentives for collaboration within industry groups. In fact, the National Baseline Survey identified lack of information as the number one problem that small firms encounter when attempting to export (UWI 1996).

The small size of Trinidad and Tobago businesses is a major, often acknowledged barrier to accessing foreign markets. Thus, from a national perspective, public and private institu-

tions have a clear role to play in addressing local businesses' need for market information from the perspectives of potential customers and business competitors. Institutions have already been designed to provide the private sector basic services; however, their implicit task is to aid businesses according to the current business model of cheap exports. In this context, the information provided is outdated and not in tandem with the country's current challenges. Therefore, market insight must be developed with a vision of how to aid clusters in reaching sophisticated customers.

Ireland is a prime example of a country that set up institutions useful to businesses. For example, the Industrial Development Authority (IDA), whose primary role was attracting foreign investment, compiled what many consider the best database of potential investors around the world. It fostered the development of close relationships between firm executives that fit the development pattern the country sought and maintained these contacts, even when individuals changed firms. This information, along with advice on how to proceed, was provided free to interested firms.

Bridging the Digital Divide

Trinidad and Tobago can radically transform its economy and use technology to generate market insights by acting along three dimensions: 1) platform, 2) firm level, and 3) cluster. Unlike less developed environments, the country stands at an ideal development point to use new and emerging technologies to accelerate the advancement of its level of sophistication.

From a platform standpoint, several key efforts are recommended. First, liberalization of telecommunications infrastructure is a crucial initial step to foster the use of new and emerging technologies.²⁶ In this respect, Trinidad and Tobago is at a serious disadvantage in its telecommunications package. The Telecommunications and Service Company of Trinidad and Tobago (TSTT) is owned, in part, by Cable and Wireless West Indies (CWWI) and partly by the Government. The quoted rates for installation and rental costs, as well as use charges, are considerably higher than in neighboring countries, including Jamaica, that wish to compete in the call-center business (e.g., El Salvador, Barbados, and Philippines) (Commonwealth Secretariat 2003) (Annex I). While Trinidad and Tobago was the first country in the region to espouse the benefits of liberalization, it might be among the last to implement it. Other e-readiness indicators provided by the GCI (e.g., level of Internet access in schools and Internet hosts and use, number of telephone lines and cellular phones, quality of competition in the ISP sector, and ownership of personal computers) all point in the same direction: Trinidad and Tobago is at a serious disadvantage relative to other countries in terms of network readiness.

²⁶ As illustrated by Harvard's Information Technologies Group's Networked Readiness Guide, 2001.

Likewise, serious gaps ought to be targeted to enhance the country's digital links with customers and suppliers. From a firm-level standpoint, initiatives that would bring immediate benefit are:

- Develop programs for training on Internet-based market-research techniques. These authors interviewed a growing wire manufacturer in Trinidad that uses the Internet to find new business customers in the South American market. While they enter new markets through cost advantages in a commoditized industry, they then work to lock loyalty through customer service. This strategy could be applied to many companies currently trading commodity goods, and help them, through a more intimate connection with their customers, to upgrade and differentiate themselves.
- Provide technical assistance for local firms to access already available, digital markets. This can be particularly attractive in the tourism and music industries, where the customer base is increasingly digitized.
- Assist in digitizing key business processes (e.g., accounting, purchasing, payroll, and professional development) and provide training in financial management tools (e.g., basic cost accounting using Microsoft Excel). After massive layoffs around the agricultural reforms, programs like NEDCO were established to help entrepreneurial activity. Along with seed capital, more technical capacity will help SMEs develop and improve the technical capabilities of the country's work force.

From a cluster perspective, such initiatives include:

- Establish incentives for developing sophisticated data-processing services. Survey tools, data mining, and Customer Relationship Management (CRM) technologies can help clusters derive insights from customer segmentation and behavior. More automated customer service would improve foreign-market access.
- Make training available on web hosting and design.
- Develop competence in data modeling and visual graphics (e.g., Next-Generation Computer-Aided Design). This is particularly relevant for geological design and infrastructure projects in the energy sector. More training in this area would improve local firms' access to contracts around exploration and design of extraction platforms.
- Implement software tools for large-scale information and people management, particularly call-center applications. If call centers are to have spillover effects on the rest of the economy, Trinidad and Tobago should implement state-of-the-art CRM technologies to provide multinational companies turnkey services.

- Encourage the development of simple e-commerce and information-sharing tools among groups of firms doing business with one another. Clusters would benefit from sharing an e-commerce platform: They drive down transaction costs and improve supply-chain integration. These technologies would also improve firmlevel efficiency, given that most inputs in Trinidad and Tobago's firms are imported from varied destinations, requiring complicated logistics or high inventory costs to maintain high service levels.
- Provide software expertise for linking local firms to the front and back ends of large international companies (e.g., those doing business in the local energy sector).

Program of Support

The above examples are illustrative of the ICTs of immediate relevance in a trajectory toward more connected firms and clusters. Building digital links that take root—that are maximally appropriate and effective—will require significant time and resources.

7. Streamline and strengthen private-sector institutions.

Government Institutions

Over the past two decades, the Government of Trinidad and Tobago has been a prolific creator of both ministries and business and development institutions. The resulting dynamic has given ministries and institutions little time to coordinate with each other, connect with private-sector stakeholders, or implement long-term policies. Institutional weaknesses are routinely addressed by creating new organizations or adding new functions to existing structures. As a result, private and public institutions remain disconnected and sometimes operate in a vacuum, and new public institutions concentrate their success in areas where interaction with the business environment is least critical.

Currently, the country has more than 30 line ministries (Republic of Trinidad and Tobago 2003), and cabinet reshuffling is more the norm than the exception. Not surprisingly, only a few core functions are set as top priorities and are adequately addressed. Many programs are backlogged and lack continuity. For example, over the years, telecommunications policy, cultural policy, and tertiary education have been articulated as key Government priorities, but responsibility has been passed from ministry to ministry, cutting short the reform process and momentum.²⁷

²⁷ In the latest reshuffling, telecommunications policy and tertiary education moved from the Ministry of Science and Technology to the Ministry of Public Administration, while cultural policy was passed from the Ministry of Culture and Tourism to the newly created Ministry of Culture and Gender Affairs.

In contrast, the Ministry of Trade and Industry (MTI) aggregates functions related to business development, trade incentives, fair competition practices, and international trade negotiations. It remains virtually impossible for MTI to connect with stakeholder groups economy-wide in all key policy areas it is designed to serve. Furthermore, the institutions placed under its mandate remain out of touch with the business environment and operationally do not reflect their strategic intent. While MTI's effectiveness in trade negotiations compares favorably to peer institutions in the Caribbean, other functions lag relative to its operational goals.

Private-Sector Development Organizations

In Trinidad and Tobago, the institutional map for private-sector development consists of three organizations: TIDCO, BDC, and NEDCO. From its inception, TIDCO was envisioned as the marketing and strategic agency that would promote and facilitate investment in industry, trade, and tourism. As such, TIDCO is the umbrella organization for private-sector development and cluster initiatives. However, neither the organization's activities nor the resources made available to it reflect this strategic intent.

TIDCO is divided into three core areas: 1) tourism, which markets the "Trinidad and Tobago" brand abroad; 2) trade, whose mandate is to help Trinidad and Tobago firms export; and 3) investment, which aims to attract both FDI and local investment. The organization's budget for this set of core areas is TT\$ 60 million (US\$ 10 million), but it is largely skewed toward tourism, which gathers approximately 80 percent of the funds while other areas, especially investment and cluster development, are underfunded; likewise, TIDCO's staff is largely devoted to tourism, where more than a third of the organization works.²⁸ The rationale for allocating both financial and technical resources in this manner is twofold. First, the tourism sector has received a big political push since it is seen as an enormous potential employer in Trinidad and Tobago's economy. Second, it is thought that building Trinidad and Tobago brand recognition through tourism will yield significant spillovers into the trade and investment areas by swaying potential investors into other economic sectors. In short, the premise is that, as Trinidad and Tobago is positioned internationally as a tourism destination, people will explore other sectors for investment, and networks of local and foreign investors will surface.

In reality, this is not necessarily the case. The financial and technical capabilities required to attract FDI and, more broadly, promote development of the Trinidad and Tobago private sector differ and go beyond those necessary to efficiently brand Trinidad as a tourism destination. Although building overall international brand recognition may place the

²⁸ Interviews with TIDCO executives (Jan. 2004).

country on the potential foreign investor's radar screen, tourism trade shows and focused site visits are initial steps toward a comprehensive private-sector development strategy. Locally, TIDCO has emerged as more of a branding and marketing company than a private-sector support platform. Thus, these authors believe that the country lacks an institution with a clear mandate, autonomy, resources, and strategic vision to promote private-sector development. Moreover, this institutional gap extends to BDC and NEDCO. Both suffer from credibility problems; some businesspersons perceive them as instruments of social development programs rather than as private-sector initiatives. As one prominent businessman and academician put it, they are "mechanisms of redistribution or grant-giving agencies with no entrepreneurs behind them."²⁹

Cluster-Specific Institutions

Cluster-specific associations can be instrumental in improving member firms' global competitiveness; they can help to compile market insight and technical expertise that are prohibitively expensive for individual firms. They can also help with marketing and promotional campaigns, and fill gaps in the value chain. Tourism is an adept area where such coordination is particularly crucial for success; however, these clusters' efforts are fragmented and lack adequate coordination. The tourism sector has a series of fragmented, uncoordinated institutions that duplicate functions, divide implementation efforts, and fail to coordinate action into a coherent, industry-wide development strategy. Seventeen offices and certification bureaus are involved in setting up an investment project in tourism in Trinidad and Tobago (Price Waterhouse Coopers 2001). None has the declared function to help investors navigate this maze. To date, none of these institutions has developed the capability to provide on-demand market research for either local or foreign investors. Only general, national statistics are published about tourist arrivals in Trinidad. While the CSB has developed the capacity to record detailed regional statistics (which could also reflect industry-level data), this source of business-development insight remains underused.

Availability of qualified human capital (high-quality tour guides and hospitality services) in the industry has been identified as a critical step toward sustainable development of the sector. This area is critical for businesses (who are under pressure to adapt to the demand of a growing international clientele and compete against already-established Caribbean destinations) and policymakers (who perceive tourism as a potential area of economic and social development). Despite the urgency of effective action to develop human-capital resources, the two agencies designed for this function have no record of collaboration. Both the Trinidad and Tobago Hotel and Tourism Association (TTHTA) and the National

²⁹ OTF Group, Ltd. interview with Institute of Business (IOB) executives (Jan. 2004).

Training Agency (NTA) face similar shortcomings in establishing internationally-recognized standards for the training they provide.

The energy sector also reveals institutional weaknesses. Although encouraging local private investment to develop downstream oil industries is a top priority on the country's agenda, the energy sector's institutional framework remains opaque to local firms with the potential to operate outside the current business areas (extraction and primary processing) and develop as service providers to existing, large-scale foreign investments. Intermediary institutions between the State and foreign investors are not equipped to address potential medium-scale, local investors in related services; they effectively shelter large-scale investments in this key industry from contact with the fragmented institutional framework designated to channel investment to the rest of the economy.

Trinidad and Tobago could undertake a comprehensive review of private-sector support functions, with the aim of minimizing overlap and maximizing efficiency. The central goal would be to identify a few critical functions and develop them at the highest worldclass levels. Like a modern industrial enterprise, all other functions would be outsourced to private-sector entities or firms. To succeed, many agencies must be rationalized, while remaining ones would need critical strengthening. Private-sector organizations and firms that ultimately participate in service delivery would also require such strengthening.

8. Fast-track and implement key pro-market legislation.

Competition Policy

Legislation is critical to protecting fair competition and nurturing the Trinidad and Tobago's business environment. Competition policy includes: 1) policies that enhance competition in local and national markets (e.g., liberalized trade policy and economic deregulation); and 2) competition law (also referred to as antitrust or antimonopoly law), which is designed to prevent anti-competitive business practices by firms and unnecessary intervention in the marketplace by Government (Khemani and Dutz 1995). In Trinidad and Tobago, the extent to which key legislation, such as intellectual property, anti-dumping, and fair-trade laws, has been implemented is either insufficient or still pending.

In 1996 Trinidad and Tobago's Parliament approved The Protection Against Unfair Competition Bill,³⁰ designed to protect against unfair practices of established industrial or commercial entities (damaging goodwill or reputation; discrediting another's enterprise or activity; and disclosing, acquiring, or using secret information).³¹ However, an overall competition policy, backed by a competition bill, is still in an incipient stage.

³⁰ Details are available at www.sice.oas.org

³¹ Fair Competition Act 1996.

Trade liberalization always plays a major role in fostering competition in markets for goods and services. Against this backdrop—further regional integration and establishment of a CARICOM Single Market Economy (CSME)—Trinidad and Tobago is drafting and implementing its competition policy. The CARICOM Competition Policy is seen as an important instrument to ensure the free flow of goods and services in the CSME. Operationally, CARICOM will set up a Competition Commission to deal with cross-border, anti-competitive practices, while member states will develop the institutional framework for implementation (Stewart 2002). With this in mind, Trinidad and Tobago has drafted a competition bill, but Parliament has yet to enact it.

Introducing competition principles into regulatory systems is a new and difficult process, not only in Trinidad and Tobago, but throughout CARICOM. These small countries are constrained by lack of economies of scale, and, in many industries, monopolies are sometimes inevitable. For this reason, the competition law should be tolerant toward issues of market structure, while emphasizing anti-competitive behavior wherever possible. This will be particularly relevant when evaluating mergers and acquisitions (Engel 2003). Given that the competition authority will advocate the elimination of regulations that impede competition and place barriers to entry in certain industries, it should also analyze Government action to avoid decisions and legislation detrimental to competition. Therefore, it is critical to set forth a modern competition law that 1) centers on conduct, not structure and 2) includes an advocacy role for competition authority.

For all of the above to be implemented, the process must be supported by technical assistance, training (of the competition authority, judiciary, and private sector), and exposure to the experiences and good practices of other small, open economies that have adopted competition laws. For example, for the competition authority to undertake its advocacy role effectively, it is essential that the competition agency/commission and judiciary have the economic and human resources necessary to do their jobs. This will be the only way that the business sector can gain confidence in the technical competence of the commission's staff and the transparency and fairness of procedures. Legislation should also support this role; in particular, the competition authority should be independent from the Government.

Consumer Protection

Consumer-protection policies also increase a country's competitiveness. As Porter (1990) argues, without consumer demand and well-functioning markets, domestic firms have difficulty developing the ability and experience to compete in foreign markets. More demanding consumers help local industry test new products and explore business opportunities at home, thereby reducing investment risk. In addition, the information needed to buy goods and services is often not readily available. Since the quality of goods increases with the number of well-informed consumers, consumer-protection policies improve the overall quality of

goods in the economy, benefiting producers of high-quality goods and all consumers (independent of how informed they are).

As cited by TIDCO, consumer policy has emerged in response to perceived abuses of businesspersons and inadequately-informed consumers, arising from more abundant and complex goods and services made available by an ever-widening market.³² The backbone of the initiative to formulate consumer policy, approved in 1996, is the Consumer Policy for Trinidad and Tobago; three years later, the Consumer Affairs Division (CAD) was created (CAD is now assigned to the Ministry of Community Empowerment). CAD has pursued an active advocacy role and visibility through information sharing in various media; its information-dissemination strategy has included print materials, information sessions, seminars, and workshops. CAD officers also handle consumer consultation and mediate disputes to resolve consumer-complaint issues.

However, consumer-protection legislation and CAD must overcome weaknesses in certain areas. For example, sanctions related to consumer complaints remain largely limited to admonishments, and the number of complaints processed is low. Also, CAD has only one office operating in all of Trinidad and Tobago, which limits national coverage; nonetheless, it is a step in the right direction. It is recommended that consumer-protection policies be strengthened so that violations lead to pecuniary penalties. In this regard, fines should ultimately exceed any benefits obtained from illegal conduct. In addition, increasing CAD's budget would give it more coverage and authority.

Telecommunications

Trinidad and Tobago's telecommunications package is unattractive for both FDI and ICT opportunities. Installation and rental costs are a serious disincentive and usage charges are extremely high.³³ The Telecommunications and Services Company of Trinidad and Tobago, Ltd. (TSTT) is partly owned by Cable and Wireless of the UK and partly by the Government of Trinidad and Tobago. TSTT is the domestic monopoly provider of public-switched local and international telecommunications services and was until recently the sole cell-phone provider.

As mentioned before, although Trinidad and Tobago was the first Caribbean country to consider liberalizing its telecommunications sector, it was the last to enact it. Frequent cabinet changes and reshuffling of ministries, vested interests, and an unsatisfactory commitment from the authorities championing this reform have stalled the process. The first

³² "Institutional Arrangements To Protect and Educate Consumers in Trinidad and Tobago: 1972–2001" (www. consumer.gov.tt/about/history.htm).

³³ Based on OTF Group, Ltd. interviews and information provided in Trinidad and Tobago Export Sector and Promotion Program (2003).

time a liberalization process was communicated, no change occurred in telecommunications legislation.³⁴ Hence, a main imperative is to set a clear deadline for the completion of liberalization. A statutory body should also be in place to lead and instill continuity in the reform process. In 2002, some progress was made by establishing the Telecommunications Board, which aims to bring the regulatory environment up to speed and prepare the platform for further liberalization (the Board consists of 11 members ranging from high-level public servants to academicians). However, creation of a Telecommunications Authority is still in an incipient stage.³⁵ Although a Telecommunications Act was adopted in 1998, the country must go further to establish a regulatory regime that addresses such issues as interconnectivity, rate-setting, and investment incentives. This should be jointly undertaken by the Ministry of Public Administration (now in charge of telecommunications policy) and Telecommunications Authority.³⁶ Further liberalization will hinge largely on the competence, technical capabilities, and independence granted to this Authority.³⁷

9. Understand that small countries prepared for globalization will benefit.

Over the past decade, Trinidad and Tobago has taken steps to integrate into the global economy. It has reduced trade barriers, created export zones, and attracted FDI.³⁸ It has also sought to improve access to other markets by negotiating preferential trade agreements with regional and hemispheric partners. While these are positive trends, ongoing FTAA negotiations are bound to bring new competitive pressures.

Local industries have learned to respond to demand patterns and customer needs from existing trade partnerships. Trade flows to other CARICOM countries account for almost one fourth of total exports, while the U.S. remains Trinidad and Tobago's main trade partner (receiving almost 50 percent of the country's exports). Adjusting for energy products (about 80 percent of total exports in 2002), skews this relationship more dramatically toward CARICOM (almost 50 percent of the country's exports end up in neighboring islands) (Figure 5-16).

Currently, Trinidad and Tobago is negotiating three key trade agreements. Furthest along is the CSME, modeled largely on EU economic integration. The country has already benefited significantly as CARICOM is a consumer market for Trinidad and Tobago manu-

³⁴ Interview with Ralph Henry, Chairman of the Telecommunications Board (Jan. 2004).

³⁵ Ibid.

³⁶ The Telecommunications Authority is not yet fully functioning; a director has not been recruited, and the organization consists of only one staff member.

³⁷ One of the Competition Authority's key roles is to conduct a comprehensive analysis of incentives that should be provided to pursue further privatization and set arrangements that mimic, as closely as possible, a competitive model (given the country's monopolistic market structure).

³⁸ Industry Quarterly (2002).

facturers, and Caribbean assets are potential investment opportunities for Trinidad and Tobago capital. Chubby soft drink (S. M. Jaleel) enjoys enormous penetration in Jamaica, and Republic Bank recently purchased the troubled Dominican Banco Mercantil at an extraordinary discount.

Further reduction in trade barriers, a common Court of Appeals, and even a future harmonization of currencies will accelerate

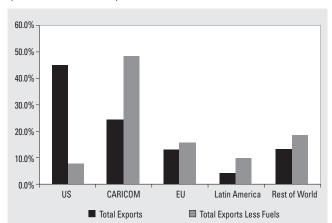


Figure 5-16. Distribution of Trade Exports, 2002 (percent of total exports)

Trinidad and Tobago's ability to sell to and invest in its neighbors. Because most of these countries are inefficient manufacturers and make few differentiated products, the current favorable relationship to Trinidad and Tobago will likely continue as the CSME becomes stronger. Of course, certain lower-value products will find markets in Trinidad and Tobago—as some St. Lucian, Jamaican, and Guyanese products do already—but the value added will continue to shift in Trinidad and Tobago's favor.

In its aggressive search for low-end markets, Trinidad and Tobago has angered its slow-moving CARICOM partners. Several bilateral agreements have been signed in seeming circumvention of the CSME, including a particularly irksome agreement with Costa Rica. Trinidad and Tobago manufacturers are correct in understanding that their success is tied to ever-widening market access for their inexpensive goods. Unfortunately, their efforts will take them into ever more competition with more competitive international rivals. In this respect, CSME's greatest significance to Trinidad and Tobago may be that it paves the way for a coordinated deterioration of its now-profitable consumer markets. FTAA will eliminate trade and investment barriers on virtually all goods and services traded by 34 member countries. Although Trinidad and Tobago already enjoys duty-free access to the U.S., forthcoming changes in trade agreements will create new opportunities and challenges that the country needs to embrace. For example, the country's export manufacturers will have access to new, larger markets in the rest of the Americas; at the same time, they will face greater international competition. Under FTAA, Trinidad and Tobago service providers will be able to tender for projects in the U.S. and Canada.

Shifts in international trade regimes have already dislocated whole business sectors in Trinidad and Tobago. The country's agriculture sector has proven particularly vulnerable

Sources: IMF (2003), Trade Map (2002), and study.

to resource-driven success and changing international trade agreements. Reforms are only now uncovering the true competitiveness gap accumulated by this sector. Manufacturing is perhaps the most vulnerable sector.³⁹ As introduction of FTAA gradually reduces tariffs, Trinidad and Tobago manufacturers will face pressure from high-quality products from multinationals entering CARICOM countries. One such example is furniture, which, in recent years, has seen a 30 percent reduction in production. Some blame this on unfair competition from abroad; others simply deem the industry uncompetitive.⁴⁰ Some businesses remain dismissive of FTAA and are not prepared for its consequences. Trade liberalization will require new patterns of policymaking to prevent further industry dislocation by undertaking changes as private-sector led opportunities. In this way, FTAA is as much a short-term threat as it is an opportunity for private-sector transformation.

While non-tariff barriers have undoubtedly played a role in accessing customers outside CARICOM, the most important cause of Trinidad and Tobago's weak preparedness for FTAA is its inability to produce goods and services that others outside the region would buy.

Raising the Standards

During the last few years of economic growth, Trinidad and Tobago's energy resources have assured it a privileged spot among CARICOM countries and cushioned it from the last Caribbean economic downturn. While CARICOM remains an important market for Trinidad and Tobago's exports, it has offered little challenge to local exporters, compared to international markets. To date, the country has subscribed to CARICOM's policy of progressive expansion of bilateral trade treaties, governed by the priority to cushion these small, open economies from negative trends in the international environment. However, as global and regional liberalization moves toward greater reciprocity in trade between developed and developing countries, erosion of trade preferences under special trade arrangements (e.g., CBI, Cotonou, GSP, and CARIBCAN) will expose Trinidad and Tobago's firms to increased competition. Trinidad and Tobago has outpaced most Caribbean countries in export performance, but this high ranking has delayed benchmarking national microeconomic competitiveness against international competitors outside the CARICOM region.⁴¹

Clearly, the advantage of new markets for Trinidad and Tobago's manufacturers is largely being achieved without FTAA. The disadvantage, however, of globally competitive goods coming into currently receptive CARICOM markets is a real and approaching threat.

³⁹ For example, SOE losses in agriculture and the food industry, including write-offs, and the virtual disappearance of the fishing industry were caused by minor changes in import requirements on its main market.

⁴⁰ Industry Quarterly (2002).

⁴¹ Industry Quarterly (2002).

When superior goods can meet Trinidad and Tobago's lower prices head on, traditional strongholds will be removed abruptly and painfully.

Delays in FTAA negotiations provide a brief, but crucial, window of opportunity for Trinidad and Tobago's firms to differentiate their goods and choose appropriate customer segments abroad, with which they can build more sustainable advantages than low price. Regardless of when FTAA comes on stream, World Trade Organization (WTO) agreements threaten similar competition on a global level. Once again, an onslaught of competition for traditional markets is to be expected, while a corresponding decrease in input prices is unlikely to be of significant benefit. Trinidad and Tobago's small domestic market may deter many international competitors from entering the home market immediately; however, for the nation's growth to continue, succeeding in export markets is a pre-condition, regardless of the extent of success enjoyed at home.

What Next?

There is much that private-sector associations and business-support agencies can and should do to prepare for the coming competitive wave. Government agencies need help in understanding and negotiating the voluminous agreements with which they are woefully unfamiliar. The level of resources being spent on the other side of the bargaining table, in both FTAA and WTO, puts Trinidad and Tobago at an enormous disadvantage.

The country must understand that reaping the benefits of these upcoming trade agreements hinges on its ability to negotiate strategically. This implies crafting a trade strategy that incorporates and is aligned with the country's future economic strategy, reflecting the country's vision for its future and the competitive goals of specific sectors and products. Being strategic, with an eye toward fostering competitiveness, means that Trinidad and Tobago must be selective in the issues it chooses to bring to the negotiating table and know where it is willing to bargain.⁴² Furthermore, relevance of trade preparation for cluster development is key if those products the country decides to bet on are subject to both tariff and non-tariff barriers. Understanding the workings of those trade requirements and their implications is imperative for both the private sector and the institutions that support its development.

Being strategic also demands that the country know its negotiating partners. Of particular relevance is understanding where it is willing to negotiate with regard to U.S. areas of interest and how trade policy is crafted in Washington DC. In the U.S., the power to influence trade talks is centered in Congress; neither the President nor trade representatives have the authority to delineate the country's position. Hence, a good strategy to get across a country's trade platform is to exert pressure from within, from an organized constituency

⁴² Industry Quarterly (2002).

that can lobby for certain issues. This can also be achieved through mobilizing immigrant communities in the U.S.

In preparing for a strategic approach to trade negotiations, Trinidad and Tobago also faces the challenge of being part of CARICOM. Regional integration has helped the country in terms of market access, but it has also generated complacency in the country's private sector. At the negotiating table, Trinidad and Tobago's interest may diverge from those of its CARCOM neighbors, given the differing economic structures of these countries. In this regard, multilateral organizations can help build institutional capacity to support trade negotiations and preparation for the Government, clusters, and firms.

10. View the energy industry as a market.

While Trinidad and Tobago's economic growth has been driven by the discovery of energy resources, growth of related industries has not kept pace. Currently, the energy cluster is primarily widening into downstream industries. Firms are largely low value-added (e.g., firms in the plastic, packaging, and printing cluster) or SOEs, which acquire more sophisticated technical capabilities through joint ventures with foreign firms. For example, the Methanol Company joined Ferrostaal, a German consortium. Fertrin, which produces ammonia, joined and was then bought out by Arcadian Partners LP. Both ANSA McAL and CL Financial are also in the process of establishing world-class ammonia plants. BP is considering an ethylene plant to make polyethylene resin, the raw material for plastics. While these plants will expand exports, they basically compete on access to raw materials and freight savings. In the process, higher value-added local industries cannot develop because they would not have access to the range of petrochemical inputs needed for production.

Since the early 1970s, the Government's driver of energy-led growth has remained unchanged: increase production and monetization of geological resources through investment in prospecting (outsourced) and distribution of extraction areas to carefully selected foreign bidders. The shift from oil to gas exploitation, rather than the push to leverage resource wealth through local industries, has driven the development of downstream industries, which are vital to primary extraction activities and monetization. Until Trinidad and Tobago developed liquefied natural gas (LNG) capabilities four years ago, turning gas into its downstream components was the only way to export it.

The country has captured leading international positions as a producer of petrochemicals; and, using state-of-the-art technology, has developed its extractive sector to take advantage of LNG, an emerging segment of the world energy market. The energy cluster—from extraction to downstream development, including the institutional framework for resource management and international marketing—is the only domain of the economy where Trinidad and Tobago has actively sought and acquired positions as a world leader. This proactive development policy can serve as a model for cluster development in other areas.

Local Impact

Beyond the start-up phase, Trinidad and Tobago's energy sector does not contribute to creating high-paying, local jobs. To date, the link between the energy sector and unrelated economic activities has been dominated by negative externalities (in the form of macroeconomic shocks) and decapitalization (channeling out of human and financial capital).

These externality trends must shift from enhancing resource dependence to leveraging geological resources. The Government's proposal to increase the minimum wage of oil-sector workers would only tax current operations, artificially attract more highly-skilled labor to the sector, and distort the labor market. Another proposal would force international companies to use local ones for a percentage of required services (versus encouraging growth to enable firms to win the business themselves). Such subsidies inhibit local companies' long-term competitive potential; they encourage uncompetitive firms unable to export their services, thereby exacerbating their dependency on the local oil industry.

Upstream Industries

Trinidad and Tobago has the opportunity to leverage the energy sector to create worldclass upstream industries and related services. Trinidad and Tobago's firms can target this profitable market of sophisticated multinational firms with such services such as geological modeling, deep-sea drilling, and construction of drilling platforms. (Sophisticated local demand is a key ingredient and impetus for creating competitive clusters.) Each year, billions of U.S. dollars are spent on upstream activities. BP alone spends almost US\$ 500 million on geological work, design engineers, deep-sea drilling, fabricators to build platforms, and other services.⁴³ It is projected that almost 40 percent (US\$ 200 million) of outsourced services could be contracted to Trinidad and Tobago's firms.⁴⁴ However, because training and education have not kept pace with the sector's labor-market demand, an entire range of skills and capabilities is missing.

During previous oil booms, the oil business did not require a stable demand for services; investment was labor intensive only during the beginning phase of exploration. Unlike oil, gas cannot be easily moved; transforming it into LNG requires building plants (10–20 year investments). Furthermore, gas-platform drilling provides for a more stable

⁴³ BP's upper management has stated that it would rather outsource certain services used locally than pay U.S. consultants and engineers to drag drilling platforms across thousands of miles of ocean.

⁴⁴ Interview with former BP manager (Jan. 2004).

demand of upstream labor. Platforms used to access deep-sea gas pockets have a five-year life (as gas is pumped, pressure decreases and supply falls, making it necessary to drill a new platform). Since a platform must be built in ongoing five-year intervals, the demand for labor (design engineers, platform fabricators, and supporting services) is permanent. This should represent a great opportunity and incentive for Trinidad and Tobago firms to offer these products and for both public-sector and academic institutions to join forces to upgrade the needed skills.

Most compelling, these global customers have other operations around the world. A Trinidad and Tobago platform maker or geological modeling firm, if successful, can hope to serve energy industries around the world. Drillers are a case in point. By world standards, Trinidad and Tobago drillers are resistant; to date, they have been exported to Egypt, and market potential can be broadened.⁴⁵ Such high-tech services build on, rather than exploit, Trinidad and Tobago's natural resource wealth. They will remain relevant exports, even after the country's own natural-resource reserves are exhausted.

Policy Recommendations

The Government of Trinidad and Tobago has a clear and critical role to play in the country's change process: it should do all it can to support and enable the business environment, except to inhibit competition. As this chapter delineates, the country has abundant physical capital: natural endowments, as well as man-made and financial capital. Undoubtedly, it is weak in the higher and more essential, forms of capital: institutional, knowledge, human, and cultural (Figure 5-3). Investing (and encouraging investment) in this social capital is the Government's primary role as it seeks to support a competitive and efficient private sector.

What follows is a set of public-policy recommendations that the Government should address if it wants to upgrade Trinidad and Tobago's higher forms of capital so that the economy can, once and for all, move away from spending the flow of oil and gas rents toward investing in a strategy that creates the conditions for long-term prosperity (Table 5-1). Organized around the four forms of social capital, as well as financial (physical) capital, these recommendations define a sphere of Government involvement to support private-sector development. They focus on ways in which the State can both accelerate and support the competitiveness of Trinidad and Tobago's firms without impeding competition and, thus, invest in sustainable wealth creation for the citizens of Trinidad and Tobago.

As the policy recommendations in Table 5-1 illustrate, Government-led institutional reforms are needed on many fronts. The State must work toward becoming a much smaller

:			
Problem	Proposed Reform	Objectives	Priority
Institutional Capital Institutional map lacks agencies with clear mandate, autonomy, resources, and strategic vision to promote private-sector develop- ment; public institutions are disconnected from private-sector priorities.	Reorganize private-sector devel- opment institutions to organize the priorities of the non-oil sector.	 Shift from income-redistribution agencies to technical-up-grading institutions through a competitive process. Create clear and distinct organizational mandates under the Ministry of Trade and Industry to minimize overlap and maximize efficiency. (see Imperative 7) 	High
Cluster-specific institutions (cur- rently under TIDCO) are fragment- ed, uncoordinated, and poorly funded; most targeted support for firms consists of concessionary financing or tax advantages.	Strengthen cluster-specific orga- nizations.	 Coordinate action into a coherent industry-wide development strategy. Incorporate the industry and facilitate experts in leading collaborative initiatives that improve global competitiveness. Implement a competitive, iterative process for cluster selection. (see Imperative 7) 	High
Key reforms (e.g., telecommuni- cations liberalization or tertiary education) are backlogged by continuous reshuffling of the many government ministries; few reforms are set up as top priori- ties and adequately addressed.	Conduct a review of the func- tions of government ministries to identify areas of overlap so that resources are used more efficiently.	 Establish an efficient government apparatus: increase information disclosure, streamline operations based on priorities, and improve budget allocation and use of public resources to encourage long-term investment. Encourage flexibility and agility of the State when operating in a more liberalized environment. Guarantee that key areas of reform are granted priority, continuity, and momentum. 	High

Table 5-1. Higher Forms of Capital: Policy Recommendations

Copyright © by the Inter-American Development Bank. All rights reserved. For more information visit our website: www.iadb.org/pub

Table 2-1. Tigher Forms of Capital. Force Accounting autors (comment	Deserved Deferm	Ohioreituse	Drinity
Unattractive telecommunications package disadvantages ICT's emergence as an enabler of more	Fast-track telecommunications liberalization legislation.	 Set a clear deadline for completing liberalization. Establish a regulatory regime that addresses such issues as interconnectivity, rate-setting, and investment incen- 	High
competitive industries.		tives that promote competition in the current monopolistic structure. (see Imperative 8)	-
State has lagged in creating a statutory body to lead and instill continuity in telecommunications reform.	Establish lelecommunications Authority and Regulatory Agency.	 Recruit director experienced in telecommunications liberal- ization and regulatory issues. Ensure that the Agency is competent, technically capable, and independent. (see Imperative 8) 	цр
Reduced tariffs, as a result of FTAA, will pressure manufactur- ing as high-quality products enter CARICOM countries; failure to prioritize in upcoming trade talks will result in less than ideal outcomes.	Support tactical training for trade negotiations and prepare for necessary adjustments.	 Craft trade strategy that incorporates and is aligned with the country's future economic strategy and formulate the competitive goals of specific sectors and products. Coordinate effectively with CARICOM to establish needed internal trade-offs negotiated under a united front. (see Imperative 9) 	High
Upgrading of anti-dumping standards lags enactment and enforcement of legislation.	Enforce anti-dumping legislation and upgrading of standards to prepare for trade liberalization.	 Help firms upgrade standards to handle problems related to U.S. non-tariff barriers. Set reasonable targets and inform industry so that firms view these standards as goals to meet rather than insurmountable obstacles. (see Imperative 9) 	Medium

Problem	Proposed Reform	Objectives	Priority
Export-promotion activities have concentrated heavily on tourism and the generic Trinidad and To- bago brand (50 percent of non-oil exports go to CARICOM).	Promote FDI and non-oil exports outside CARICOM.	 Set clear institutional mandates and align goals with those of the private sector. Equip mandated institution (TIDCO) with adequate human resources and technical capabilities. (see Imperative 7) 	Medium
Bureaucratic delays have created Customs inefficiencies (maligned by both government and private- sector representatives).	Improve efficiencies of Customs agencies to minimize transaction costs.	(see Imperative 2)	Medium
Knowledge Capital Education and training (particu- larly at the tertiary level) have not kept pace with labor-market demand in various sectors (e.g., upstream energy cluster and yachting industry).	Create and strengthen partner- ships between academia and the private sector.	 Upgrade skills and capabilities needed in targeted growth sectors. Establish university programs and research centers focused on innovation that can the private sector can capitalize. Help universities create internship programs that link students with firms during their training. (see <i>Imperative 3</i>) 	H H
Internet penetration and other ICTs are low compared to other countries in the region.	Adopt ICTs and disseminate in the private sector.	 Digitize key business processes (e.g., accounting, payroll, and purchasing). Support proprietary local software development in key industries, particularly those that require customization. Include ICT and technology training as part of the business curriculum in universities. 	Medium

Table 5-1. Higher Forms of Capital: Policy Recommendations (continued)

Copyright \odot by the Inter-American Development Bank. All rights reserved. For more information visit our website: www.iadb.org/pub

Problem	Proposed Reform	Objectives	Priority
Firms—especially in sectors requiring IT capabilities, data processing, and software main- tenance—point to difficulties in recruiting Trinidad and Tobago nationals with the right skills.	Make applied science and tech- nology a more relevant part of tertiary education and technical and vocational training.	 Increase opportunity for Trinidad and Tobago nationals to participate locally in the knowledge economy. Reap market opportunities that currently go to foreign firms (e.g., upstream energy sector and IT-related activities). (see Imperative 6) 	High
Human Capital Lack of information is the prob- lem small firms encounter most often in attempting to export; firms and clusters experience seri- ous gaps in links with customers and suppliers.	Develop training programs on market research and data-collec- tion systems.	 Address local businesses' need for market information on potential customers and competitors, both locally and internationally. Help private-sector development organizations foster closer relationships with executives in firms that fit targeted industries (e.g., Ireland and Costa Rica). Create digital links between firms and their customers, and train firms in how to act on this information expeditiously. (see Imperative 6) 	Medium
Current skill level in promising clusters impedes these industries' growth and income potential.	Create specialized training institutions for craftsmanship in the Yachting Industry, Upstream Energy Sector, and other promis- ing clusters.	 Promote and strengthen organizations and training institutes that offer targeted-industry skill upgrading; such institutions include National Energy Business Alliance (NEBA), Center for Energy Entrepreneurship Development (CEED), and Trinidad and Tobago Hospitality and Tourism Institute (TTHTI). (see Imperative 3) 	Medium

Problem	Proposed Reform	Objectives	Priority
Cultural Capital The country fails to reward an entrepreneurial and innovative culture.	Shift from structural to cognitive catalysts for change by creating an award for business strat- egy and innovation; press could feature monthly recipients, who could share lessons with other firms (such as Malcolm Baldrige National Quality Award).	 Generate incentives for entrepreneurship and innovation. Send private sector strong message that the Government regards entrepreneurship and innovation as high-priority areas for support. Publicize innovation success stories to instill the sense of possibility among Trinidad and Tobago firms; create role models. 	High
Most Trinidad and Tobago businesspersons regard oil and gas as the only viable alternative for creating globally competitive firms and products; the press and current role models reflect this view.	Help society make the cognitive shift with regard to creating globally competitive firms and products.	 Organize seminars to train business journalists in state-of-the-art competitiveness and strategy concepts (such training will help journalists ask businesses the right questions and cover relevant world-business trends; understanding what creates sustainable success will help the press to publicize the right role models in business society). Publicly recognize entrepreneurs and innovators. 	High
Government institutions and agencies lack technical capabili- ties (public-sector employment has fluctuated between 25 and 30 percent of total employment.	Encourage pro-merit and leader- ship campaigns in government.	 Instill a results-oriented and merit-based culture for mid- and high-level public servants. Attract and retain highly qualified individuals, even from the private sector. (see Imperative 2) 	High

 Table 5-1. Higher Forms of Capital: Policy Recommendations (continued)

Table 5-1. Higher Forms of Cap	apital: Policy Recommendations (continued)	S (continued)	
Problem	Proposed Reform	Objectives	Priority
Financial Capital The country has consistently failed to leverage its oil income, particu- larly after the second oil shock in 1981–83; the Government's focus has alternated between crisis management and income collection.	Strengthen fiscal management to rationalize spending.	 Strengthen budgetary institutions to rationalize spending, size of bureaucracy, and layers of decision-making. Reform budgetary process and periodic disbursements throughout the year that do not allow for long-term planning and strategy. 	Medium
Privatization policy remains entrenched in fiscal management, with little or no explicit connec- tion to private-sector develop- ment.	Streamline privatization process.	 Include clear commercial objectives and performance targets in the privatization process, while limiting the bureaucracy's ability to get involved in day-to-day management. Bring international knowledge and professional management into these entities. Reform work practices and incentive and reward systems, establish explicit cultural-change programs, and make structured and sustained investment in management and staff training and development. 	Medium

and efficient entity with a clear mandate.⁴⁶ Not surprisingly, only a few core functions are set as top priorities and addressed adequately, while many programs are backlogged and lack continuity (e.g., telecommunications liberalization, cultural policy, and tertiary education).

In addition, private-sector institutions lack the strategic vision, resources, and autonomy to promote private-sector development. Most remain disconnected from the needs of firms and lack the technical capabilities and entrepreneurial expertise key to upholding the legitimacy of such institutions. These organizations are commonly perceived as either instruments of political patronage or social development programs used as mechanisms of income redistribution.

In terms of legislative actions, the Government should fast-track and strengthen legislation that is fundamental to the development of competitive firms. A clear deadline should be set to finalize telecommunications liberalization and lay out the terms under which further privatization will occur. In such areas as anti-dumping and standards, although legislation is in place, there is a clear lag between enactment and enforcement. FTAA is imminent; when it goes into effect, it will reward and punish countries asymmetrically. Those prepared for a liberalized environment will undergo a less painful adjustment process and will reap greater than expected benefits. In such areas as product standards, firms can start to view these as goals to be met to target more sophisticated customers rather than insurmountable obstacles.

With respect to cluster-specific initiatives, the Government can spearhead them through concrete policies. First and foremost, it must formulate and coordinate a coherent, industry-wide development strategy for targeted clusters, in conjunction with private-sector support and participation. Credible institutions must incorporate industry goals and facilitate collaborative initiatives that improve global competitiveness. Second, cluster selection and targeted Government support should be done through a competitive, iterative process. Cluster initiatives should focus on technical assistance, rather than concessionary financing or tax exemptions. Third, the Government should address the skills gap in many promising clusters, in addition to facilitating local firms' access to market information through public agencies. For example, specialized craftsmanship training institutions are lacking in the yachting industry, upstream energy sector, and other promising clusters. Information externalities exist because, while the costs of acquiring market information are borne privately, the benefits are reaped socially; hence, the Government has a role to play in identifying potential customers and competitors, both locally and internationally, for new and existing firms whose scale may be too small to bear such research endeavors individually.

⁴⁶ The Central Government routinely addresses institutional weaknesses and reform priorities by creating entirely new ministries; also, cabinet reshuffling is the norm in reaction to political pressures.

To improve its competitiveness, Trinidad and Tobago must take concrete steps to upgrade its knowledge and human capital (in this sphere, the country lags developed countries considerably).⁴⁷ First, it must create and strengthen partnerships between academia and the private sector. To date, there has been a serious disconnect between university and technical and vocational institutions and private-sector demand for skills. Seldom can one find private-sector involvement in these institutions (e.g., development of study programs or part-time professorships or board membership). Second, the gap in tertiary education remains worrisome. While primary and secondary enrollments are in line with or exceed those of other LAC countries, university enrollment rates fluctuate about 6-7 percent. In response, the Government has created a series of programs and technical schools and has made program accreditation easier and courses more flexible. While these efforts are in the right direction—although they must be carried to completion—businesspersons still point to difficulties in getting the right local people to fill jobs.⁴⁸ Hence, the Government should support industry-specific training agencies that prove to have private-sector linkages and, through them, encourage internships and exchange that bring knowledge back to the classroom.

Finally, with regard to cultural capital and private-sector development,⁴⁹ the country must shift from structural to cognitive incentives as the basis for change. In this respect, the private sector must lead in developing its future by proactively seeking market opportunities and requesting the Government's support as an enabler, not an architect, of the future. Hence, policies that aim at rewarding innovation and entrepreneurship are favored, as are merit-based promotions and public-servant campaigns. The Government should help to publicize and disseminate entrepreneurial success stories to awaken Trinidad and Tobago nationals to what is possible. The idea is to move away from a state of complacency—the Government as caretaker—to one in which competition is viewed as the force that spurs innovation, human initiative, learning, interpersonal trust, and the triumph of cooperation (Fairbanks 2000).

⁴⁷ Upgrading knowledge and human capital should become the Government's immediate priority since fully realizing a return on investment in upgrading intangible assets requires both practice and patience over the long term.

⁴⁸ In these authors' interviews, this was especially true in the upstream energy sector, as well as in IT, data processing, and software maintenance.

⁴⁹ Cultural capital refers not only to the explicit articulations of a nation's culture (e.g., language, music, and art) but also its values, attitudes, and accepted behaviors linked to innovation (e.g., the ways in which individuals think about risk, trust, competition, authority, and other critical variables).

Annex I

Country Competitiveness Profile: Trinidad andTobago

The Global Competitiveness Report (GCR), produced annually by the World Economic Forum (WEF), assesses countries' degree of competitiveness. Country rankings are based on two indicators: Growth Competitiveness Index (GCI) and Microeconomic Competitiveness Index (MICI). The 2002–03 GCR surveyed and ranked 80 countries on these indices.

The GCI measures the national economy's capacity to achieve sustained economic growth over the medium term, controlling for the current level of development; that is, it attempts to capture a country's medium-term growth prospects, based on three component indices: 1) macroeconomic environment, 2) public institutions, and 3) technology. At the same time, these indices are constructed by reviewing various indicators. For example, the macroeconomic environment index is composed of three sub-indices: 1) macroeconomic stability,⁵⁰ 2) country credit rating,⁵¹ and 3) government expenditure.⁵²

While the GCI captures a country's overall macroeconomic policy and prospects, macroeconomic stability is a necessary, but insufficient, condition for rapid productivity growth. Competitiveness is rooted in a nation's microeconomic fundamentals, as revealed by quality of the business environment and sophistication of firms. The MICI assesses the microeconomic foundations that define a country's current productivity level and well-being. It determines the capacity and willingness of a country's business community to respond to the current environment. It measures the set of institutions, as well as market structures and economic policies supportive of high current levels of prosperity, as captured by two sub-indices: 1) sophistication of company operations and strategy and 2) quality of the business environment (WEF 2002).

Evaluating the sophistication of company operations and strategy is based on four sub-indices: 1) strategy, 2) marketing, 3) organizational capabilities, and 4) technology. The strategy sub-index captures such elements as nature of competitive advantage, value-chain presence, production process sophistication, and capacity to innovate. The marketing sub-index is calculated based on degree of customer orientation, extent of branding, control of

⁵⁰ The macroeconomic sub-index accounts for such variables as rate of inflation, real exchange rate, savings rate, and access to credit.

⁵¹ The country credit ratings sub-index reviews a country's credit rating based on Moody's and S&P and business cost caused by terrorism.

⁵² As a share of GDP.

international distribution, and breadth of international markets. Organizational capabilities are assessed by the extent of company staff training, willingness to delegate, extent of incentive compensation, and reliance on professional management. Technology at the firm level is measured by the extent of R&D spending, adoption of international technology, and capacity to innovate.

Lastly, quality of the business environment reviews 1) factor conditions, 2) demand conditions, 3) context for firm strategy and rivalry, and 4) related and supporting industries. At the same time, these are assessed using a set of proxies or indicators for each sub-index. For example, factor conditions relate to the quality of physical and administrative infrastructure, human resources, and science and technology. Demand conditions are based on such factors as buyer sophistication, demand-regulating standards, and government procurement of advanced technology. The last two sub-indices include proxies for extent of local competition, incentive structures, local access to products and equipment, and state of cluster development (as measured by such factors as quality of local suppliers, degree of collaboration between firms in product and processes, and intensity of local competition).

Growth Competitive Index Performance

In 2002–03, the first year that Trinidad and Tobago was included in the GCI sample, the country ranked 37 out of the 80 countries surveyed (Table AI-1). Trinidad's GCI standing is in relation to three sets of countries: 1) benchmarks selected for this study, 2) CARICOM, and 3) FTAA (comprising most LAC countries, as well as the U.S. and Canada).

Based on the GCI, the country performed better than the CARICOM and LAC countries ranked, except for Chile (20). Although ranked well below benchmark countries, Trinidad and Tobago ranked 25 in terms of its macroeconomic environment, outperformed only by three benchmark countries: Iceland (24), Ireland (9), and Norway (7). In this respect, the country enjoys a privileged, and even enviable, position relative to its regional neighbors.

Less striking is the country's rankings in terms of public institutions (43) and technology (42). The former ranking consists of two sub-index rankings: contract and law (42) and corruption (48). In terms of contract and law, the country outperforms most LAC and CARICOM countries, except for Uruguay (21) and Chile (24); however, in terms of corruption, it scores lower than Chile (10), Uruguay (24), Peru (37), Colombia (41), El Salvador (40), Brazil (46) and Mexico (47) and much lower than Iceland (2), Singapore (5), Norway (12), and Ireland (14). In terms of public institutions, much attention should focus on favoritism in decisions of government officials (55), irregular payments in exports and imports (50), irregular payments in public utilities (50), and organized crime (45) (Table AI-2). In this respect, Trinidad and Tobago ranks much lower than more developed countries, being more in line with countries in the region where corruption and contract enforcement impede growth and prosperity.

	Die Al-T. Grow	vui co	mper	luven	essi	nuex,	vvoric		iomic	Forui	11 2002	<u> </u>	
		Growth Competitiveness Index	Technology Ranking	Innovation Subindex	ICT Subindex	Technology Transfer	Public Institutions Ranking	Contracts and Law Subindex	Corruption Subindex	Macroeconomic Environment Ranking	Macroeconomic Stability Subindex	Country Credit Subindex	Government Expenditure Subindex
	Singapore	4	17	20	5		7	9	5	1	1	18	11
S	Norway	9	10	12	8	_	12	16	12	7	2	7	63
IAR	Iceland	12	16	21	2	_	3	3	2	24	44	24	39
CHN	Ireland	24	31	22	22		18	20	14	9	28	14	36
BENCHMARKS	Trinidad	37	42	67	43	12	43	42	48	25	29	39	28
8	Costa Rica	43	37	36	45		46	43	59	43	69	50	7
5													
CARICOM	Trinidad	37	42	67	43	12	43	42	48	25	29	39	28
ARI	Jamaica	60	46	69	48	19 50	51	52	49	74	64	70	46
0	Haiti	80	80	80	80	56	80	80	79	68	78	79	1
	US	1	1	1	4	_	16	15	20	2	46	6	12
	Canada	8	8	8	11		9	14	7	12	13	10	52
	Chile	20	33	37	33	24	19	24	10	13	33	28	21
	Trinidad	37	42	67	43	12	43	42	48	25	29	39	28
	Uruguay	42	50	43	58	48	20	21	24	73	79	42	41
	Mexico	45	47	56	46	27	58	62	47	21	60	33	4
	Brazil	46	35	53	41	3	45	45	46	67	61	54	48
	Panama	50	49	41	53	21	55	53	55	42	39	48	35
	Dominican												
FTAA	Republic	52	48	46	55	14	60	56	57	41	58	60	8
E	Peru	54	64	48	60	41	52	59	37	49	49	59	34
	Columbia	56	58	55	56	40	54	64	41	51	66	55	18
	El Salvador	57	69	59	65	49	48	58	40	33	54	52	14
	Argentina	63	44	30	47	20	66	76	58	65	65	72	20
	Venezuela	68	53	47	51	37	73	77	65	72	77	61	25
	Guatemala	70	74	75	71	51	74	79	66	56	75	62	2
	Paraguay	72	76	73	68 66	54	71	72	72 60	63	73	69 76	13
	Ecuador Nicaragua	73 75	70 73	60 70	66 75	47 42	75 64	78 69	69 60	69 79	63 76	76 77	30 58
	Honduras	76	75	70	76	42 46	76	75	74	79	70	73	31
	Bolivia	78	77	58	72	55	69	70	71	76	67	68	57
		-			-			-		-			

Table AI-1. Growth Competitiveness Index, World Economic Forum 2002

Trinidad and Tobago has a visible gap in its technology ranking. In terms of technology transfer, the country's position is impressive (12), surpassed only by Brazil (3) and Costa Rica (7) (Table AI-1); however, on the innovation sub-index (which measures perception of the role of innovation in company performance, level of R&D spending in the economy, and overall R&D collaboration of business and academic communities), the country's score is dismal (67). The country ranks in the lower end of the sample and far from benchmark countries. Closer examination of these indicators reveals specific weaknesses. Areas that call for improvement include quality of competition in the ISP sector (76) (the lowest score in all the sub-indices), tertiary enrollment (75), Internet access in schools (61), laws relating to ICT (59), government prioritization of ICT (57), university/industry research collaboration (55), number of cellular phones (49), and ownership of personal computers (42) (Table AI-2).

Notable Competitive Advantage Criteria	s Rank	Notable Competitive Disadvantage Criteria	es Rank
Macroeconomic Environment		Macroeconomic Environment	
Recession expectations	10	Real exchange rate, 2001	61
Access to credit	10	Interest rate spread, 2001	54
Government surplus/deficit, 2001	18	National savings rate, 2001	42
Inflation, 2001	26		
Government expenditure	28		
Technology		Technology	
FDI and technology transfer	10	Quality of competition in the ISP sector	76
Utility patents, 2001	28	Tertiary enrollment	75
Technological sophistication	31	Internet access in schools	61
Government success in ICT promotion	37	Laws relating to ICT	5
Firm-level innovation	39	Government prioritization of ICT	57
		University/Industry research collaboration	55
		Cellular telephones, 2001	49
		Company spending on R&D	47
		Prevalence of foreign technological	
		licensing	45
		Internet hosts, 2001	42
		Telephone lines, 2001	42
		Personal computers, 2001	42
		Internet users, 2001	40
Public institutions		Public institutions	
Judicial independence	22	Favoritism in decisions of government	
		officials	55
Property rights	39	Irregular payments in exports and imports	50
Irregular payments in tax collection	39	Irregular payments in public utilities	50
		Organized crime	45

Table AI-2. Trinidad and Tobago–National Competitiveness Balance Sheet: Growth Competitiveness Index

Source: World Economic Forum GCR 2001-02.

In sum, Trinidad and Tobago has achieved a relatively enviable position in the CARICOM and LAC regions with respect to macroeconomic stability; the GCI substantiates this observation. However, the country has failed to outperform its neighbors in terms of broad achievements in technology and public institutions. As captured by the GCI, Trinidad and Tobago remains far from benchmark countries (with the possible exception of Costa Rica), indicating that work in these two areas may be required if the country wants to achieve developedcountry status in the years ahead.

Microeconomic Competitiveness Index Performance

In terms of the MICI, Trinidad and Tobago ranked 44 out of 80 countries (Table AI-3). The country is surpassed by all benchmark countries and four LAC countries: Chile (31), Brazil (33), Costa Rica (39), and Dominican Republic (41). In both MICI subindices, Trinidad and Tobago ranks 44 out of 80 countries. The country scores on the

	. Forum 200	۷	
	Microeconomic Competitiveness Index	Company Operations and Strategy Ranking	Quality of theNational Business Environment Ranking
Singapore	9	14	5
Iceland	17	17	14
Ireland	20	15	22
Norway	21	23	19
Costa Rica	39	32	47
Trinidad	44	44	44
Trinidad	44	44	44
Jamaica	59	60	59
Haiti	80	80	80
US	1	1	1
Canada	10	13	7
Chile	31	35	31
Brazil	33	28	36
Dominican			
Republic	41	30	53
Trinidad	44	44	44
Panama	50	54	52
Mexico	55	45	60
Columbia	56	51	57
Uruguay	62	63	61
El Salvador	63	61	62
Argentina	65	57	68
Peru	66	65	66
Venezuela	72	73	72
Guatemala	73	70	73
Nicaragua	75	75	76
Paraguay	76	77	75
Ecuador	77	74	77
Honduras	78	78	79
Bolivia	79	79	78

Table AI-3. Microeconomic Competitiveness Index, World Economic Forum 2002

Notable Competitive Advantages		Notable Competitive Disadvantages	
Criteria	Rank	Criteria	Rank
Sophistication of Company Operations and Strategy		Sophistication of Company Operations and Strategy	
Extent of regional sales	29	Capacity for innovation	67
Extent of incentive compensation	36	Extent of branding	63
Production process sophistication	37	Value chain presence	59
Quality of National Business Environme	ent	Quality of National Business Environme	nt
Administrative burden for startups	26	Railroad infrastructure development	68
Utility patents, 2001	28	Effectiveness of anti-trust policy	67
Efficacy of corporate boards	29	Local availability of components and parts	65

Table AI-4. Trinidad and Tobago–National Competitiveness Balance Sheet:
Microeconomic Competitiveness Index

Source: World Economic Forum GCR 2001-02.

upper scale of company operations and strategy in the following criteria: extent of regional sales (29), extent of incentive compensation (36), and production process sophistication (37) (Table AI-4). These results are not surprising, given the country's share of exports to the U.S. (46.8 percent) and CARICOM countries (20.5 percent), along with the capital-intensive nature of its petroleum and gas exploration. However, the country performs poorly with regard to cluster-development indicators, including capacity for innovation (67), extent of branding (63), value-chain presence (59), and degree of customer orientation (52) (Table AI-4).

With regard to quality of the business environment, Trinidad and Tobago is well-positioned in areas related to administrative burden for start-ups (26) and efficacy of corporate boards (29). Yet, the country underperforms in effectiveness of antitrust policy (67) and local availability of components and parts (65). The extent to which key legislation (e.g., intellectual property, anti-dumping, and fair trade laws) has been implemented is either imperfect or still pending.⁵³

Although the GCR methods and rankings have their shortcomings, one cannot dismiss the report's ability to pinpoint and diagnose potential areas of improvement for country competitiveness. For Trinidad and Tobago, several areas in need of upgrading emerge. First, the country must focus more on technology, particularly the role of innovation in fostering competitive advantage. It is noteworthy that, in this respect, the country ranks in the bottom half of the 80 countries surveyed and close to many countries that it outperforms in other areas. Second, the country must strengthen public institutions, especially in terms

⁵³ Adoption of competition policy is in the incipient stage and under review TIDCO (2003).

of eliminating corruption and organized crime (pinpointing a clear area for government improvement). Third, MICI results clearly show that private-sector initiatives—particularly those related to cluster development—which are still pending, are an imperative to bolstering competitiveness.

Performance by Other Standards

By regional standards, Trinidad and Tobago is recognized for its favorable investment climate, as captured by other survey-based indices and indicators. According to the Heritage Foundation, Trinidad and Tobago is considered one of the freest economies in the Caribbean (after Barbados), approaching the same level of economic freedom awarded Costa Rica and Panama (Table AI-5).⁵⁴ Areas of particularly good performance include monetary policy (due to low inflation),⁵⁵ low barriers to capital flows and foreign investment, and moderate level of restrictions on banking and finance. Conversely, trade-policy scores worsened because of heightened levels of protectionism,⁵⁶ as well as government intervention in the economy.⁵⁷

Transparency International's Corruption Perception Index (CPI) ranks a given country's degree of corruption, as perceived by the international business community and risk analysts, on a scale from 0 (most corrupt) to 10 (least corrupt). Trinidad and Tobago's 2002 CPI ranking of 33 (out of 102 countries) is noteworthy relative to its LAC neighbors, but is far from benchmark countries (Table AI-5). The main factor determining the country's ranking is the highly publicized corruption cases of three major Government-funded projects.⁵⁸ Other serious issues include the Government's potentially weak stance on anti-corruption and transparency. The assessment stresses the Government agenda's lack of an anti-corruption strategy.⁵⁹ At the same time, the country is not on the list of LAC countries cited for

⁵⁴ The Index of Economic Freedom is constructed based on 10 criteria: trade policy, fiscal burden, government intervention, monetary policy, foreign investment, banking and finance, wages and prices, property rights, regulation, and prevalence of a black market.

⁵⁵ From 1992 to 2001, the weighted average annual rate of inflation was 4.85 percent.

⁵⁶ According to the World Bank, Trinidad and Tobago's weighted average tariff rate in 1999 (the most recent year for which data are available) was 17 percent, up from 9.1 percent reported in the 2002 Heritage Foundation Index.

⁵⁷ According to the Heritage Foundation, CBTT data indicate that, in 2001, government consumption amounted to 13.3 percent of GDP; 9.92 percent of its revenues came from SOEs and government-owned property.

⁵⁸ The Regional Corruption Report for Central America and the Caribbean cites the following cases: Inncogen power plant, desalinization plant, and airport expansion project (Transparency International 2002, www.transparency.org). According to media sources cited by Transparency International, these three cases warranted large media coverage and were qualified by the main opposition party (United National Congress) as a "witch-hunt." Reportedly, the US\$ 1.6 billion Piarco Airport expansion project was investigated only after the former government's collapse; the report was kept secret by the current administration for more than a year. The event was cited as a major cause of the former government's collapse.

⁵⁹ Trinidad Tobago Overview, National Integrity Systems 2001, Transparency International.

	Combined Average Ratings Freedom House 2002		Corruption Perceptions Index Transparency International 2002	ex 002	Index of Heritage	Index of Economic Freedom Heritage Foundation 2003	
веиснирвка	Iceland Ireland 1 Norway 1.5 Trinidad 1.5 Costa Rica 1.5 Singapore 5	BENCHWBRKS	lceland Singapore Norway Ireland Trinidad Costa Rica	4 5 12 33 33 40	Singapore Ireland Norway Trinidad Costa Rica		2 5 11 27 43 44
САВІСОМ	Trinidad 1.5 Jamaica 2 Haiti 5	CARICOM	Trinidad Jamaica Haiti	33 45 89	Trinidad Jamaica Haiti		43 56 128
AATA	Canada US Panama Uruguay Trinidad Bolivia Chile Argentina Ecuador El Salvador Dominican Republic El Salvador Brazil Moduras Nicaragua Brazil Mexico Paraguay Columbia Venezuela Honduras Peru 4.5	– – – ი ი ი ი ი ი ი ი ი ი ი ი ი ი ი ი .	Canada US Chile Uruguay Trinidad Brazil Peru Columbia Mexico Dominican Republic El Salvador Panama Argentina Argentina Argentina Argentina Argentina Argentina Argentina Bolivia Ecuador Paraguay	98 8 8 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	US Chile Canada El Salvador Uruguay Uruguay Bolivia Panama Mexico Peru Argentina Brazil Columbia Nicaragua Honduras Dominican Republic Paraguay Ecuador Venezuela	<u>.u</u>	6 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1

Table AI-5. Business Environment Ratings

violations of freedom of the press or information, misappropriation of private property, and hostile business environment.

With regard to Freedom House ratings, which evaluate a country's political rights and civil liberties,⁶⁰ Trinidad and Tobago's position is among the highest compared to other Caribbean and Latin American countries and on par with such developed countries as Belgium and Germany.

Finally, with regard to Standard and Poor's country credit ratings (which assess a country's overall business environment), Trinidad and Tobago maintains a A– investment grade. Moody's similarly rates the country's foreign currency bonds (Baa3), accounting for successful macroeconomic stability and a transparent agenda for economic management.⁶¹

⁶⁰ The Freedom House Index groups countries into three sets: Free (scores of 1, 1.5, 2, 2.5, and 3), Partly Free (scores of 3, 3.5, 4, 4.5, 5, and 5.5), and Not Free (scores of 5.5, 6, 6.5, and 7). The Free group is the largest of the three, which illustrates that the index refrains from highlighting potentially large differences between best and worst performers; it takes values from 1 to 10 (least free), but effective values are awarded between 1 (for a group of 28 countries) and 7. Trinidad and Tobago is evaluated as Free; its score of 1.5 is shared with 30 other countries.

⁶¹ Martinez-Alas (Moody's), Trinidad and Tobago Roundtable, Institutional Investor (Aug. 2003).

Annex II

Business Support Institutions

Assessing Trinidad and Tobago's major private-sector development institutions aims to capture these institutions' scope of action, available resources, and major weaknesses. As evident from Table AII-1, as well as interviews conducted with key Trinidad and Tobago officials,⁶² the primary issues are that agencies overlap, lack in-house technical capabilities, and require alignment of strategic intent.

Although TIDCO is envisioned as the umbrella organization for private-sector development, most of its activities center on T&T brand awareness. Its strategy is based on the premise that a country recognition campaign will spill over into increased trade promotion and investment. However, these authors believe that the technical capabilities and staffing required to address these two objectives differ fundamentally from those needed to conduct successful marketing and branding campaigns.

BDC and NEDCO display similar institutional gaps. BDC's grand mandate is to grow small enterprises into medium and large ones; however, private-sector leaders and academicians sense that BDC does not know how to implement this task. This skepticism arises from SBDC's track record with SMEs and poor representation of entrepreneurs and businesspersons in the organization. Likewise, most NEDCO employees have a community service, rather than entrepreneurial, background.⁶³ Although they measure success factors and survival rates of new businesses in terms of the community's ability to create cooperatives and come together,⁶⁴ these authors hypothesize that their outreach is more along the lines of social policy and grant transfers than private-sector development.

Finally, Trinidad and Tobago businesspersons share the impression of a total disconnect between these institutions and the private sector. For examples, hoteliers claim that TIDCO's actions are out of touch with the sector's priorities; members of the plastic, packages, and paper cluster argue that TIDCO's initiatives have lost momentum. In these authors' view (as further explored under Imperative 7), no Trinidad and Tobago institution is taking the lead on private-sector development. If the Government is truly committed to diversifying the country's economic base and building a sustainable environment that improves the prosperity of the average Trinidad and Tobago citizen, it must fill this institutional gap.

⁶² Jan. 2004.

⁶³ Interviews conducted with NEDCO executives (Jan. 2004).

⁶⁴ Ibid.

D	
0	
rve	
× 1	
>	
<u> </u>	
ese	
S	
(h)	
Y	
<u> </u>	
S	
-	
5	
	_
	0
	9
	-
	9
	5
	5
σ	0
m	
	0
	g
+	
en	σ
O	
	-
_	2
	<
0	>
-	2
lopme	>
	>
Ve	
	Ð
	.
(1)	
Ð	1.0
-	100
Õ	bSi
Õ	D S
Õ	ebsi
an D	D S
can D	D S
can D	D S
rican D	r webs
rican D	Ir webs
erican D	Ir webs
nerican D	Ir webs
nerican D	r webs
erican D	our webs
American D	it our webs
-American D	it our webs
-American D	sit our webs
-American D	it our webs
er-American D	sit our webs
ter-American D	sit our webs
ter-American D	n visit our webs
ter-American D	n visit our webs
Inter-American D	on visit our webs
Inter-American D	ion visit our webs
e Inter-American D	tion visit our webs
he Inter-American D	ation visit our webs
e Inter-American D	ation visit our webs
the Inter-American D	ation visit our webs
/ the Inter-American D	ation visit our webs
y the Inter-American D	rmation visit our webs
/ the Inter-American D	rmation visit our webs
by the Inter-American D	ormation visit our webs
by the Inter-American D	formation visit our webs
y the Inter-American D	formation visit our webs
© by the Inter-American D	ormation visit our webs
: © by the Inter-American D	information visit our webs
: © by the Inter-American D	e information visit our webs
: © by the Inter-American D	e information visit our webs
: © by the Inter-American D	information visit our webs
: © by the Inter-American D	e information visit our webs
: © by the Inter-American D	ore information visit our webs
: © by the Inter-American D	ore information visit our webs
yright © by the Inter-American D	e information visit our webs
yright © by the Inter-American D	more information visit our webs
pyright © by the Inter-American D	r more information visit our webs
yright © by the Inter-American D	or more information visit our webs
opyright © by the Inter-American D	or more information visit our webs
opyright © by the Inter-American D	r more information visit our webs

Institution	Mission	Major Programs and Outreach	Budget ¹	Major Weaknesses
Tourism and Industrial Devel- opment Company of Trinidad and Tobago (TIDCO)	Market and promote T&T brand.	 Tourism: Market and promote Trinidad and Tobago; develop the tourism sector. Trade facilitation: Help Trinidad and Tobago firms export. Investment: Attract FDI and local investment; target specific sectors (cluster Initiatives). 	Total (2003): TT\$ 60 million (US\$ 10 million) Allocation: Tourism (80%), Trade Facilitation (15%), and Investment (5%)	 Failure of resource allocation and staffing to reflect strategic intent and program outreach. Lack of in-house technical capabilities in trade facilitation and investment. Fragile spillovers from T&T brand awareness to export promotion and investment. Business community's sense that TIDCO actions are out of touch with the private sector. Support required for cluster-initiative continuity.
Business Development Com- pany (BDC) ²	Provide a range of qual- ity products and services to enhance the growth and competitiveness of enterpris- es, while contributing to the company's sustainability.	 Trade assistance: Provide technical, marketing, and financial assistance to companies on a cost-sharing basis. Consultancy services: Research and train and maintain technical competencies. Project management: Prepare, evaluate, and follow up on programs and other development proposals for agencies and private-sector companies. 	Total (2002): TT\$ 58 million (US\$ 9.5 million)	 Lack of in-house technical capabilities to execute new mandate. Lack of Institutional legitimacy and strategic guidance. Service offerings irrelevant to business needs.

lable All-1. Assessme	nt of Private-Sector Deve	lable All-1. Assessment of Private-Sector Development Institutions (continued)	ed)	
Institution	Mission	Major Programs and Outreach	Budget ¹	Major Weaknesses
		 Business upgrading and restructuring: Conduct business and process (re)engineering, organizational and operations analysis, and systems design. 		
National Entrepreneurship Development Company Limited (NEDCO) ³	Facilitate any Trinidad and To- bago national in establishing a micro or small enterprise.	 Micro and SME credit: Lend to individuals who wish to start up businesses. Business advisory services: Provide technical assistance and training in business-plan creation, accounting, and entrepreneurial skills. 	Total (2003): TT\$ 100 million (US\$ 16.3 million) Allocation: Loan Portfolio (70%) (50% urban and 50% rural communities)	 Poorly defined strategic indicators and/or success rate of newly established micro-enterprises and SMEs. Unclear organizational mission and focus (i.e., private-sector development or social assistance program).
<i>Source</i> : OTF Group Inc. ¹ TIDO executives provided budget and budget allocation ² Business Development Company, Ltd. (2003). ³ Based on interviews with NEDCO executives (Jan. 2004	budget allocation estimates during Jan. 2004 interview. (2003) . .utives (Jan. 2004).	nterview.		

;÷ Inctitutions 4000 1 Davialon Cortor of Driveto -1 Accocc Table All-1

-

Copyright © by the Inter-American Development Bank. All rights reserved. For more information visit our website: www.iadb.org/pub

References

- Barclay, L. 2003. "FDI-facilitated Development: The Case of the Natural Gas Industry of Trinidad and Tobago." Discussion Paper Series No. 2003-7. United Nations University, Institute for New Technology. Maastricht, the Netherlands.
- Business Development Company, Ltd. 2003. "Strategic Plan for the Business Development Company Limited, 2002/03-2005/06." Internal Document.
- CBTT. 2002. *Annual Economic Survey*. Port-of-Spain: Central Bank of Trinidad and Tobago (www.central-bank.org.tt).
- Commonwealth Secretariat. 2003. *Trinidad and Tobago: Export Sector Investment Promotion Programme to North America.* Port-of-Spain: Commonwealth Secretariat.
- ECLAC. 2002. "Trinidad and Tobago: The Yachting Sector." Port-of-Spain: Economic Commission for Latin America and the Caribbean, Subregional Headquarters for the Caribbean.
- Engel, E. 2003. "A Pro-Market Agenda for El Salvador." In *Economic and Social Strategy* 2004–2009. San Salvador: FUSADES.
- Fairbanks, M. 2000. "Changing the Mind of a Nation: Elements in a Process for Creating Prosperity." In *Culture Matters: How Values Shape Human Progress*, chapter 20. New York.
- Fairbanks, M., and S. Lindsay. 1997. *Plowing the Sea: Nurturing the Hidden Sources of Growth in the Developing World*. Boston: Harvard Business School Press.
- Government of Trinidad and Tobago. 2002. *Vision 2020 Document*. Port-of-Spain: Government of Trinidad and Tobago.
- IADB Report. 2002. "Post-Secondary/Tertiary Education in Barbados". http://www.iadb. org/int/DRP/ing/Red4/Documents/Barbados02-04eng.pdf
- ILO. 2000. "The employment impact of restructuring and privatization in Trinidad and Tobago". ILO Caribbean Studies and Working Papers.
- IMF. 2003. *Trinidad and Tobago: Selected Issues and Statistical Appendix*. IMF Country Report No. 03/233. Washington, D.C.: International Monetary Fund.
- IMF. 2005. *Trinidad and Tobago: Staff Report for the 2005 Article IV Consultation*. Washington, D.C.: International Monetary Fund.
- International Standards Organization (ISO). <www.iso.ch/iso/en/aboutiso/introduction/ index.html>
- Khemani and Dutz. 1995. "The Instruments of Competition Policy and Their Relevance for Economic Development." In *Regulatory Policies and Reform: A Comparative Perspective*, chapter 2. Washington, D.C.: The World Bank.
- Latin Finance Supplement. 2003. "Trinidad and Tobago Banking". Latin American Financial Publications Inc.

- Lawrence, R. 2003. "Capitalizing on Regional Integration" in *Economic and Social Strategy* 2004–2009. FUSADES. El Salvador. Forthcoming.
- Ministry of Finance, Trinidad and Tobago. 2003. "Green Paper on the Financial Sector" prepared by the Government Information Services, Port of Spain.
- Porter, M. 1990. The Competitiveness of Nations. New York: McMillan.
- Price Waterhouse Coopers. 2001. TIDCO Investment Guide to Trinidad and Tobago.
- Republic Bank of Trinidad and Tobago–RBTT. 2002. *RBTT Annual Report 2002.* <www.rbtt.com>
- Republic of Trinidad and Tobago. 2002. *Draft Estimates of Expenditure for the Financial Year, 2003.* Port-of-Spain: Ministry of Finance.
- Sachs, J., and A. Warner. 1995. "Economic Reform and the Process of Global Integration." *Brookings Papers on Economic Activity* 1995, no. 1: 1–118.
- Salazar-Xirinachs and Granados. 2003. "The United States-Central America Free Trade Agreement: Opportunities and Challenges," (draft, May 2, 2003).
- Stewart, T. 2002. "Challenges of Developing a Competition Regime in CARICOM." University of the West Indies, Trinidad and Tobago (www.iadb.org/sds/doc/IFM-Taimoon_Stewart-E.pdf).

Trinidad and Tobago Bureau of Standard (TTBS). <www.ttbs.tt.org>

UWI. 1996. *National Baseline Survey*. University of the West Indies, Institute of Business. WEF. 2002. Geneva: World Economic Forum.

This page intentionally left blank

A n n e x

Institutional Initiatives to Promote Private-Sector Business

Rolph Balgobin and Deryck Omar

As alluded to in this chapter and throughout this book, Trinidad and Tobago must focus on institutional strengthening if the country is to achieve sustained growth and high real income per capita. This Annex briefly recounts current initiatives to address the shortcomings of public-sector institutions and the legal and regulatory framework as it affects competitive-ness and the effectiveness of private-sector activities.

Overcoming Public-Sector Shortcomings

In Trinidad and Tobago, various government ministries support private-sector operations. The most important are:

- Trade and Industry;
- Labor and Small and Micro Enterprise Development;
- Education;
- Science, Technology, and Tertiary Education;
- Local Government;
- Energy and Energy Industries; and
- Finance.

The public sector's effectiveness in strengthening private-sector activities can be assessed by analyzing the Government's role in the economy; its ministries' effectiveness in fulfilling their respective missions and operational efficiency; and its readiness in technology, innovation, and research and development (R&D).

Government as Actor in the Economy

As discussed in chapter 1 of this volume, the Government of Trinidad and Tobago is closely involved in many sectors of the economy. It maintains total ownership of some 28 compa-

nies and indirect ownership of another 39 in such vital sectors as energy, financial services, manufacturing and agro-based services, transportation, and communication. Government subsidies and transfers often have distorting effects on the economy (e.g., by propping up uncompetitive businesses). While the Government considers the privatization agenda a top priority, the process often lacks clear commercial objectives and performance targets, often resulting in conflicts between commercial viability and political expediency (see chapter 5). At the same time, the Government is being urged to play a more supportive, versus a more active, role and streamline the privatization process in the national interest. All indications are that this change is occurring, albeit slowly.

The country lacks a trade strategy aligned with its economic strategy. To offset this public-policy shortcoming, the Government has entered into a loan arrangement with the Inter-American Development Bank (IDB) to provide partial funding for a trade-sector support program, which aims to improve the country's international trade performance by strengthening its technical and institutional capacity to develop and implement trade policy, participate effectively in trade negotiations, implement trade agreements, and increase and diversify exports.¹ A Program Coordinating Unit (PCU) has been established in the Ministry of Trade and Industry (MTI), the executing agency, to implement the program (see chapter 4).

Mission Effectiveness

Improving the clarity and definition of the ministries' respective missions is a major challenge. Insufficient clarity, which is naturally transferred to the relationship between ministries and subsidiary agencies, often results in overlapping functions and conflicting responsibilities. In turn, important cross-sectoral linkages are weakened and the building of private-sector support functions is compromised.

Thus, the business model must be made transparent to all. In addition, ministries require a clear organizational strategy by which to manage the dynamics of reporting to elected officials and the selection and prioritization of projects. To this end, the Ministry of Finance has introduced a performance-based, output budgeting system that favors the traditional line-item budgeting process (from 2006 on, all ministries must adhere to this system). Ministries must submit both a three-to-five-year corporate plan and an annual business plan (incorporating the budget) in a predefined framework. The policy document states that, inter alia, "corporate plans are [will be] assessed to: a) verify that each department's [ministry's] goals and objectives are consistent with whole of government policy; and b)

¹ More detailed information is available at www.tradeind.gov.tt/projects/programs/trade_reform.htm

ensure, centrally, that goals and objectives of all departments [ministries] are consistent and do not conflict with each other."²

Operational Efficiency

With ministerial officials left to interpret mandates, employee actions, organizational processes, and resources are often inadequately aligned for optimal service delivery. For example, the process of generating leases from the Land and Surveys Division of the Ministry of Agriculture for use of State lands is inefficient and lacks transparency. Port equipment is often cited as outdated and non-functional, extending loading and clearing lead times and increasing costs to businesses and consumers unnecessarily. Such debilitating public-sector effects do not escape the attention of public servants; no doubt, they affect employee morale, creating a vicious cycle. In the 2004 Public Service Employee Survey, public servants cited inadequate salary, inappropriate incentive schemes and systems of merit-based promotion, unsatisfactory training and promotion opportunities, and a general lack of self-confidence and feeling of accomplishment as major reasons for the prevailing public-service ethos.

There is optimism and confidence that the new output-based performance management framework will help to streamline resource use for effective service output and project execution, thereby decreasing bureaucratic red tape and improving productivity, accountability, and transparency. A stated policy is that the business plan will be reviewed to:³

- Confirm that the outputs a department [ministry] proposes to deliver are appropriate to the achievement of the department's [ministry's] goals and objectives.
- Assess the resource requirements of each department.
- Enable a rational allocation of resources across the whole of government activities.
- Ensure that Government's interests as owner are protected by sound financial, asset, and resource management strategies.

Another positive step was the August 2005 dissemination of a White Paper on reforming the Government's procurement regime, which stated that the new policy would come on stream by June 2006.⁴ Three major goals of this initiative are transparency, accountability, and even application of standards across all stages of the procurement process and to all actors in the process.

² "A Guide to Corporate and Business Planning," Ministry of Finance (Treasury Division), Republic of Trinidad and Tobago (Feb. 2003).

³ Ibid.

⁴ Excerpt from a March 4, 2005 speech by Kamal Mankee, Permanent Secretary, Ministry of Finance.

The Government has recently accessed a major IDB public-sector reform loan. Its objective is to drive transformational change through important touch points in the public sector, thereby improving morale and level of service delivery.

Technology, Innovation, and R&D Readiness

According to the World Economic Forum's 2005 Global Competitiveness Report (GCR), Trinidad and Tobago clearly has a technology handicap from the perspectives of both national infrastructure and individual use. On a scale of 1 to 7, the country scored low with regard to quality of competition in the Internet service provider (ISP) sector (2.2), laws relating to information and communication technology (ICT) (2.8), and Internet access in schools (3.0); it had average scores with regard to technological readiness (3.3), government success in ICT promotion (3.5), and government prioritization of ICT (3.8). In terms of both capacity for innovation and university/industry research collaboration, the country scored only 2.6; for company spending on R&D, it registered a bit higher (2.8).⁵ Unfortunately, these GCR scores indicate that the country is still in the early developmental stages of a knowledgebased economy. To help bridge the digital divide, the Ministry of Public Administration and Information is implementing a comprehensive National ICT Plan (2003–08).

About four years ago, the Ministry of Education accessed loan funding for the long-term Secondary Education Modernization Program, whose goal was to modernize the country's secondary-education sector. In 2006, the Government declared free tertiary enrollment for all and subsequently launched the Accreditation Council of Trinidad and Tobago (the national quality assurance organization). Perhaps more significantly, in 2005, a 15-year National Strategic Development Plan was formulated. While private-sector led, the Plan was fully enabled by the Government, representing two years of consensus-driven work. Within its pages are, inter alia, the cross-sectional choices and priorities, goals, objectives, initiatives, measures, and performance targets required to thrust innovation and R&D to the national forefront and create the much needed public-private-academic sector partnerships.⁶

Facing Private-Sector Inefficiencies

The Business Development Company (BDC), National Entrepreneurship Development Company (NEDCO), Tourism Development Company (TDC), and other such organizations are dedicated to developing and providing support services for private-sector businesses. The overall challenges facing such companies are lack of strategic focus, relevant in-house

⁵ In 2002, the country was reported to have only 8 personal computers per 100 residents and 1,060 Internet users per 10,000 inhabitants; moreover, gross tertiary enrollment was only 9 percent.

⁶ At the time of this writing, Trinidad and Tobago's Parliament was debating this Plan.

technical expertise, and industry engagement. Arguably, the institutional landscape lacks an agency with the effective authority to coordinate, promote, and lead private-sector development. That is, private-sector investors (both local and foreign) seeking to stake a claim in the economy have no effective "one-stop integration shop." The need for multiple agencies to evaluate and screen proposed entrepreneurial projects results in unnecessary cost, time, and administrative delays. It is often alleged that, though originally well-intentioned, private-sector development organizations eventually evolve into instruments of social development and political patronage.

The disheartening track record of these organizations, along with the lack of a measurement culture and feedback from local businesspersons, leads one to conclude that the organizations are insufficiently staffed with experienced business facilitators. As a result, the entrepreneurial sensitivity and innovative capacity of these organizations are severely compromised, which erodes their institutional legitimacy. In all probability, these factors impinge on the organizations' ability to generate the self-confidence and credibility needed to actively engage the industry they were created to serve.

The main private-sector development organizations are within the scope of the MTI and Ministry of Labor and Small and Micro Enterprise Development. Therefore, intensive inter-ministry cooperation is required if business development organizations are to transform themselves into service centers of excellence.

Improving the Legal and Regulatory Framework

Encouraging macroeconomic reform through institutional strengthening is a necessary, but insufficient, condition to significantly boost national competitiveness. It is generally recognized that the complementary force in this process is the simultaneous upgrading of microeconomic infrastructure. In the case of Trinidad and Tobago, the key leverage point in promoting the growth and development agenda of public institutions is improving the legal and regulatory framework that directly circumscribes the business environment. In recent times, the Government has attempted to accelerate the pace of reform in such fundamental pro-market areas as competition law and regulatory authorities, public-sector procurement, consumer protection, anti-dumping regulations, industrial relations, financial and taxation regulations, and environmental law.

Competition Law and Regulatory Authorities

In small open economies like Trinidad and Tobago, monopolies are sometimes inevitable; therefore, monitoring anti-competitive behavior, rather than structure, is imperative to promote local investor and entrepreneurial access to important industries (e.g., network utilities), as well as ensure that unnecessary oligopolies are avoided. In this context, the country has not succeeded as well as it might have, as illustrated by its GCR scores in effectiveness of anti-trust policy (3.0), overall infrastructure quality (3.3), and presence of demanding regulatory standards (3.8).

With regard to competition law and policy, on July 20, 2005, Parliament approved a bill proposing adoption of the Fair Trading Act,⁷ whose major objectives were as follows: establish a Fair Trading Commission to promote and maintain effective competition in the economy, ensuring that competition is not distorted, restricted, or prevented to the detriment of the community. In addition, it was proposed that a Fair Trading Tribunal or Court of Record be established with jurisdiction to hear and determine appeals from the Commission.⁸

Steps in the right direction include establishment of the public utilities' Regulated Industries Commission (RIC)⁹ in November 2002 and a fully functional Telecommunications Authority (TATT) in mid-2004.¹⁰ In recent years, both regulators have been vibrant: RIC established compulsory and transparent standards, instituted sanctions for errors, and monitored utility rates; while TATT fast-tracked liberalization of the telecommunications sector. In January 2006, Khalid Hassanali, Chairman of the TATT Board and President of Evolving Technologies and Enterprise Development Company, stated that the Authority had succeeded in opening up the Domestic Mobile, International, and Domestic Fixed Wired Telecommunications markets. He indicated that, although the Government had limited the entry of operators in the Domestic Mobile Telecommunications market, no such limit existed in the International and Domestic Fixed Telecommunications markets and thus interest was still being invited in these sectors. He said that the Authority had moved quickly to develop appropriate regulations in spectrum and broadcast management, system interconnectivity, service standards, and consumer rights to facilitate and monitor sector liberalization.

Public-Sector Procurement

Since 1961, the Central Tenders Board (CTB) has legally functioned as the Government's main procurement agency. Due, in part, to the need to circumvent rigid CTB structures to expedite project execution, several State firms were allowed to issue their own tenders under their regulations. Consequently, numerous public-sector agencies now implement procurement functions using inconsistent procedures with their own contractor registers.

⁷ At the time of this writing, this bill was before the Senate and legislation was expected to be enacted in early 2006.

⁸ Details are available at www.tradeind.gov.tt/

⁹ Regulated Industries Commission Act of 2000.

¹⁰ The Telecommunications Authority, established by the Telecommunications Act of 2001, arguably did not become fully functional until mid-2004, when the executive director was appointed.

This semi-decentralized system has raised concerns about the lack of transparency and accountability and failure to disseminate best practices; these factors explain, in part, the low GCR score (2.6) with regard to favoritism in decisions of government officials.

Redressing the issue began in August 2005, with dissemination for public comment of the White Paper entitled "Reform of the Public Sector Procurement Regime." The main tenets of the proposed legal and institutional reform were to repeal the CTB ordinance; prescribe the principles, address the objectives, and provide for development of guidelines; define the responsibilities of the purchasing agencies and prescribe penalties; establish an independent regulator mandated to ensure a relevant, efficient, and compliant system; establish a National Procurement Advisory Council, drawn from civil society and the private sector, to support the regulator's operations; provide a complaints mechanism; and provide for the allocation of adequate human and material resources to the regulatory agency. After synthesizing the feedback from this White Paper, a Green Paper will be prepared for final public commentary, after which a bill will be drafted to pioneer the necessary legislation.

Consumer Protection

The stated aim of current consumer policy is to create, inter alia, "an environment within which the consumer, through his or her actions, would ensure that families and individuals maximize their economic resources and influence the private and public sectors to function in a manner that promotes just, equitable, and sustainable economic and social development." Unfortunately, the current legal and regulatory framework does not effectively support this goal. As the private-sector Chamber of Industry and Commerce stated in a recent news article,¹¹ the Consumer Affairs Division (CAD) has become more of a complaint and mediation bureau for individual consumers, rather than a proactive agency for national consumer protection, enforcement, and advocacy. The article viewed consumers seeking redress as having to rely on the Sale of Goods Act;¹² supplier warranties and guarantees; and the expensive, time-consuming procedures of the Petty Civil or High courts.

In response, the Government published a Green Paper in 2005, which is now being evaluated for drafting the necessary legislation for submission to Parliament later this year. The reform aims to ensure that the new legislation, as well as the effective revision of all contributory regulations, is enacted. Proposals on the agenda include a small-claims tribunal to facilitate speedy and inexpensive consumer relief, consumer credit legislation to enforce truth in lending and advertising, and product-warranty legislation to provide consumers adequate warranty information.

¹¹ See the Business Guardian (Dec. 15, 2005).

¹² Consumer Protection and Safety Act (no. 30) of 1985.

With regard to existing legislation, several areas that affect consumer rights are being reviewed simultaneously: Consumer Protection and Safety Act, Standards Act, and Food and Drugs Act. Additionally, institutional frameworks are being constructed to ensure greater linkage to monopoly commissions and CAD's institutional strengthening in such areas as research and planning, enforcement, legal services, training, and consumer education.¹³

Anti-dumping Regulations

The Anti Dumping Unit, established in the MTI in January 1996, has achieved much. However, with increasing market sophistication, it has become necessary to upgrade relevant rules and regulations. One major impediment to effective execution of regulations (as cited by a senior MTI anti-dumping investigator) is that the accumulation of supporting evidence in formulating a complaint (including the normal value and export price of the good in question) is often problematic, which inhibits accurate completion of complaint questionnaires. Additionally, complainants often lack financial resources, technical expertise, and cooperation of relevant parties to help ensure that complaints are handled effectively.

Salient recommendations now being promoted to the Government include: 1) excluding the preliminary hearing from regulations, 2) providing clarity with respect to standard of proof, 3) re-examining the time frame for imposing a duty, 4) re-examining the retroactivity of duties, and 5) revising questionnaires.¹⁴

Industrial Relations

The current Industrial Relations Act and its associated amendments have generally promoted cooperation in labor-employer relations. However, with passage of the Occupational Safety and Health Act in January 2006, significant amendments to the Act are on the agenda.

Financial and Taxation Regulations

In terms of financial markets, Trinidad and Tobago currently leads the Caribbean with respect to GCR scores. In the areas of venture capital availability, financial market sophistication, and local equity market access, the country scored 3.6, 4.3, and 5.4, respectively. Despite these successes, major financial pieces of legislation—Financial Institutions Act, Income Tax Act, Insurance Act, Value Added Tax Act, Petroleum Tax Act, Corporate Tax Act, and Fiscal Incentives Act—contain important elements considered antiquated or inadequately

¹³ See the Green Paper entitled "Consumer Protection in the Information Age," Ministry of Legal Affairs, Consumer Affairs Division (April 2005).

¹⁴ Beverly Mahabir-Charles, Lecture on Trade Remedies: Anti-dumping Actions (Oct. 10, 2005).

linked, thus having a punitive, rather than a constructive, effect on investment. For example, bankruptcy regulation tends to emphasize resource liquidation and debt collection more than regrowth of businesses and debtor protection. In addition, the petroleum taxation system is burdensome when applied to small farm-outs, workovers, and lease operator-ships. Furthermore, the Fiscal Incentives Act (1979) provides manufacturing, rather than the economically faster-growing area of services, more incentives. Finally, the slow rate of processing the Value Added Tax (VAT) is problematic, particularly for exporters awaiting refunds. For mergers and acquisitions, VAT registration is difficult and apparently not governed by a specific set of guidelines.

To maintain its lead position in financial markets, the Government has commissioned legislative reviews in certain of these major areas, which Parliament will review later this year.¹⁵

Environmental Law

The Government's Vision 2020 National Strategic Plan succinctly summarizes the country's activities in environmental law. The Plan states:

Much has been done in the area of environmental management and protection. The Government has ratified environmental treaties to which it is a signatory. Community-based groups and individuals lobby for the protection and sustainable development of natural fauna and flora. The Environmental Management Authority (EMA) and the EMA Act (2000) provide the institutional and legal requirements for addressing environmental protection issues. A major deficiency limiting the Authority's ability to enforce the EMA Act to its fullest, however, is the absence of subsidiary legislation (the supporting rules arising from the Act) to govern important areas, such as water pollution and hazardous waste from oil, gasoline, and diesel under the Act.

Consequently, Vision 2020 proposes the following solutions:

- Draft or finalize enabling legislation arising from the EMA Act. In particular, fasttrack the enactment of rules that address treatment of polluted water, hazardous and oily waste, and gas and diesel emissions.
- Implement demand- and supply-side strategies to reduce utility-company waste. On the demand side, educate consumers on metering and the negative environ-

¹⁵ Rolph Balgobin, An Overview of the Business Climate of Trinidad and Tobago (Oct. 2004).

mental and cost effects of wasting products and services. On the supply side, expose employees to increased levels of training and other development aids to increase productivity.

• Change the cultural mindset by officially declaring selected areas of the country environmentally protected zones. To support the effort, implement co-management plans with local communities and introduce environmental responsibility into all areas of education, using both formal (e.g., science and social studies) and informal (e.g., drama and art) vehicles.

sit our website www.ladb.org/pub

Inter-American Development Bank 1300 New York Avenue, N.W. Washington, D.C. 20577

www.iadb.org/pub

