



IDB WORKING PAPER SERIES #IDB-WP-115

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A Critical Review

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January 2010

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Inter-American Development Bank
2010

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

Moya, Ramiro.

Productive development policies in Trinidad and Tobago : a critical review / Ramiro Moya, Anne-Marie Mohammed, Sandra Sookram.

p. cm. (IDB working paper series ; 115)

Includes bibliographical references.

1. Economic development—Government policy—Trinidad and Tobago. 2. Trinidad and Tobago—Economic policy. I. Mohammed, Anne-Marie. II. Sookram, Sandra. III. Inter-American Development Bank. Research Dept. IV. Title. V. Series.

HC157.3.Z94 M69 2010

338.972983 M938—dc22

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Abstract

Even as Trinidad and Tobago seeks productive diversification away from the energy sector, the process underlying the country's productive development policies (PDP) is in a state of transition from state-directed industrial policy to a newer approach with extensive private-public participation. This study explores the main characteristics of four PDPs in Trinidad and Tobago and reviews them following the related literature (e.g., Rodríguez-Clare, 2005a and 2005b, and Melo and Rodríguez-Clare, 2006). The four PDPs are: a) The process towards the Promotion of Clusters; b) the PDPs for the Tourism industry; c) the classical PDPs for Micro, Small and Medium Enterprises and; d) the Free Trade Zone as a policy designed to compensate for the failure of the State.

JEL classification: L52, O25, O54

Keywords: Industrial policy, Productive development policies, Diversification, Caribbean, Trinidad and Tobago

Acronyms

BDC	Business Development Company
CBTT	Central Bank of Trinidad and Tobago
CCCL	Caribbean Leasing Company Limited
Eteck	Evolving Technologies and Enterprise Development Company
HSF	Heritage and Stabilization Fund
IDC	Industrial Development Company
FDI	Foreign Direct Investment
MfDR	Managing for Development Results
MSG	Multi-sectoral Group
MTI	Ministry of Trade and Industry
MTPF	Medium Term Policy Framework
NEDCO	National Entrepreneurship Development Company Limited
PIDCOTT	Property and Industrial Development Company of T&T
PMO	Programme Management Office
THA	Tobago House Assembly
TIDCO	Tourism and Industrial Development Company
TDC	Tourism Development Company
TTEnt	Trinidad and Tobago Entertainment Company
TTFC	Trinidad and Tobago Film Company Limited
TTFZC	Trinidad and Tobago Free Zones Company Limited
UTT	University of Trinidad and Tobago
VCIP	Venture Capital Incentive Programme

1. Introduction

Trinidad and Tobago is a country rich in natural resources, having developed a world-class energy cluster based on gas and oil. However, among top officials and other leading members of the society there seems to be general agreement that diversification into sectors other than energy represents a major medium-term goal. The policies analyzed to be analyzed in this study are closely related to that objective.

The country constitutes a very interesting case for the analysis of productive development policies (PDP). Currently PDPs are in a state of transition from old-fashioned industrial policy to a newer approach with intense private-public collaboration. Nevertheless, the older, more traditional interventions persist in Trinidad and Tobago, although a broader view involving new-type policies appears in a multi-sectoral report called Vision 2020.

In fact, the promotion of information and communication technology (ICT), the generation of non-energy clusters and public intervention only in case of market failure are all ideas expressed in several Government reports, which are consistent with a more modern approach of PDPs. However, many of the policies that appear in official documents are a long way from implementation. Consequently, traditional measures such as supporting small and medium enterprises (SMEs) and attracting foreign direct investment (FDI) through fiscal incentives remain in force and are relatively important.

In this study we will explore the main characteristics of four PDPs in Trinidad and Tobago, trying to use a global approach following their whole development process, from birth to maturity, whenever it is possible. In all the cases we will conduct a critical review of the selected policies following the literature of Productive Development Policies (PDP) as expressed in, for instance, Rodríguez-Clare (2005a. and 2005b) or in Melo and Rodríguez-Clare (2006). The four PDPs are the following: a) The process towards the Promotion of Clusters; b) the PDPs for the Tourism industry; c) the classical PDPs for Micro, Small and Medium Enterprises and; d) the Free Trade Zone as a policy designed to compensate for the failure of the State.

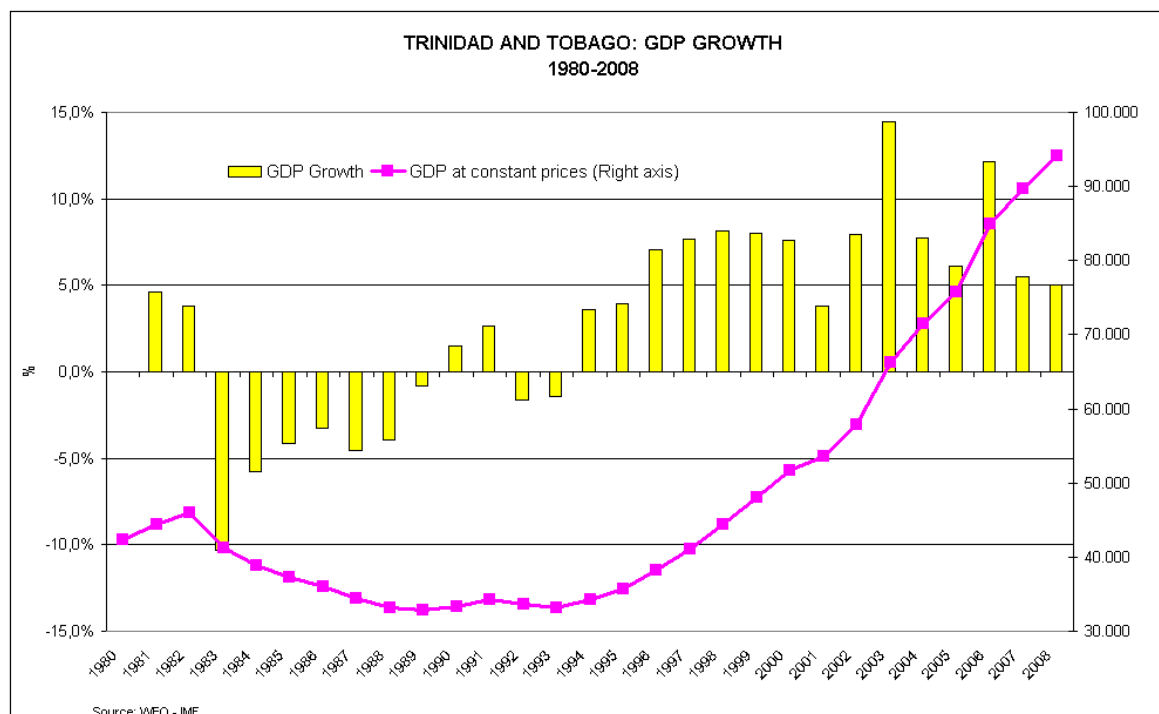
2. Trinidad and Tobago at a Glance

2.1 General Information

Trinidad and Tobago is a middle-income, energy-rich country with relatively strong institutions and political stability. It is the most industrialized economy in the English-speaking Caribbean. Since 1994 the country has been growing at an average rate of 7.7 percent per annum, as shown in Figure 1, but this growth has been very unbalanced: it is led by the energy sector, which accounts for more than 45 percent of GDP and 80 percent of exports, but only 5 percent of employment. In the non-energy sector, growth has been much lower: the energy sector accounts for 29 out of the 51 points of the accumulated growth rate between 2002 and 2006, private sector services for 19 and the rest of the economy for just 3 points. What is even more striking is the low level of investment in the non-energy sector. Since 1991, capital stock has grown by 7 percent per annum, but this was due almost entirely to the energy sector since, in the non-energy sector, the capital stock has grown only at a modest rate of 1.5 percent. New investment has been directed mainly to the gas industry, after the discovery of new reservoirs.¹ These new gas products, however, do not really providing a strong source of diversification for the economy, since the prices of gas-related products are highly correlated with those of oil-related products.

¹ Trinidad and Tobago is the world's largest supplier of ammonia and methanol, as well as the largest supplier of Liquefied Natural Gas to the United States.

Figure 1.



Although the recent trend has been influenced by the high energy prices, the economy shows a worrisome pattern: in the last 50 years the non-energy tradable sector's share of GDP has been constantly shrinking, which means that the economy is more and more energy-dependent, increasing the risks of energy price shocks to the entire economy. In spite of the Government's stated intention to diversify the economy, expressed in the Vision 2020 plan,² the share of the energy sector almost doubled in the last 15 years, and the pattern of investment for the last years 10 years shows that the actual levels would hold and probably increase even further. The trade policies and incentive schemes used to promote other activities have not paid off.

One of the puzzles to be solved in Trinidad and Tobago is why resources are not flowing to the non-energy sector, particularly the non-energy tradable sector. Fairbanks et al. (2007) point out that, while the business platform is sound in Trinidad and Tobago, firms lack the necessary strength. Outside of the energy industry, no healthy clusters have

² The objective of the Vision 2020 plan is to become a developed country by 2020, with sustained and balanced growth, diversifying the economy and spreading out the benefits of the economic growth to the entire population.

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.

Artana et al. (2007) find that the country is exposed to “Dutch Disease”: the high exposure to energy price shocks might force the non-energy tradable sector to be even more competitive than in other countries where that risk does not exist. The historical correlation between the international oil price and Trinidad and Tobago’s real GDP, which is close to 80 percent, is a fact that business managers know only too well. In this sense, growth opportunities could be very path-dependent and, although several reforms in the right direction have been implemented, current growth is limited by historical conditions. Not having a developed non-energy tradable sector can limit future growth due to lack of externalities in production, lack of forward and backward linkages, lack of learning-by-doing and lack of local entrepreneurship. As a consequence, the “natural resource curse” might reflect past rather than present conditions, and the current success of the energy sector might be in itself a constraint for the development of the non-energy tradable sector. From a macroeconomic point of view, in this economy more than in others, a very prudent fiscal policy, as well as clear and credible rules, is necessary to isolate the non-energy sector from the risks of the energy sector.

The recently created Heritage and Stabilization Fund (HSF), formally established by an Act of Parliament in 2007, is a policy in the right direction, although it might still have problems of credibility. The HSF is supposed to meet two complementary goals. The first is to preserve the petroleum wealth stock for future generations (the heritage component) and the second is to protect government revenues from fluctuating oil prices in the international markets (the stabilization component).

The HSF is supposed to be financed from excess income from oil and gas. Whenever these revenues exceed the quarterly projected budget by more than 10 percent, 60 percent of this difference is added to the fund. In the same way, when revenues are below projections, the government may withdraw using the same arrangement. Higher than budgeted oil prices have allowed for a build-up in the value of the Fund, which totaled close to US\$ 2 billion as of May 2008 (approximately 8 percent of GDP).

A more prudent fiscal policy, combined with the more stable macroeconomic environment of the last years, ought to have provided a better environment to overcome the natural resource curse. The question is whether enough has been done to boost growth in other economic sectors, and whether specific industrial policies are needed to ignite growth and overcome years of underdevelopment. Artana et al. (2007) consider that the situation in Trinidad and Tobago, as it relates to eliminating constraints to growth, is one of “fine tuning”: many macro reforms have already been implemented, but more is needed from the micro point of view to improve the competitiveness of key business clusters and improve the conditions for innovation and entrepreneurship.

Regarding the institutional setting, Trinidad and Tobago belongs to the British tradition and is organized as a Westminster-style parliamentary democracy. That is, there is a formal separation of powers between the Executive, the Legislative and the Judiciary. According to Mottley (2008), however, real power has resided with the executive branch since Colonial times. In fact, under this system, decisive power was centralized in the colonial governor as the representative of the Crown. This tradition extends to the present, as real power resides with the Cabinet, particularly the Prime Minister, and Parliament can block only decisive bills. As government revenues are dominated by oil and gas-related taxes, local governments have little decision-making ability in regard to public expenditure. The narrow tax base of local governments consists of resources such as property and inheritance taxes. The centralization of resources reinforced the central government’s power.

2.2 How Important Is Dutch Disease?

Artana et al. (2007), using open forest analysis based on Hausmann and Klinger (2006, HK) and Hausmann, Hwang and Rodrik (2006, HHR), found that Trinidad and Tobago ranked lowest among a group of Latin American and Caribbean countries in its capacity to diversify its production and export base. This is a consequence of its specialization in oil-related products and is a symptom of Dutch disease. HHR also found this characteristic for other oil-exporting countries.

An important implication of open forest analysis is that the degree of sophistication will not improve that capacity unless economic policies compensate for

Dutch disease. In fact, HK found that a one standard deviation increase in “open forest size” results in an increase of half a percentage point in the measure of sophistication of exports.³ *The characteristic of most of the oil-exporting countries is that they produce and export a good with a very specific endowment not easily interchangeable with other kinds of goods.* Additionally, if one takes into account the sudden appreciations in the real exchange rate that usually characterizes these economies when the oil price is high, the development of other non-oil tradable sectors becomes a difficult task.

In the case of Trinidad and Tobago, Dutch disease is not merely a cyclical characteristic: although a booming international oil market could aggravate the disease through real exchange rate appreciation, the effect may be permanent. In fact, exports of oil and related products⁴ historically represent 60-70 percent when measured in constant US dollars.⁵

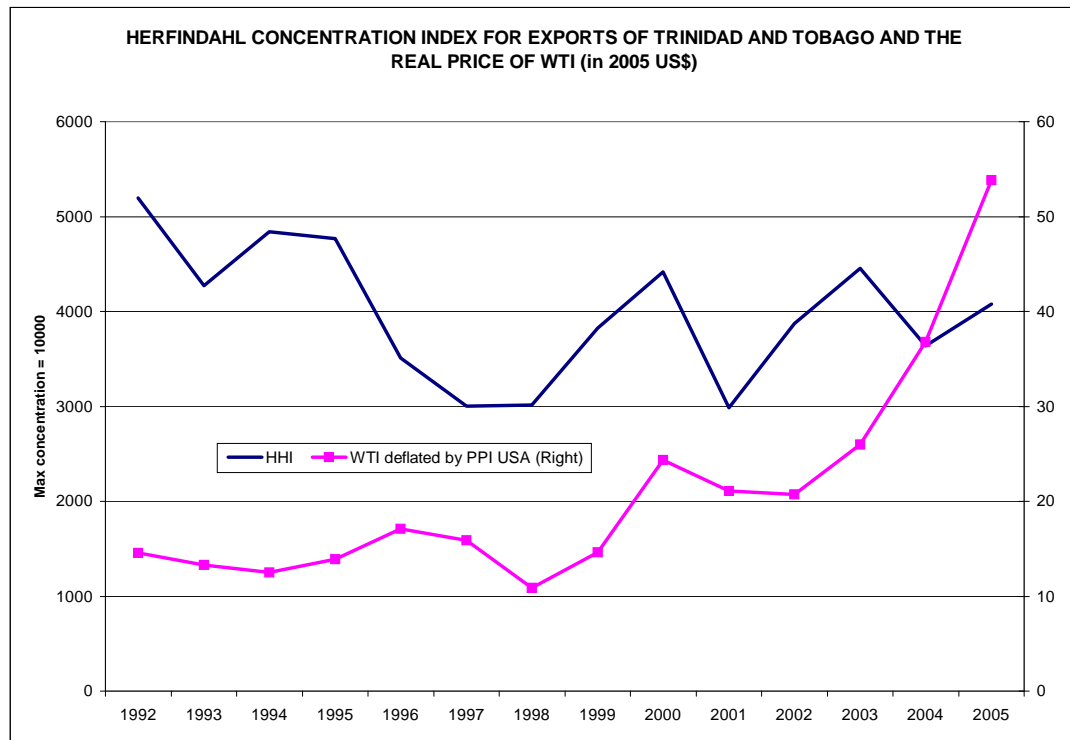
As a consequence, the degree of export diversification (measured in real terms) did not change substantially in recent times despite the cyclical behavior of the price of West Texas Intermediate crude oil (WTI), the benchmark petroleum price. As illustrated in Figure 2, the Herfindahl-Hirschmann index shows that export concentration fell only slightly over the last 13 years.

³ Denominated as the “average productivity” of the exports.

⁴ Chapter 27 in the Harmonized System 1992.

⁵ Deflated by the Export Price Index - HS classification, U.S. International Price Program, Bureau of Labor Statistics.

Figure 2.



Source: Authors' compilation.

Nonetheless, exports in nominal terms follow the pattern of movements in the oil price: export concentration tends to increase when the price of oil is high and vice versa. The coefficient of correlation between both series is 0.78 for the period 1980-2005.

Another implication of our analysis is that the existence of uneven conditions for the rest of non-oil tradable sector due to this phenomenon makes every effort to improve export diversification a much harder task for economic policy. However, we will proceed under the assumption that necessary policies should be applied to mitigate Dutch disease. This means that the HSF would be designed accordingly to overcome the typical problems of volatility and currency overvaluation. Otherwise, the PDPs intended to attain the desired industrial and export diversification could result in a wasteful use of resources and efforts with the PDPs being totally ineffective and a drain on government revenues as a result of subsidies and other supporting fiscal measures.

In this study, we shall therefore not discuss the necessity of export and industrial diversification of the non-energy sector: we shall take it for granted that the authorities and the society as a whole want to achieve more complex backward and forward linkages

and industrial production less dependent on the energy sector as expressed in the Vision 2020 documents.

3. PDPs in Trinidad and Tobago

According to Rodríguez-Clare (2005a), there were three kinds of interventions to complement the Washington Consensus reforms: a) macroeconomic reforms in order to reduce the high volatility observed in emerging countries, b) an enhanced institutional set-up to foster higher economic growth and c) microeconomic or “competitiveness” policies through public interventions with the goals of allowing sectors and companies to take advantage of the opportunities.

Trinidad and Tobago has taken these steps with different degrees of success as a result of the reforms of the 1990s. In particular, to reduce macroeconomic volatility, advances have been made through the creation of the Heritage and Stabilization Fund (HSF). Also, reforms have been added to the previous market liberalization through some privatization of State Owned Enterprises (SOE), although State direct intervention through companies is still significant.

As far as institutional quality is concerned, the country does relatively well on the basis of the indices of economic freedom (29th out of 162 countries), ease of doing business (80th of 181), voice and accountability (66 points out of 100), government effectiveness (66 points) and regulatory quality (71 points). However, Trinidad and Tobago underperforms in the spheres of political stability, rule of law and control of corruption. In the Global Competitiveness Index produced by the World Economic Forum, the country ranks 92nd out of 134 countries. In sum, Trinidad and Tobago does not score high on the basis of indices of institutional quality, though all are better than the median for Latin American countries and six out of the nine measures considered them are not lower than the median value of neighboring countries.

Table 1.

ALC: Institutional and Business Ambient Indicators									
Country	Ease of Doing Business Rank (1)	Governance Indicators (2)						Global Competitiveness Index Rank (GCI) (3)	Economic Freedom Index Rank (4)
		Political Stability	Voice and Accountability	Government Effectiveness	Regulatory Quality	Rule of Law	Control of Corruption		
		2007						2008 - 2009	2008
LATIN AMERICA	112.0	30.8	49.0	48.3	53.4	28.6	47.8	82.0	77.0
CARIBBEAN	79.0	54.8	65.4	66.4	68.4	57.6	68.6	92.0	74.0
Antigua and Barbuda	42.0	76.9	63.9	68.7	68.4	83.3	86.0	sd	sd
Bahamas	55.0	75.0	83.7	83.9	82.0	85.2	90.8	sd	24
Barbados	sd	92.3	87.0	85.3	80.6	87.6	89.9	47	21
Belize	78.0	54.8	67.8	48.8	44.7	54.3	51.2	sd	61
Bermuda	sd	74.5	78.4	81.0	87.9	77.6	86.0	sd	sd
Cuba	sd	48.6	2.4	28.9	3.4	25.2	53.6	sd	156
Dominica	74.0	82.7	81.7	74.4	72.8	71.0	73.9	sd	sd
Dominican Republic	97.0	49.0	55.3	37.0	50.0	37.1	31.9	98	87
French Guyana	sd	45.7	57.7	75.4	76.2	67.6	75.8	sd	sd
Grenada	84.0	60.6	71.2	64.0	64.6	57.6	68.6	sd	sd
Guyana	105.0	32.7	51.0	53.6	33.5	35.2	32.4	115	136
Haiti	154.0	10.6	26.0	7.6	20.4	4.8	3.4	sd	138
Jamaica	63.0	43.3	65.4	59.7	61.7	31.9	39.1	86	45
Netherlands Antilles	sd	90.4	63.0	75.4	76.2	77.6	86.0	sd	sd
Puerto Rico	35.0	74.0	90.9	72.5	75.7	66.2	71.5	41	sd
Suriname	146.0	53.8	58.2	55.5	37.9	48.6	51.7	103	118
Trinidad and Tobago	80.0	44.2	65.9	66.4	71.4	49.0	55.1	92	29

Sources:

(1) *Doing Business 2009* report World Bank. Economies are ranked on their ease of doing business, from 1 to 181, with first place being the best. A high ranking on the ease of doing business index means the regulatory environment is conducive to the operation of business. Figures for Latin America and the Caribbean represent country medians.

(2) The Worldwide Governance Indicators (WGI) project (2008). Percentile rank (0-100), 0 representing the lowest rank among all countries in the world. Figures for Latin America and the Caribbean represent country medians.

(3) World Economic Forum: Global Competitiveness Report 2008-2009 (2008).

(4) Heritage Foundation (2008). The 2008 Index of Economic Freedom covers 162 countries across 10 specific freedoms such as trade freedom, business freedom, investment freedom, and property rights.

Finally, concerning microeconomic interventions to enhance productivity, the country has taken significant steps to improve its PDPs, although there are still some elements of the old approach and problems of implementation, coordination and overlapping that might inhibit the potential effect beyond the above-mentioned Dutch disease. In the following section we present a brief review of the main historical approach to PDPs in Trinidad and Tobago. Afterward we analyze current PDPs in the country, emphasizing those aimed at industrial diversification and the process of selecting targeted sectors.

3.1 Brief Review of Historical PDPs

Historically, the Government of Trinidad and Tobago has played an active role in several economic sectors (vertical policies), often involved as a provider or a key decision-maker, taking the responsibility for so doing away from the private sector. Some authors see this approach as a limitation to private sector development (e.g., Fairbanks et al., 2007, and Artana et al., 2007).

Since the mid-1950s, Trinidad and Tobago has applied diverse industrial policies that have changed over time. The People's National Movement (PNM) government elected in 1956 pursued economic development through the "industrialization by invitation" model. According to Mottley (2008), in its first years, the country sought to industrialize following the example of Puerto Rico. In this initial stage, the government actively sought to attract investment using a newly created agency called the Industrial Development Corporation (IDC). However, this policy was not successful, as the country could not match the benefits granted to US investors by the Puerto Rican government. In those years (1958-1973), there were three five-year development plans following a policy of state-directed economic planning.

Beginning in the mid-1960s, the government implemented a policy of industrialization by import substitution (ISI). The main instrument of protection was the Negative List: items on this list would require a license for importation that was not easily acquired. The IDC additionally began to construct service industrial parks during this period. In the 1970s there was an explosion of assembly-type industrial production. Goods assembled locally in response to the ISI strategy included (but were not limited to) mattresses, garments, radios, TVs, car batteries, motor cars, home appliances, light bulbs, processed foods and furniture. After 1984, the Negative List was replaced by high import tariffs amidst accusations of corruption in the granting of import permits. As of the mid-1990s the authorities began to scale down the highly protective tariffs, unwinding the old ISI policy.

In the third development plan, 1969-1973, the government outlined the need for investment in heavy industry, specifically the petroleum industry. Several events took place during those years which helped to increase the share of oil production in the GDP: in 1969, the Amoco Oil Company found a substantial oil reserve off Trinidad's east

coast; the following year, Amoco discovered an important natural gas reservoir; and, finally, there was an increase in oil prices after the Arab/Israeli war of 1973.

From 1973 onward, oil production was an enormous source of revenue for the government. During this boom, the State of Trinidad and Tobago embarked on a broad-based program of industrialization, spending part of its revenues on acquiring corporate assets. The policy followed basically a state-led approach rather than a private-led approach (Mottley, 2008). At its peak, 62 enterprises were owned by the state, covering sectors of activity as diverse as airlines, cement, telecommunications, hotels, food processing and, most importantly, energy.

In fact, Trinidad and Tobago began a broad process of public ownership before independence with the acquisition of the Telephone Company of Trinidad and Tobago (Telco) and British West Indian Airways (BWIA) in 1960. The third development plan (1969-1973) states that the public sector would not “hesitate to enter either alone or in partnership with foreign or local private capital into the productive fields of industry, tourism or agriculture” (Bernal and Leslie, 1999).

In the early 1980s, the fall in the international price of oil and in domestic production caused a severe decline in government revenues, and this circumstance forced the country to adjust to a lower level of income. In order to avoid a new swing due to the dependence on oil, the new government elected in 1986 attempted a policy of industrial development based on the non-energy sector. Since then, several policies have been implemented to diversify the industrial fabric.

Some State agencies such as the Tourism Development Company (TDC), the Business Development Company (BDC), the Estate Management and Business Development Company, Ltd. (EMBD), and the Sugar Manufacturing Company of Trinidad and Tobago (SMCOTT) have been key players, which might be seen as distrust of market mechanisms and the ability of the private sector to serve as an engine for development. In 2002 the Government issued a policy statement declaring as a top priority the divestment of management and ownership of State Operated Enterprises (SOEs), with preference given to local investors. Fairbanks et al. (2007) see this move related more to fiscal management than to any explicit connection to private-sector

development, stressing that “moving the locus of responsibility to the private sector requires a shift in the Government of Trinidad and Tobago’s approach.”

The Government continued acquiring equities in various companies until the early 1990s. However, a process of privatization took place since 1987 with a partial divestiture of the telecom company, TSTT (Telecommunications Services of Trinidad & Tobago), and the transfer to the private sector of Trinidad Cement. In 1991, the newly appointed Government outlined the need to let the private sector take the lead in the economy. However, the State would keep its stakes in strategic sectors such as oil and gas, telecommunications and other utilities.

According to Bernal and Leslie (1999), by 1993 the Government had identified 30 SOEs for divestment and 12 for liquidation and, by mid-1995, several companies had either been fully or partially privatized, including the Trinidad and Tobago Urea Company Ltd., the Trinidad and Tobago Methanol Company, BWIA international, the Iron and Steel Company and the Electricity Company. As for the energy sector, the exploration and production activities of the Trinidad and Tobago Oil Company (TRINTOC) and the Trinidad and Tobago Petroleum Company (TRINTOPEC) were merged into a new company, the Petroleum Company of Trinidad and Tobago Ltd. (PETROTRIN). The new petroleum assets of both TRINTOC and TINTOPEC were divested. Finally, it is worth mentioning that the water and the sewage authority, WASA, was handed over in a contract of concession to a private company in 1996 but lasted for only three years under this regime.⁶

The main vision of the Government about PDPs in Trinidad and Tobago has been expressed in the Green Paper on The Trinidad and Tobago Industrial Policy 2007-2012, which builds on the foundation laid by the Enterprise Development Policy 2001-2005 and the Industrial Policy 1996-2000. The main strategy is to diversify the economy away from its dependence on the petroleum sector by developing non-oil manufacturing activities as well as services.

The report identifies some problems and provides a set of eventual policies the Government might adopt. Most of these policies are Government-intensive in the sense

⁶ A private company operated WASA until 1999 when the Government did not renew the contract and the company reverted to the public sector.

that the problems are intended to be solved through Government institutions more than market-oriented reforms, which is evidence that there is little or no change in Trinidad and Tobago's approach to developing private business. There is, however, a change in the traditional approach, since these plans have been formulated in part through collaboration with private sector representatives.

3.2 What Has Changed in the PDPs? The New Ideas of Trinidad and Tobago Policymakers

A careful reading of the Green Paper⁷ shows that the Government emphasizes a modern view of PDP. Additionally striking is the emphasis placed on diversifying the economy, increasing the weight of non-energy activities in GDP, employment and exports.

This report states “government intervention should take place only if it could result in greater social and economical gains” (p. 31). Moreover, following the experiences of other countries around the world, the “Government’s involvement in business is limited to certain key, strategic and cultural industries. The recommended approach, therefore, is the creation and implementation of *effective policies that target and address the inefficiencies in the market*” (p. 31, italics ours).

Note this definition’s similarities with a modern one of the Productive Development Policies (PDPs) as an effective set of microeconomic interventions specifically addressed to solve market failures (Rodríguez-Clare, 2005a). Also, it should be noted that this statement represents a retreat from the premises underlying the 1969-1973 development plan.

The Green Paper continues with the statement that the “investment regime will continue to place priority on stimulating entrepreneurship, increasing industrial expansion and services, as well as the promotion and diversification of exports” (p. 32). These policies, as will be explained below, are consistent with the traditional approach of supporting SMEs, the development of Free Trade Zones, and attracting FDI, among other measures.

Finally, the report states there is no one way to address the “desire to increase the level and quality of investment.” Different sets of incentives would be recommended for

⁷ Green Paper on the Trinidad and Tobago Investment Policy 2007-2012. Ministry of Trade and Industry.

the promotion of each sector, and no single policy for all sectors (p. 32). Accordingly, authorities would assume that policies should be basically of a vertical rather than horizontal nature.

And what sectors should be promoted? As will be explained below, the first choice of targeted sectors was based on an economic report elaborated by an international consultancy firm⁸. In proposing what sectors should be promoted they consider several variables such as contribution to GDP, to employment etc.

4. Selected PDPs for Detailed Assessment

4.1 Basic Approach

In this section we discuss briefly the selected PDPs and the justification for this selection. Taking into account the importance of these PDPs and their potential for improvement, it is necessary to make a critical evaluation taking into account their institutional setting, their probable economic justification, their likely impacts and some suggestions to improve the efficacy of the actual policies.

To do this, we employ a global approach in which we empirically contrast the institutional context of the PDP (which, in some cases, may require that we go deeper into the origins and evolution of the PDPs) with their final outcomes and policy soundness. Briefly, each PDP is analyzed as an independent chapter within the following structure:

a. Institutional setting

Analysis of the institutional framework describing the incentives and the PDP process (agents involved, how policies are selected and designed, private-public sector collaboration, etc.). Some of the questions to be answered are: Who is in charge of the policy design and implementation? What are the main policies? What are the main instruments of these policies? What are the public or semi-public agencies in charge? Why, in the case of vertical policies, does the Government choose to target these specific sectors?

⁸ The report is the “Investment Promotion Strategy Study for Trinidad and Tobago” (1999).

b. The Case for Policy Intervention

PDP justification: Analysis of eventual market or government failures that justify specific policies in each sector or activity.

c. Policy Outcomes and Recommendations for Improvement

Assessment of the PDP. This section evaluates the final outcome of each PDP: Are the policies coherent? Are they well targeted? Are they well designed? Are they consistent with the goal? Are there unintended consequences? What are the causes of diversion of the targeted actors or activities?

4.2 Selected PDPs

We have selected four PDPs for analysis. They were selected according to the following criteria: a) most are explicitly considered *priorities in the government's program* and they are documented in the multi-sectoral statement of economic development (Vision 2020) and are cases of vertical policies; b) they show an *enormous potential for improvement* (cases of PDP for tourism, SME and FTZ) and; c) they are part of the ongoing debate around the need for industrial diversification.

The following table summarizes the selected PDPs and their classifications according to the horizontal/vertical dimension and the public input/market channel of intervention (IDB, 2008).

Table 2. Summary of Selected PDPs

	Transversality	
	Horizontal	Vertical
Public Input	Macroeconomic stability so far Overvalued real exchange rate: Dutch disease? Acceptable business climate	Harbours, ports and roads suitable for energy sector
Market Intervention	SME: National Entrepreneurship Development Company Limited (NEDCO) / Business Development Company (BDC) * Business advisory service * Loan programs for SME Free Trade Zone (FTZ): in charge of the state-owned Trinidad and Tobago Free Zones Company	Old Industrial Policy: Vision 2020 with "targeted sectors" in manufacture 1. Food and beverage 2. Chemical and plastics 3. Metal processing 4. Leisure marine 5. Information technology and electronics 6. Printing and packaging Tourism: Tourism Development Company and THA Public companies to develop sectors: oil (Petroleum Company of Trinidad and Tobago), gas (National Gas Company)

Source: Authors' compilation from IDB (2008).

In our view, the public input/horizontal (HP) quadrant could be filled by a relatively stable economy and an acceptable business climate assessment. On the other hand, the HP space should include the unfavorable, overvalued exchange rate for non-oil production; most of this effect is related to the so-called Dutch Disease (see Artana et al, 2007).

In the public input/vertical (VP) quadrant we include, as an example, the infrastructure supply as developed in Trinidad and Tobago. This is concentrated on the most export-oriented sector, oil and gas production. In this study we will exclude this quadrant and we will focus on the market intervention channel.

Lastly, we will show in the market intervention quadrants examples of different policies. Due to its relevance, we will select for this study four market-intervention PDPs that will be detailed below. They are the following:

4.2.1 Vertical policies:

- a) **Cluster promotion of targeted sectors.** The PDPs for these sectors involve several interesting aspects to be analyzed: the number and sectors chosen to promote changed several times. Originally, six specific activities were chosen (Food and beverage; Chemical and plastics; Metal Processing; Leisure marine; Information technology and electronics; Printing and packaging⁹), but they were later changed in the process of policy design and implementation as a result of changes in coordination among the stakeholders. Although some progress has been made, the evidence seems to indicate that the policies are still far from being fully implemented and effective; therefore more than analyzing what the Government has done, we analyze what the Governments wants to do, what the private sector is asking for, and what we think needs to be done.
- b) **The PDP for the tourism sector.** Surprisingly, this is underdeveloped in Trinidad and Tobago compared to other Caribbean countries. These policies depend on three different and not always coordinated organizations: the Ministry of Tourism, the Tourism Development Company (TDC) and the Tobago House of Assembly (THA). We analyze the policies they are implementing, whether they are grounded in market failure arguments and what are, in our view, the policy recommendations.

4.2.2 Horizontal policies:

- c) **Small and medium enterprises policies (SME PDPs)** designed to deliver support to these types of firms. The main instruments are implemented by the NEDCO (National Entrepreneurship Development Company Limited), established in August 2002, and by the BDC (Business Development Company Limited);
- d) **The implementation of a Free Trade Zone (FTZ)** to facilitate export diversification and as FDI attractor, overcoming obstacles and distortions in the rest of the country.

⁹ In more recent times, seven sectors have been identified: Food and Beverage, Merchant marine, Yachting, Film, Music and entertainment, Fish and fish processing, and Printing and packaging.

4.3 General Overview of Current Institutions for the Selected PDPs

Rodríguez-Clare (2005a) argues that governments should make selective interventions aimed at discovering new profitable activities (horizontal interventions) and at creating innovation clusters (vertical policies).

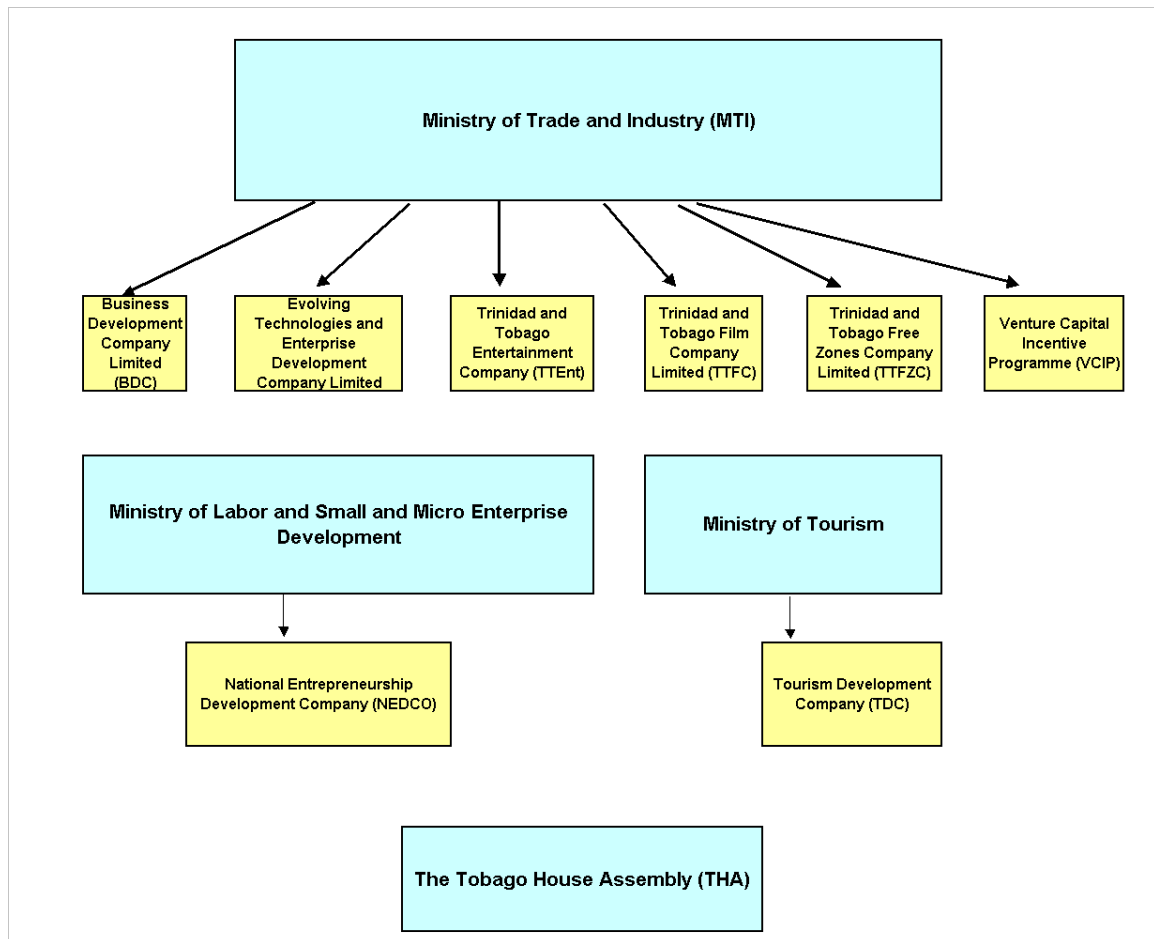
An effective set of microeconomic interventions should specifically address the market failures that have an impact on economic development. Theoretical and empirical studies suggest two sets of market failures: a) externalities in the entrepreneurial process of discovering new profitable investment opportunities (Hausmann and Rodrik, 2003) and b) coordination failures in taking necessary actions to increase sector-wide productivity. Both types of interventions, horizontal and vertical, are key to economic growth, but, according to Rodríguez-Clare the mix of their applications depends on the stage of development of the country.

Market intervention policies applied in Latin American and Caribbean countries, including Trinidad and Tobago, are not new: export promotion, FDI attraction, small and medium-sized enterprises (SME) support programs and innovation promotion. In fact, several instruments and perhaps an even larger number of goals exist to put the country on the path of export and industrial development in non-energy production. Although there are seven identified sectors to be targeted by the PDPs, they exist together with a set of other PDPs also directed to other particular sectors, such as tourism.

Generally speaking, in Trinidad and Tobago the Ministries are in charge of outlining policies, and a set of related agencies take the responsibility of implementing them following the instructions of the Minister. It should also be noted that public intervention through state-owned enterprises is pervasive, especially in the energy sector. It was estimated that expenditures from public enterprises reached 36.8 percent of GDP in 2007, whereas Central Government outlays amounted to approximately 28 percent of GDP in the same period.¹⁰ Figure 3 shows the main official institutions in charge of the PDPs selected for this study.

¹⁰ Source: Staff Report for the 2007 Article IV Consultation, August 2007. International Monetary Fund (IMF).

Figure 3. Institutions Involved in Productive Development Policies



Source: Authors' compilation.

The main responsibilities of each institution are outlined below:

The Ministry of Trade and Industry (MTI). This Ministry is in charge of the trade reform process aimed at enhancing competitiveness. It also has a major role in developing the country's industry, especially the seven targeted sectors. It is also responsible for stimulating both domestic and foreign investment and is the official Secretariat for the Prime Minister's Standing Committee on Business Development, which is an advisory body to Cabinet. To sum up, the MTI coordinates trade and industrial policy.

The following agencies implement the MTI's policies:

Business Development Company Limited (BDC). The BDC focuses on providing technical and financial support to small and medium sized enterprises (SMEs). This agency grants limited loan guarantees for the acquisition of working capital through financial institutions.

Evolving Technologies and Enterprise Development Company Limited (eTeck).

This agency has the following mandates: i) supplying proper infrastructure through the development of industrial parks, ii) encouraging diversification of the country's non-energy and downstream from energy production and export bases, and iii) exploring niche areas of investment for local and foreign companies. In short, eTeck is a sort of investment promotion agency

Trinidad and Tobago Entertainment Company (TEnt). This agency has the responsibility to facilitate international exposure of the local entertainers; to market and promote the national creativity; to influence positive perception of Trinidad and Tobago's arts and culture abroad; to assist local entertainers and artistes in accessing funding for projects geared towards the export market; and to facilitate private sector investment both locally and abroad into the entertainment industry. To sum up, this agency promotes cultural diffusion and investment in cultural affairs.

Trinidad and Tobago Film Company Limited (TTFC). The main responsibilities of TTFC include functioning as a one-stop shop to facilitate film and television production; to assist local producers in accessing funding for the production and distribution of their products and for providing access to channels for distribution; and to market and promote the country's film industry in the international market.

Trinidad and Tobago Free Zones Company Limited (TTFZC). The TTFZC regulates companies in free zones and makes recommendations to the Ministry of Trade and Industry on enterprises eligible for free zone status. The company is also in charge of administering the Free Zones Act (1988).

Venture Capital Incentive Programme (VCIP). The main objective of the VCIP is to increase the supply of risk capital to the entrepreneurial small business sector. This is done through the granting of tax credits to investors to qualifying companies.

Ministry of Labor and Small and Micro Enterprise Development. This Ministry has responsibilities for providing services to employers, labor unions, and individual workers. These functions include Administrative Services, Conciliation Services, Occupational Safety and Health Issues, Labor Inspectorate Services, Library Services, Research and Planning Services, Trade Union Services, and, Friendly Societies Services. In addition, Co-operative Activities and Employment Services are also provided by the Ministry.

National Entrepreneurship Development Company (NEDCO). This agency focuses on micro business (up to five employees, with no more than TT\$ 250,000 in assets or sales). As will be explained in detail below, NEDCO provides small loans, training and general advice to micro businesses. The agency' targets are non-traditional small production and services.

Ministry of Tourism. This Ministry is responsible for formulating policies to guide the tourism industry; conducting research on tourism-related issues; monitoring and evaluating tourism industry initiatives and development; networking between stakeholders; developing and implementing tourism-related projects; facilitating tourism investment and the general development of the industry; building awareness of the tourism industry; providing lifeguard services; and monitoring the operations of the Tourism Development Company (TDC).

Tourism Development Company (TDC). The TDC's responsibilities are to establish and to implement standards for the development and maintenance of tourism infrastructure and amenities, as well as standards for all identified tourist sites and attractions. The TDC is also responsible for the rationalization of the ownership of all beach facilities, tourism sites and attractions and maintenance of those identified facilities and amenities. All elements of tourism marketing and promotion are the exclusive responsibility of the TDC, including the promotion of hotel investment opportunities. The agency is mandated to manage the State's interest in all new hotel development and facilitate applications from tourism investors for concessions under the Tourism Development Act or similar legislation. The TDC is also

mandated to upgrade the reception and information service facilities at the destination's official ports of entry, in collaboration with other relevant stakeholders. Where the functions of the TDC relate to Tobago, all activities are planned and accomplished in consultation with the Tobago House of Assembly (THA).

The Tobago House Assembly (THA), Division of Tourism and Transportation.

Section 25 (1) of the THA Act, 1996, gives the THA Division of Tourism and Transportation responsibility for the formulation and implementation of tourism policy for Tobago so that the THA is responsible for its own tourism promotion and development, and overseas marketing of Tobago in collaboration with the TDC.

As can be seen, there are many agencies involved in the implementation of PDPs. They are divided according to the activity to be encouraged—small business, entrepreneurship, export promotion and investment attraction—more than the targeted sectors; the few exceptions include entertainment, films and tourism. Table 3 summarizes the main activities and responsibilities undertaken by the different agencies.

Table 3. PDP Activities and Responsibilities by Agency

Ministry	Agency	Target	Services and Incentives
Ministry of Trade and Industry	Trinidad and Tobago Film Company Limited (TTFC)	Film Industry	Provides up to 30 percent rebate for filming on location in Trinidad and Tobago. These rebates are based on the expenditure in the country. Provides an administrative structure to facilitate all incoming film crews to Trinidad and Tobago. Acts as liaison with different Ministries and co-ordinates permits to film. Networks with Customs and Excise Division to allow for the temporary importation of film, television and radio equipment without crews having to post a Bond, or pay duties and Value Added Tax (VAT). Facilitates media accreditation and support of the Copyright Organization of Trinidad and Tobago (COTT) for the protection of Intellectual Property Rights. Networks with industry partners for reduced rates for airline travel, accommodation, transport and other support service providers. Provides information on services available by certified and approved Tour Guide Operators and Tour Guides.
	TT Entertainment Company Limited	Music and entertainment	Financial aid to artists through the Revolving Investment Arrangement (RIA). The funds granted will cover up to 70 percent of the investment and are granted on the condition that T&T Ent. receives a negotiated return on its investment. Familiarization Tours of the country for international executives in the music industry and successful Trinbagonian visual and performing artists living abroad to assist in exporting local talent and products; Networks with foreign executives of the industry and with locals living abroad; Purchasing airtime on international mainstream broadcast media. The company will also facilitate the annual participation of artists in International Music Festivals such as the international trade fair MIDEM. Joint venture projects to stage International Promotional Music Concerts and Major Theatrical Productions abroad. Trinidad and Tobago Ent. Online for downloads of the collected archives of our local soca, chutney, calypso and other genres of music and music videos. In addition, there will be a national database of artists and cultural entrepreneurs as an Entertainment Directory.
	Evolving TecKnologies and Enterprise Development Company Limited	FDI and ICT.	Trinidad and Tobago Country Branding and Investment Promotion. This is a sort of Investment Promotion Agency. In charge of the administration of existing Industrial Parks. To encourage the development of the ICT, knowledge based and downstream energy industries. Ownership, development and management of the Tamana InTech Park. Management of the lease operatorship for the Hilton Trinidad and Conference Centre and the Tobago Hilton Development and delivery of non-energy industrial sector incentives. Collaborating with TDC and NEC in the development of promotional strategies as well as material on Trinidad and Tobago.
	Business Development Company (BDC)	SME	Loan guarantee program. Lease financing through Caribbean Leasing Company Limited (CLCL). Tax breaks for SME. Grants to encourage innovation in the non-energy sector. Support for participation in international fairs and mission. Dissemination of other relevant information (market research, trade agreement, etc.)
	Trinidad and Tobago Free Zones Company Limited (TTFZC).	FDI	In charge of the Implementation of the Free Trade Zone Act (1988).
	Venture Capital Incentive Programme (VCIP)	SME	This program was introduced to promote the formation of Venture Capital Companies (VCC's). Granting of tax credits to investors of VCC's. Provide entrepreneurs with advisory services and pre-investment technical support necessary for them to secure funding for their projects (through the Advisory and Mentoring Unit, AMU).

Ministry of Labor, Small and Medium	NEDCO	Microenterprises	Direct financial assistance to micro-entrepreneurs. Providing training programs for entrepreneurs. (Entrepreneurial Training Institute & Incubation Centre,ETIIC). Facilitate the promotion of and participation in marketing and distribution initiatives of entrepreneurs (e.g., trade fairs).
Ministry of Tourism	Tourism Development Company (TDC)	Tourism sector in T&T	TDC is in charge of applying the Tourism Development Act (1999), which includes responsibilities in granting fiscal relief and other benefits. Tourism marketing.
Tobago House Assembly (THA)	Division of Tourism and Transportation	Tourism sector in Tobago	Tourism marketing.

5. Vertical PDPs

5.1 Clusters Promotion

5.1.1 Institutional Setting: Origins, Main Actors and PDP Process

The prescription for moving Trinidad and Tobago towards prosperity through industrialization on the basis of the exploitation of natural gas as the source of growth of new industries dates back to 1975. More recently, the present Prime Minister, Patrick Manning, created a committee to develop strategies for the country in order to achieve developed status by the year 2020.

The Multi-sectoral Group (MSG), also called the Vision 2020 Planning Committee, was asked by the Government “to lead the process of planning to develop a national strategy that would guide this country to becoming a developed nation by the year 2020,”¹¹ resulting in the 392 page document entitled “Draft National Strategic Plan Vision 2020.” This plan identifies up to 28 sectoral fronts through an inclusive process of participation by different actors. Although the document has been published, many of the issues regarding future industrial policy have not been settled (Mottley, 2008).

Figure 4 illustrates the consultative process between the Government and the MSG and the involvement of different stakeholders. In 2002, the Cabinet of the Government of the Trinidad and Tobago established a 25-member Vision 2020 Planning Committee. The MSG’s membership was drawn from diverse fields in a voluntary undertaking to guide the planning process of the Draft. The MSG established 28 subcommittees to develop strategic plans in sectors/areas of interest to the country. These 28 groups were clustered under six headings designed to facilitate easy management of the planning process:

- Business and Productive Sectors
- Human Resource Development
- Technology and Innovation
- Health and the Environment
- Public Institutions, Public infrastructure and housing
- Social Framework

¹¹ Draft National Strategic Plan, Vision 2020.

[In: http://vision2020.info.tt/cms/index.php?option=com_frontpage&Itemid=1.]

The subcommittees were mandated to produce comprehensive sector strategic plans for their focus areas; their membership was determined by the MSG, the Secretariat and the respective chairs. The documents formulated by the subcommittees, known as Sector Strategic Plans, are supposed to be as operational as possible.

Figure 4. Participants and Information Flows in Consultative Process



Source: Draft National Strategic Plan, Vision 2020.

Chapter 5 of the main report, the Draft National Strategic Plan, discusses the MSG’s ideas of the MSG about fostering competitive businesses. In this chapter, on page 50 it is stated that one of the strategies for building up competitiveness is to introduce policies that “support knowledge generation and thereby facilitate industrial cluster development within the non-energy export sector.” In a 1999 study commissioned by the Tourism and Industrial Development Company (TIDCO), “Investment and Promotion Strategy Study for Trinidad and Tobago,” it is pointed out that special attention should be given to “energizing” the light manufacturing

industries of six sectors: Food and Beverage, Chemicals and Plastics, Metal Processing, Leisure Marine, Information Technology and Electronics and Printing and Packaging.

However, the Government later increased to seven the number of sectors to be targeted and, at the same time, replaced some of them.¹² The currently selected sectors are the following:

- Food and Beverage
- Printing and Packaging
- Merchant Marine
- Film
- Music and Entertainment
- Fish and fish processing
- Yachting

It should also be noted that Information and Communication Technology (ICT) was included as an additional activity.

Once the targeted sectors were agreed upon by the Government and the consultants, a process of consultation through the MSG was established in order to find ways to enhance the productivity of the different sectors. Before specifying the main policies, we will review how the sectors were chosen and how they have been modified since 1999.

5.1.2 The Path to Choosing the “Winners”

In 1992 the Government of Trinidad and Tobago entered into a loan agreement with the World Bank for a Business Expansion and Industrial Restructuring project. The institutional strengthening of TIDCO was part of this agreement. TIDCO commissioned the report “Investment Promotion Strategy Study for Trinidad and Tobago” to the Trade Development Institute of Ireland Limited (TDI). The principal objective of this document was to propose an Investment Promotion Strategy for the agency charged with this responsibility, then TIDCO and now eTeck and other agencies.

¹² Also Fairbanks et al. (2007) pointed out that in Trinidad and Tobago leisure marine, tourism, and manufacturing (including plastics, packaging, and printing, and food and metal processing) would offer immediate prospects, while information technology and information services would hold particular promise both as clusters and as enablers for developing other clusters.

The report was intended to develop “a strategy and a cost-effective supportive program for the short and medium term and the promotion of T&T as an attractive location for internationally competitive manufacturing and service industry.” That is, the tasks of the consultants were to elaborate the guidelines of TIDCO, the resources for the plan and the necessary marketing to attract investment.

The stakeholders from the private sector highlighted some problems that were adversely affecting domestic investment:

- The lack of consistency in Government trade policy and the poor dissemination of information on the impact of ongoing trade agreements;
- Financial constraints derived from the absence of an active stock market and risk-averse banks;
- The lack of entrepreneurial spirit due to the scarce availability of venture capital.

The report also stated that “the development of a risk-averse business culture has reduced the capability of the domestic sector to make a greater contribution to job and economic development” (p. 7).

However, in Artana et al. (2007), it is found that the credit conditions are relatively good in Trinidad and Tobago, as the country has sufficient resources and financing is relatively cheap, and the micro evidence shows that a high proportion of new investment in the non-energy sector is financed through the banking system under reasonable conditions regarding interest rates and collateral requirements. Therefore credit availability does not seem to be an important constraint to growth. Nevertheless, financial depth and access to finance are somewhat inadequate, and the main explanation for this lies in weak demand for loans, showing that the problem in the non-energy sector may be the lack of opportunities due to other factors (e.g., overvaluation of the exchange rate, infrastructure, quality of education).

The report also remarks that reasons for attracting FDI include increasing employment, exports, domestic absorption and tax revenues. While all these benefits could also be attained by increasing domestic investment, others are in fact more linked to foreign investors, such as modernization of machinery and manufacturing processes and integration with external markets.

As will be discussed in the FTZ section below, the goals of FDI attraction could be more efficiently attained through other policies.

The reports suggested that, once a potential investor is identified, the agency should be actively involved in the entire investment process of investment through ongoing stimulus, invitations to meet with potential partners and publicizing the country's benefits for investors. In other words, *TIDCO should intermediate in order to attract investment*. This recommendation seems to be government intensive rather than based on market incentives.

The suggested tasks of the investment agency are the following:

- a) Identifying a list of potential target investors;
- b) Making contact with those investors;
- c) Stimulating the interest of potential investors;
- d) Securing meetings between the agency and the potential investors;
- e) Securing and organizing visits by potential investors to Trinidad & Tobago;
- f) Undertaking regular reviews of progress.

The report additionally proposed as target markets of potential investors the United States, Canada, Germany, United Kingdom, France (Food and IT), Switzerland (Chemicals) and some Mercosur countries. The sectors on which the agency should be focused are those taken from a larger list by TIDCO. These were the six sectors mentioned: Food and beverage, Chemicals and plastics, Metal Processing, Leisure marine, Information technology and electronics and Printing and packaging.

Table 4 shows the number of sectors targeted at different stages of the policy process.

Table 4. Targeted Sectors in Trinidad and Tobago

Suggested by the Trade Development Institute of Ireland in 1999	Selected by TIDCO Vision 2020 (2001)	Green Paper on Investment Policy 2007-2012	Current Year 2008
Food and Beverages	Food and Beverages	Food and Beverages	Food and Beverages
Chemicals	Chemicals, including Plastics		
Building Materials			
Clothing and Textiles			
Other Manufacturing	Metal Processing		
Printing and Publishing	Printing and Packaging	Printing and Packaging	Printing and Packaging
Sugar refining			
Electronics	Information Technology/ Electronic	Information and Communication Technology	Information and Communication Technology (*)
Wood Products			
Services (financial, tourism, telecommunications)			
Yachting	Leisure Marine	Yachting	Yachting Industry
Warehouse/ Transshipment		Merchant Marine	Merchant Marine
Music and Entertainment		Film	Film
		Music and Entertainment	Music and Entertainment
			Fish and Fish Processing

Sources: Investment Promotion Strategy Study for Trinidad and Tobago (TDI- TIDCO), June 1999; Vision 2020, Draft National Strategic Plan, 2001; Green Paper on the Trinidad and Tobago Investment Policy 2007-2012, Ministry of Trade and Industry; and Ministry of Trade and Industry, Business Development, (in http://www.tradeind.gov.tt/Business_Dev/industries.htm). (*) Although this is not part of the targeted sectors, this is an activity that the government wants to stimulate.

It is remarkable how the number and the set of activities selected by the government have been changing all along. In fact, in the Green Paper on Investment Policy (year 2006) the number of sectors was different from those stated in the Vision 2020, since metal processing and chemicals and plastics were dropped from the short list. At the same time, yachting replaced the more general “leisure marine,” while Merchant marine, Film and, finally, Music and Entertainment were introduced as new sectors to be fostered by industrial policy. The list changed even more recently as the Ministry of Trade and Industry added a new sector, the fish and fish processing industry. Therefore seven sectors are now targeted, and ICT might be included as an eighth.

In the case of ICT, the government has taken steps to liberalize the telecommunication sector in order to provide cheaper communication costs, and two companies (DIGICEL and LAQTEL) have been granted licenses in addition to the company partially owned by the government (TSTT). The idea is to create an Information Technology cluster around the University of Trinidad and Tobago (UTT), which has been established in a new campus at Wallerfield. The state-owned company, Evolving Technologies and Enterprise Development Company Limited (eTeck), has been building new industrial parks in Debe, Dow Village, Endeavor, Factory Road, Frederick Settlement, Point Fortin, Preysal and Reform. eTeck is in fact “responsible for developing the Light Industrial Parks in Trinidad and Tobago by encouraging diversification of the country’s non energy and downstream from energy production and export bases, exploring niche areas of investment for local and foreign companies, as well as providing infrastructural support by development of eTeck Parks throughout Trinidad and Tobago.”

According to Mottley (2008), the government’s main investment in diversifying away from energy has been the founding of UTT and eTeck. The UTT was founded in 2004 with a double objective: to become a center of Research and Development (R&D) focused on the technologies related to the targeted sectors and to be a center of training in specific skills required for those activities. Its activities are supposed to mirror the needs of the strategic sectors identified for development in Vision 2020. For the purpose of ensuring that its objectives are achieved, a range of programs has been developed and is being increased. According to the UTT website, in order to offer a competitive curriculum, the UTT has signed strategic alliances with foreign institutions of renown.

In addition, the eTeck company, founded in 2004, resulted from a Government of Trinidad and Tobago proposal to divest the assets of the Property and Industrial Development Company of Trinidad and Tobago (PIDCOTT) from the Tourism and Industrial Development Company Limited (TIDCO) and create an independent entity that would own and manage various real estate holdings on behalf of the Government, including 17 industrial parks across the country. Today eTeck concentrates on non-energy business development, as well as knowledge-based and downstream energy industries, currently managing and maintaining 19 light industrial parks with over 500 tenants whose scope of operations is in the non-energy and downstream from energy base. eTeck is also developing eight other new light industrial parks to stimulate growth of industries in the non-energy sector and the Tamana InTech Park, the first of its kind in the Caribbean with its cutting-edge technology, “smart” green buildings and an environment to facilitate R&D businesses, software developers, biometrics researchers and business intelligence incubators

eTeck encourages investment in the Tamana InTech Park on the grounds that, among other things, investors would benefit from an environment that i) is rich with networking opportunities, ii) holds the potential for equity injection and business development through government funds, and iii) possesses the ability to hire highly skilled personal trained in the UTT.

Finally, it should be noted that the National Productivity Council, an initiative to boost labor productivity in the manufacturing sector, was launched in June 2008. This tripartite Council was set up in order to develop and implement a public awareness program and conduct a baseline survey on productivity levels in the country. The Council will collaborate with international agencies such as the International Labor Organization (ILO). It will also undertake preparatory work to establish a National Productivity Centre, which will, among other things, facilitate educational programs on the improvement of national productivity.

5.1.3 The Case for Policy Intervention

For Rodríguez-Clare (2005b), industrial policy should be interpreted as promoting clustering in sectors where the country has a comparative advantage rather than creating new sectors. For Hausmann and Rodrik (2003), industrial policy is more about discovering the country’s comparative advantage.

An important question, however, arises in the case of Trinidad and Tobago. How is a country supposed to promote clustering if most of its comparative advantages are hidden or difficult to develop because of Dutch disease? In this case, the Hausmann and Rodrik approach would seem to be especially suitable because they tend to emphasize that industrial policy should be designed to discover those sectors that are still undiscovered. Notice that, in the case of a country with Dutch disease, since the other comparative advantages might be hidden, vertical PDPs could become ineffective in diversifying away from the prosperous energy export sector.

It is difficult to determine whether the selection of sectors effectively represents the idea of “picking the winner” or that of encouraging the development of sectors in which the country already has a comparative advantage. When a country suffers from Dutch disease, it is hard for any sector to be a successful exporter if it is not closely related to oil and gas production. At present, what the data show is that the set of exports is effectively highly concentrated in the energy cluster.

Rodríguez-Clare (2005b) emphasizes that it would be preferable to foster “innovation clusters” in sectors where the country has a comparative advantage than a diffuse policy directed to innovation in general. Given that there is evidence of local positive externalities in innovation activities, decentralized agents will invest less than the optimum. The coordination failure is in producing a good without the investment in innovation necessary to enhance its productivity or its quality.

Rodríguez-Clare also argues that it would be more effective to think of innovation policies as means of solving *cluster-specific coordination failures* that prevent firms from innovating. How can we detect activities of innovation with spillovers? The author offers several clues based on empirical findings:

- a) It is likely that spillovers are found among firms located close together. In the case of Trinidad and Tobago there are sectors that, due to their natural conditions, tend to be geographically concentrated. This is the case with agricultural production (i.e., food), the yachting industry, and merchant marine and fishing activities. However, there are other cases where this is not necessarily true.
- b) It is probable that spillovers exist among firms undertaking similar or related activities. In this sense, activities tend to be similar among sectors.

- c) Spillovers depend on how innovation activities are done and on the context in which they take place. He points out that activities from universities or specialized centers generate stronger spillovers than those undertaken in corporations.

According to Rodrik (2004), PDPs complement market forces by reinforcing or counteracting the allocation effects that existing markets would otherwise produce. He takes into consideration the fact that the location and magnitude of the market failures is highly uncertain. *Thus, the task of industrial policy is also about extracting information from the private sector on significant externalities and their remedies as it is about implementing the policies.*

In fact, eliciting information on market failures from the private sector is a key feature of the Government's policy process. Hausmann, Rodrik and Sabel (2008) consider a "good" industrial policy to consist of those institutional arrangements and practices that effectively organize effectively public-private sector collaboration. They distinguish between two levels of industrial policies: one designed to address distortions of existing industries through stepwise increases in their capacities and the other to change the pattern of production through assisting the process of "self-discovery."

This distinction is important from an institutional point of view. Public-private cooperation is crucial in solving problems of missing public inputs or coordination externalities but less important in changing the specialization of the country. The latter requires considering what industry should be developed, and this is a more centralized process.

Melo and Rodríguez-Clare (2006) argue that there are currently two approaches to industrial policymaking in the region, which they call the two-paradigm hypothesis: i) the demand-driven approach and ii) the *strategy-driven approach*. The former represents a set of policies *responding to the needs of the private sector* in order to enhance productivity and competitiveness, which matches the first level of Hausmann, Rodrik and Sabel (2008). In contrast, the strategy-driven approach arises from an *explicit definitions of the desired medium and long- term changes* in the vector of goods and services produced by the economy, which fits Hausmann, Rodrik and Sabel's second level. To draw examples from other countries in the region, the demand-driven approach might be represented by Colombia's PDP process, while the strategy-driven approach might be represented by the Brazilian PDP process.

5.1.4 Policy Outcomes and Suggestions to Improve the Policy Process

Even though some efficient sectors may remain undiscovered in Trinidad and Tobago due to an overvalued real exchange rate or more generally to the so-called Natural Resource curse (Sachs and Warner, 2001), the Government has chosen seven specific activities to support. However, there exists the risk that not all of them represent the most efficient sectors—or at least those with potential comparative advantages.

A summary of some of the recent PDPs intended to increase the productivity of the seven selected sectors can be seen in the Appendix. Notice that, in most of them, *innovation policies are not of concern to the authorities but, on the contrary, they are focused on fiscal incentives or financial support unrelated to such a process.* However, some initiatives such as improving the standards in food or fish processing are PDPs intended to coordinate stakeholders through addressing market failures, as shown in Table 5.

Table 5. Comparison of Initiatives Addressing or Not Addressing Market Failure

Sector	Addressed to market failure	Do not address market failure
Food and Beverage	Agricultural access roads and bridges. Dissemination of market information. Youth apprenticeship program in agriculture. Technological package for poor farmers (Grow box development). Improvement of food safety.	Creation of large farms on State-owned lands. Creation of retail markets
Entertainment Industry	Financial assistance to new projects.	
Film industry	State agency promotes the T&T industry abroad.	Fiscal incentives: expenditures rebates.
Fish and Fish Processing	Training in food safety	
Merchant marine		Preparation of the sectoral report.
Printing and Packaging		Preparation of the sectoral report.
Yachting industry	Coordination of training courses.	Preparation of the sectoral report.

Although there are no precise indicators for the targeted sectors, a closer inspection of the labor productivity growth rates of several related industrial sectors allows us to infer that they did not outperform average growth in recent years. In fact, if we consider worker productivity growth for 33 industrial sectors as supplied by the Central Statistical Office (CSO), 13 were identified as belonging to the targeted sectors, and only four of them outperformed the average productivity rate of growth between 1998-1999 and 2005-2006. These were Fruit and Vegetable Processing, Alcoholic Beverages, Meat, Poultry and Fish and Printing and Packaging.¹³ The data thus show that the chosen sectors might not be the fastest-growing ones—a characteristic that should be expected if they belong to the group with comparative advantages in the country.

However, even though the favored sectors can be questioned on the ground that they were not chosen on the basis of sound criteria, the institutions created for Vision 2020 may be helpful for collaboration with the private sector in obtaining the main instruments for developing clusters.

In fact, the Government set up institutions basically to enhance productivity and elicited information from the private sector related to existing activities that they have considered strategic. This approach can be seen as composed of two parts:

- First, a top-level decision in the Ministerial Committee to target sectors/clusters. This is a sort of strategy-driven approach. Its main problem arises from the lack of sound criteria for choosing the sectors/clusters. In this regard, a policy based on venture capital to finance new activities which would reduce the externalities related to a self-discovery process would be preferable to this type of strongly centralized decision.
- Second, a lower-level organization (the multi-sectoral group) and its technical sub-committees to elaborate operational plans. In these commissions the participation of the private sector was very important. The main drawback of this institutional setting is the lack of accountability concerning the application of the policies. Obviously, if the selected clusters are wrongly chosen, the organization at lower levels will be useless.

¹³ See Appendix A.

The institutional setting for Trinidad and Tobago PDPs could be considered a mix of the Colombian and the Brazilian approaches. Even though the process originated in the governmental sphere, private stakeholders assumed an important role as part of the committees and multi-sectoral groups in the different discussions around Vision 2020.

The PDPs for clustering those chosen sectors are still ongoing. As discussed above, PDPs for some of the sectors or activities have not been fully implemented. In particular, the anecdotal evidence seems to suggest that, except in Food and Beverage and in ICT, there were no significant advances in evaluating their impacts.

Since this is the case, it should be noted that another recurrent problem arises: *the lack of reliable statistical information to evaluate the performance of the PDPs*. This scarcity of statistics is a common characteristic of the entire region. However, the Government is committed to monitoring the achievement of goals through a program called “Managing for Development Results” (MfDR). This is a strategy that focuses on using information of the results of development interventions in order to improve decision-making, a sort of feedback process based on the results achieved.

In January 2007, the Government set up the Program Management Office (PMO) in the Ministry of Planning and Development. This Office has been mandated to lead, guide and coordinate the implementation of all Vision 2020 activities in the Public Sector. The PMO is required, inter alia, to evaluate and measure performance and development outcomes of projects and programs; to build monitoring and evaluation capacity in the public sector; disseminate knowledge and best practices across the public sector; establish standards which will be used as benchmarks across the public sector; and report on the status of plan implementation and progress at the operational level.

Between February and May 2007, the PMO conducted a Vision 2020 Readiness Assessment Survey that involved 23 ministries. More than 140 interviews with Senior Public Officers were conducted to determine their perceptions of Vision 2020 and the capacity for monitoring and evaluation of projects within the public sector, among other issues. The findings, presented in Operational Plan 2007-2010, Transformation in Progress 2007 Report, included the following:

- Logical frameworks¹⁴ are rarely prepared and in instances where they have been developed, this is due to the requirements of multilateral institutions;
- Logical frameworks constitute a “paper exercise” rather than a mechanism that facilitates the tracking of a project’s implementation or contribution to identified goals/outcomes;
- Despite the identification of indicators and sources of data collection in logical frameworks, the actual collection, collation, analysis and utilization of such data are rarely undertaken;
- There is a lack of effectiveness of existing monitoring and evaluation mechanisms within the public sector;
- Some monitoring agencies encounter difficulty in ensuring that their recommendations are implemented;
- Monitoring and evaluation across the public sector is not effectively coordinated;
- Performance evaluation or results are not widely used in decision-making or for the management of programs;
- There are deficiencies in terms of availability of reliable, valid and timely economic and social data to track progress towards the achievements of the goals of Vision 2020.

However, the 2007 and 2008 progress reports¹⁵ represent an important advance. Unfortunately, these reports show more qualitative than quantitative indicators, and they are not broad enough to attain the precision that is required to evaluate particular PDPs.

Finally, it must be noted that the soundness of PDPs is closely related to the stability of goals. In Trinidad and Tobago, however, the government has frequently changed the selection of sectors to be fostered. Ministries, agencies and private stakeholders try to accommodate the new objectives but lose efficacy in this way.

¹⁴ Logical framework is the name given to a management tool used in project design, execution and evaluation.

¹⁵ Also, the Government signed an agreement with the Inter-American Development Bank (IADB) in May 2007, to access grant funding for the introduction of a system of Managing for Results in the Public Service. This Project has three main components: a) Preparation of a Medium Term Action Plan for the Strengthening of Results Based Management in the Public Sector; b) Building consensus about the challenges and benefits of Results-Based Management and, c) Institutional strengthening of the Ministry of Planning and Development.

The following recommendations are offered in order to improve the efficacy of the policy process are:

1. The strengthening of the venture capital program (VCIP), which would help the economy to reveal potential activities with comparative advantages.
2. The continuation of the Public-Private collaboration using the institutions created with Vision 2020.
3. The improvement of accountability in agencies as well as in PDPs.
4. Enlarging the scope of activities included in programs such as the Venture Capital Initiative Program (VCIP) in order to incorporate those belonging to the energy cluster, which has been shown to be very efficient.

5.2 The Case of PDP for Tourism

5.2.1 Institutional Setting: Origin and Main Actors

The Vision 2020 Tourism Strategic Development Plan (Government of Trinidad and Tobago, 2004) identifies tourism as a growth driver and a source of diversification away from energy. Tourism is one of the largest and fastest-growing sectors in the world and a major driver of growth for Caribbean countries. However, Trinidad and Tobago seems to be one of the region's least developed countries in this area, ranking 8th in tourist preferences in the English-speaking Caribbean nations. In 2006, Trinidad & Tobago had 530 thousand international arrivals, but only 67.5 percent were tourists, representing tourism revenues of US\$ 260 million. In that same year the Dominican Republic welcomed 4.3 million international tourists and tourism revenues were US\$ 3.4 billion. In terms of international tourists per square kilometer, Trinidad and Tobago has the lowest ratio in the English-speaking Caribbean, with 87.6 tourists per square km.

Trinidad and Tobago welcomes about half a million of tourists each year, representing 2.3 percent of the 19 million tourists visiting the Caribbean islands in 2007. However, although the country can offer the same natural landscape as its neighbors—especially in Tobago—a simple comparison to other countries shows that Trinidad and Tobago's tourism industry did not perform as well as others.

Table 6. Trinidad and Tobago Tourism Highlights, 2006

Visitor Arrivals			
Tourist Arrivals	457,387	Cruise Passengers	85,859
Summer	64.80%	Summer	26.70%
Winter	35.20%	Winter	73.30%
Visitor Profile			
Tourist Arrivals by Purpose of Visit		Tourist Arrivals by Place of Stay	
Holidays	67.50%	Hotels	25.30%
Business	19.30%	Apartment/Guest Houses	6.10%
Other	13.20%	Private	59.30%
		Other	9.20%
Total income from tourism as % GDP			2.3%
Accommodation and other statistics			
Rooms	5,929		
Room Occupancy Rates	52.0%		
Land Area (square kilometers)	5,128		
Population (thousands mid-year 2004)	1,294.5		

Source: Caribbean Tourism Organization.

Table 7 below shows the country's relative position compared to other neighboring destinations. In fact, with respect to the number of visitors Trinidad & Tobago ranks 11th out of 30 destinations. However, the number of tourists per square kilometer of land is 88, well below of the regional average of 1,362, making the country 23rd according to that criterion. Other indicators, such as the number of tourists per inhabitant, the number of rooms per area and the income from tourism as percentage of the GDP places the country in one of the lowest position.

Table 7. Tourism Indicator Rankings for Trinidad and Tobago

	Trinidad and Tobago	Number of destinations in the Caribbean region
Arrivals (2007)	11 th	30
Number of tourists per sq km of land	23 rd	28
Number of tourists per inhabitant	26 th	28
Rooms per sq km of land	23 rd	28
Tourism expenditure as % of GDP	20 th	20

Source: See Appendix C.

The tourism industry involves many sectors of the economy and requires a fair amount of coordination to develop, particularly international tourism, since externalities are large and the economies of scales in some related sectors are also high (particularly in transportation). As

Harrison and Rodríguez-Clare (2009) point out, coordination failures might prevent the adoption of modern production technologies in a sector that has latent comparative advantage or the possibility of capturing rents in international markets or generating inter-industry externalities.

If we look at the recent history of tourism in Trinidad and Tobago, there was a period of substantial tourist growth in the 1960s when the country was following the same trend as other Caribbean countries and using fiscal incentives offered under the Hotel Development Act of 1963. With the oil boom of the 1970s, however, attention was diverted away from tourism as a source of foreign exchange revenues, and the sector had problems in surviving with a strongly appreciated local currency. There were no thus major hotel construction projects until the mid-1980s when the government once again started looking at tourism to diversify away from dependence on energy-based industry. At that time the lack of physical infrastructure for the tourist industry was the main obstacle to further development in this sector.

Continuing with the diversification efforts perhaps as a result of the experience of neighboring countries, the government took some initiatives to develop this sector in the mid-1990s. The National Planning Policy in the government's 1993-1995 Medium Term Policy Framework (MTPF) document stated "of all the sectors, tourism has the potential to generate significantly increased employment opportunities within a short period of time." Later, the 1994-1996 MTPF discussed preparing a Tourism Master Plan and the development of the tourism infrastructure with IDB assistance. The Ministry of Tourism was established in 1994, developing and implementing tourism-related projects, building awareness of the tourism industry and facilitating tourism investment and development of the industry. By 1995 a Tourism Master Plan was completed, which addressed national tourism vision and policy, market potential, marketing strategies, preparation for tourism, environmental considerations, product development and economic feasibility. From this plan emerged another IDB project, the Short Term Program of Support for the Development of the Tourism Industry.

This trend continued as the 1997-1999 MTPF devoted a large amount of space to tourism and attempted to implement the IDB Short Term Program. The program was to be implemented by TIDCO, which prepared a Strategic Plan for the period 1998-2000. The 2001-2003 MTPF additionally contained a Government pledge to continue to establish policies and implement programs to facilitate the development of tourism. There was talk of a new Tourism Development Act and government assurances of establishing systems and procedures to ensure

the effective implementation of the Act. However, this was more in word than deed, as reflected in the small National Budget allocation of 0.3 percent of the recurrent budget to the Ministry of Tourism. McLeod and Airey (2007) note that, although Trinidad and Tobago completed a Tourism Master Plan in 1995, more than 10 years later this “Master Plan is still to be implemented and a written policy to be devised.”

From the institutional standpoint, the Ministry of Tourism coordinated a Policy Working Committee comprising the Ministry of Tourism, the Tourism Development Company (TDC), policy advisers and other technical staff to develop the first Draft National Tourism Policy document with the participation of the Division of Tourism of the THA. The completion of this document was undertaken considering the comments from different stakeholders and partners after National Workshops held in Trinidad and Tobago.

As is the case for other neighboring Caribbean countries, the Tourism Development Act 2000, provides for several forms of tax relief for investment in tourism. The Act, further discussed in Box 1, provides for benefits to be granted to the owners/operators of various types of tourism projects once these projects have the potential for contributing substantially to the development of the tourism sector. Those benefits, administered by the TDC agency, include tax holidays of up to seven years, tax exemption on profits from the initial sale of villas, condominiums and other sites, carry-over of losses from tax exemption period, duty concessions on vehicles, duty exemption for building materials and articles of tourism equipment, capital allowances and accelerated depreciation.

Tobago is the smaller of the two islands in the union. Local governance of Tobago lies with the Tobago House of Assembly (THA). Tobago has the greater potential to becoming a successful tourism destination, being a winner of several eco-tourism awards, and having rich green vegetation, coral reefs, beaches and a picturesque landscape.

Box 1. The Tourism Development Act of 2000: Some Remarks

This Act concedes fiscal benefits to operators of different activities related to tourism. In fact, the tax benefits are conferred by the Minister of Tourism on a new project or on the expansion of an existing project. These benefits are the following:

- a) Taxes on Profit exemption not exceeding seven years.
- b) Taxes on Profit exemption derived from the initial sale of a villa or condominiums or the site for a villa or condominiums that forms part of a resort which is an approved tourism project.
- c) A carry-over from a tax exemption period.
- d) A tax exemption on interest paid for loans used for an approved tourism project.
- e) Customs duty at the rate of ten per cent for imported inputs.

Incentives for the following tourism projects are reserved solely for nationals of Trinidad and Tobago:

- a) Accommodation facilities under twenty-one rooms.
- b) Transportation services (ferry services, charter boats, VIP limousines, motor cars, tour buses, taxis, etc.);
- c) Ground tour operations or destination management companies.

5.2.2 The Case for Policy Intervention

Why should the Government intervene in this particular industry? Perhaps the main cause is related to the needs of coordination. There is a coordination failure in setting up basic infrastructure in new areas. There is also the need for some regulation regarding standards in areas such as the quality of rooms, the training of human resources (which may involve some coordination because of externalities), the protection of the environment and natural resources which demands public intervention and, finally, the supply of neighboring destinations, which implies granting compensatory benefits whenever there is tax competition among them.

Let us review briefly each of these items. Firstly, the build-up of basic infrastructure needs to be coordinated by the State due to the typical market failure implicit in supplying public goods. That is, the non-rivalry and non-excludability in consumption of these goods make private provision difficult without centralized coordination. This is particularly true in basic infrastructure such as ports, airports and roads. Whenever such market failure is present,

governmental intervention would help to alleviate the problem through different mechanisms such as coordinating different stakeholders in order to supply the good.

There are also other market failures related to tourism. Following the classification set forth by Nelson (1970, 1974), there are basically three types of goods: experience, search and credence goods. Tourism activity can be associated with the first type. In fact, the quality of experience goods cannot be verified before purchasing them, which makes these goods different from search goods, for which information on quality can be acquired through investing in information. As a consequence, some producers of experience goods will attempt to provide consumers with signals about the quality of their products. However, there could be some opportunistic behavior if the bad quality suppliers cannot be disassociated from the rest. Due to this asymmetric information, in this case there is some room for governmental intervention in coordinating and benchmarking some classification of hotel rooms. It should also be mentioned that sometimes regulations are required in order to protect the environment and natural resources, given that the common pool problem is evidently present in this case. Finally, the government must sometimes grant fiscal benefits to discourage investors, domestic and foreign, from leaving the country and going to other competing neighbors. This tax competition is typical in the Caribbean region.

5.2.3 Policy Outcomes and Recommendations for Improving PDPs

Melo (2001) found that most of the countries in Latin America and the Caribbean employed selective financial and fiscal incentives, and natural-resource-based sectors were one of the most frequently favored by these policies. The fact that the main instruments used are tax incentives rather than loans to specific sectors reflects the idea that they were designed to attract FDI. Tax incentives take two forms in the Caribbean region. The most usual form is the tax holiday designed to attract foreign investment, and in many countries of the region tax breaks are the usual instruments.

In the case of Trinidad and Tobago, fiscal incentives in tourism are basically tax holidays aimed at attracting investors, foreigners as well as nationals. Other policies seem to impede this incentive, such as limitations placed on foreign investors in some activities or the bureaucratic process of approval for investment in Tobago.

Tourism policy formulation and implementation for Tobago are the result of two different governing bodies seeking sometimes different goals: the central government and the local government, the THA. Accordingly, tourism policy might prove ineffective. The main arm of the THA, which implements tourism policy, is the Department of Tourism. Only after the Tobago House of Assembly Act passed in 1996 did tourism legally become an area of THA responsibility. On the other hand, the central government maintained its tourism policy through TDC (Tourism Development Company Limited), sometimes conflicting with the local authorities according to McLeod and Airey (2007).

In addition, the Government has historically paid little attention to tourism either as a development driver or as a source of revenue, which has not aided private sector development. The country faces the challenge of developing the sector in the face of strong competition from other Caribbean countries, which have a more developed sector, more generous fiscal incentives, and an established international reputation. On the other hand, since the country is starting later, it can benefit from its neighbors' experiences.

The Sub-committee Report on Tourism, as part of the Vision 2020 documents, points to three main problems:

- a) The current legislation is not all-inclusive and a number of weaknesses have made it difficult to administer the Tourism Development Act 2000;
- b) The main agency, then TIDCO and now TDC, suffered from political interference and it is financially constrained;
- c) There is no clear guideline as to which agency is responsible for the product since many agencies share the responsibility (THA, TDC and the Ministry of Tourism).

Last but not least, the Ministry of Tourism in its Draft of National Tourism Policy of Trinidad and Tobago (July 2008) stresses that the restriction on foreign investors and workers, the lack of up-to-date data on the sector and a limited collaboration between public and private sector stakeholders represent weaknesses for the development of this sector. However, it can be asserted that the roots of tourism underdevelopment in Trinidad and Tobago are the result of a combination of several factors, some of which can be fixed by specific vertical PDPs while others would require horizontal PDPs.

For example, PDPs of a vertical nature include fiscal incentives and the creation of the Trinidad and Tobago brand name as an international destination. On the one hand, fiscal incentives may be eroded by competition among Caribbean countries to attract investment. Moreover, some fiscal benefits are exclusive to local investors and if a foreign company wants to invest in some tourism activity in the island of Tobago, the company will face another important barrier: the approval of both the THA and the Ministry of Tourism. On the other hand, there is an important place for public intervention in tourism marketing and benchmarking of services. As a matter of fact, these policies are the responsibility of three separate agencies: the THA, the Ministry of Tourism and the TDC; uncoordinated efforts and sometimes conflicting objectives make it difficult to implement effective policies. This issue is particularly important in the fiercely competitive environment of Caribbean tourism, which requires investment in a well-known international brand to attract tourists. Also, the authorities might coordinate some basic standards regarding quality of services such as a starred classification system.¹⁶

There are other market failures which would require PDPs of the horizontal type. One is related to labor shortages, especially of low-skill workers. This is a manifestation of the very well known Dutch disease that produces an overheated economy during periods of high international oil prices. According to the Central Bank of Trinidad and Tobago (CBTT)¹⁷, some initiatives have been undertaken recently to alleviate the labor shortage. One such initiative was the revision of the immigration regulations relating to the employment of foreign nationals. The Cabinet approved amendments to the Immigration Act to simplify the processing and issuance of visas and work permits to non-nationals. Some of the amendments included the submission of work-permit applications electronically; the submission of group work-permit applications for groups of 10 or more persons; the issuance of multiple entry visas when required; and the issuance of visas by immigration officers to holders of work permits when they arrive at a port of entry in Trinidad and Tobago. Additionally, under the CARICOM Single Market agreement, the categories of workers eligible for free movement were expanded in 2007 to include nurses and teachers. Finally, there was a proposal for a further expansion to include domestics and hospitality workers.

¹⁶ However, this classification can be organized among members of the Industry.

¹⁷ Annual Economic Survey 2007 (CBTT).

Finally, other PDP required to avoid the stifling of growth of this industry is the reduction of the bureaucracy. One of the most recurrent problems pointed out by some of the interviewees is the excessive delays and red tape costs imposed by the lack of dynamism in the State structure. This is facilitated by the absence of accountability in public sector agencies.

To sum up, there are several market failures that deserve public intervention to enhance tourism productivity: infrastructure, information for consumers, protection of the environment and tax competition. When there are three institutions in charge of usually overlapping responsibilities and with no necessarily aligned objectives, every policy suffers from effective implementation. Trinidad and Tobago not only has this institutional problem but also its policies are centered on fiscal benefits and to a lesser extent on other PDPs to solve what the market failures call for.

6. Horizontal PDPs

6.1 Micro, Small and Medium Enterprises Policy (MSME PDP)

6.1.1 Institutional Setting: Origin, Main Actors

Trinidad and Tobago has been attempting to diversify its economy since the 1980s. In view of the increasing importance of Micro, Small and Medium Enterprises (MSMEs) to growth and development, the Government in 1998 appointed a Task Force to examine the operation of MSMEs in Trinidad and Tobago and to make recommendations for their improvement. As reported in the Enterprises Development Policy and Strategic Plan 2001-2005, the critical areas distinguished by the 1998 Task Force were as follows:

- Co-ordination among MSME developmental agencies
- Harmonization of MSME policies and programs
- Access to credit and other sources of finance
- Training and human resource development
- Marketing opportunities and development
- Institutional and infrastructural arrangements
- Other business development support services

In the latest development plan articulated for Trinidad and Tobago, the Government has been attempting to put systems in place to ensure that the country attains developed country

status by the year 2020.¹⁸ To attain this goal, the government has targeted there are several key areas in the economy that the government has targeted for sustained economic development. One of the important areas in this regard is the proposed enhancement of the Micro, Small and Medium Enterprise (MSME) sector to increase its contribution to GDP. Targeting this area is even more important in light of the six sub-sectors chosen for promotion and development in the Vision 2020 development plan—it is highly likely that many MSMEs will feature prominently in advancing these six sectors.

The following table shows the definition of micro, small and medium businesses in Trinidad and Tobago as recommended by the 1998 Task Force. Businesses which are independently owned and managed, and with these characteristics, can qualify for certain government assistance programs. Data from the list of business establishments in Trinidad and Tobago generated by the Central Statistical Office of Trinidad and Tobago in 2005 show that approximately 68 percent of the enterprises listed could be classified as micro enterprises based on their number of employees.

Table 8. Definition of Small Businesses in Trinidad and Tobago

Type of Enterprise	Employment	Assets (In TT\$)	Sales (In TT\$)
Micro	1 - 5	\$10,000 - \$250,000	<\$250,001
Small	6 – 25	\$250,001 - \$1.5m	\$250,001 - \$5m
Medium	26-50	\$1.5m – \$5m	\$5m – \$10m

Source: Enterprises Development Policy and Strategic Plan 2001-2005.

The Government’s involvement in MSMEs centers on two state-owned institutions: the Business Development Company (BDC) and the National Entrepreneurial Development Company (NEDCO). The BDC’s mandate is to facilitate the growth and expansion of SMEs. The BDC pursues its mandate by providing loan guarantees for commercial bank lending to these enterprises. It also provides direct support for capital investment by way of lease financing. For the acquisition of working capital through financial institutions, the BDC guarantees up to 85 percent of loans to a maximum of TT\$500,000,¹⁹ with the possibility of increasing to TT\$1.5

¹⁸ The Vision with respect to Micro, Small and Medium Enterprises is “To create profitable and sustainable opportunities in the non-energy sector, while contributing towards GDP development and employment in a facilitative environment” (Vision 2020 Draft Report on Industry and Entrepreneurship).

¹⁹ For comparison purpose, the exchange rate is approximately TT\$6.2 per each U.S. dollar.

million. The company has issued 5,190 guarantees to date, valued at TT\$130 million and covering loans of over TT\$250 million. The Caribbean Leasing Company Limited (CLCL), a BDC subsidiary, provides financial leasing for the acquisition of capital equipment for plant expansion, modernization and upgrading.

The government has sought to provide venture capital financing by offering tax credits for contributions to a venture capital fund. The supply of venture capital to prospective entrepreneurs has however been very limited. The BDC also delivers technical assistance programs with a focus on training for management and entrepreneurial development, as well as on the provision of project management and company-specific consultancy services for business growth.

NEDCO's primary mandate is the management of a credit program for micro businesses. It also offers other business support services including entrepreneurial education and development, business advisory and coaching services, training and business mentorship. In an effort to strengthen the country's entrepreneurial culture, NEDCO recently expanded its training programs to secondary schools and tertiary institutions. The Government's vision is to integrate entrepreneurship into the school curriculum at all levels, starting at the primary school level. This organization aims to become a "one-stop-shop" for entrepreneurial support services.

Services provided by this agency include the following:

- a. Loans to micro business under non-stringent conditions.
- b. Business Advisory: The organization has Business Development Officers at all 14 locations to offer information on critical issues such as marketing, financial management, business planning and supply chain management.
- c. Promotional support: Access to marketing and promotional channels provides real opportunities to SMEs to foster growth and innovation. NEDCO provides all customers avenues for promotion by facilitating their participation in marketing and distribution initiatives on a consistent basis.

NEDCO lends money for up to four years and offers short-term loans as well; the interest rate is fixed at 8 percent a year. Another goal of NEDCO is to provide training to entrepreneurs with related courses on topics such as reading balance sheets, calculating cash flows and training in procurement. The types of business supported include wholesale retail traders;

manufacturing; frozen bakery products; convenience stores; beauty salons and barber shops; photography and video services; printing and desktop publishing; art and craft; leather goods; carpet and upholstery cleaning; IT services; security services; event planning and party rentals; dance studio and theatre production; agro processing; educational and job training services; restaurant and catering services; nursing and personal care services; child day care centers; therapeutic services; tourism (tours, tour guides); auto body shop and mechanic; housekeeping services; signs and advertising services; plumbing, carpentry and masonry; iron and wood working; welding landscaping and yard maintenance.²⁰

6.1.2 The Case for Policy Intervention

Many countries around the world apply policies directed in some way to support micro, small and medium enterprises (Rodríguez-Clare, 2005b). This situation applies even more in less developed countries where, in contrast to developed countries, the size distribution of plants is highly biased towards smaller ones (see, for example Tybout, 2000, for the case of manufacturing).

In fact, according to Tybout, perhaps the most striking distinctive feature of the manufacturing sector in less developed countries is its so-called “dualism”—in many industries there are a large number of micro and small businesses and a handful of modern, large-scale plants producing similar goods side by side. Across countries, these microenterprises generally operate generally in the informal sector and rely heavily on informal credit systems. Moreover, these firms use labor-intensive technology and account for an important share of the jobs in the economy.

Rodríguez-Clare (2005b) argues that the economic value of supporting SMEs is limited. However, for the Government these policies seem to be associated with innovation, competitiveness and growth, and the promotion of SMES in order to create new firms and stimulate new activities appears to have been somewhat justified. In fact, the Hausmann and Rodrik (2003) hypothesis on the externalities generated by “self-discovery” is closely related to the creation of new firms. However, such externalities justify only supporting innovative activity in specific projects directed to external markets and not a more general policy toward SMEs. Why should these PDPs be focused on exporting firms? Because it is highly probable that future

²⁰ <http://www.nedco.gov.tt/>

comparative advantages will be manifested in companies producing goods efficiently for sale to the rest of the world.

Perhaps the most cited argument for supporting SMEs involves the credit constraints facing small firms. As credit market imperfections prevent low-wealth entrepreneurs from obtaining loans, they cannot enlarge their scale of plants to reach the optimal size and thus produce below the efficient level of output. However, firms that start out small due to low equity levels and credit constraints will generally earn a higher rate of return and experience a higher rate of growth. Consequently, firms that remain small and with low productivity long after their creation may do so as a result of intrinsically low productivity to begin with rather than credit constraints. In this case, then, the most efficient policy is to focus on new or young firms rather than all small firms.

Government intervention should also address the source of distortion, in this case credit markets. Policies to alleviate dysfunctional loan markets range from the strengthening of property rights to facilitating the establishment of credit bureaus. As Rodríguez-Clare (2005a) has noted, however, even applying the right policies would not eliminate the distortions that cause young companies to suffer credit constraints. In this case, the Government should provide grants to young firms rather than the labor training, technology transfer and export support services usually found in the region.

Rodríguez-Clare points out two important reasons for helping to explain why SME policies are likely to fail:

- Small firms have low productivity on average all around the world, particularly in less developed countries. In poor countries, SMEs generally arise as a consequence of weak labor market demand in labor market rather than entrepreneurship. Also, as SMEs already make up a significant share of all businesses in countries such as Trinidad and Tobago, PDPs promoting them could reduce overall productivity in the economy.
- PDPs designed to address SMEs generally have a wide scope, attempting to reach a large group of firms without a proper evaluation of the real number of businesses in need of assistance.

Both reasons lead Rodríguez-Clare to conclude “investing resources to support SMEs is a policy that does not enjoy solid conceptual foundations and is likely to prove ineffective in practice” (p. 11).

6.1.3 Policy Outcomes and Recommendations for Improving the PDP

Although comprehensive data permitting a reliable estimate of the impact of recent policies are not available, the scarce existing data suggest strong growth in the number of MSMEs served by NEDCO and BDC over the last few years. As of November 2007, the NEDCO program has built a client base of 6,500 businesses and has advanced close to TT\$100 million in loans to various sectors including light manufacturing, services and food and agro-processing. Since 2002, about 5,000 persons have also benefited from the training and mentorship programs. It should be noted, however, that most of the SMEs served to date confine their activities largely to the domestic market. From July 2007 to July 2008, the National Entrepreneurial Development Company Limited (NEDCO) has distributed approximately 1,471 loans at a value of TTD \$50.14 million to Small and Micro Enterprises. This implies an average loan of TT\$ 34,100 (US\$ 5,500).

In general, Trinidad and Tobago’s PDPs toward micro, medium and small firms suffer from several problems:

- The complete absence of a quantitative evaluation program. The lack of accountability of programs and of governmental agencies is an important issue to be solved as prerequisite to making the PDPs useful and effective. Not surprisingly, according to non-official sources the delinquency rate of NEDCO’s outstanding loans may be higher than 50 percent.
- NEDCO programs are targeted to entrepreneurs in general. If externalities exist in the self-discovery activities, loans and support policies should be addressed to entrepreneurs with new activities and products, especially with those selling abroad or with high potential to be exported, and not to the newly self-employed.
- NEDCO lending programs might crowd out other private lending initiatives such as microfinance institutions, perhaps as a consequence of the former’s non-stringent and morally hazardous loan conditions.

- BDC engages in traditional SME activities. As discussed above, those PDPs are generally broadly targeted to support firms on the basis of their size and without regard to their innovative capacity or lack thereof, the true source of market failure.

In brief, MSMEs PDPs in Trinidad and Tobago share the same characteristics as other traditional programs around the world and are based on the assumption that MSMEs' main constraint resides in the lack of credit, leading to their failure as exporters. More recent perspectives, however, suggest that informational externalities brought about by innovation activities themselves might be the main cause of the lack of dynamism in companies. If the policy goal is to enhance the productivity of the economy, PDPs must be designed to encourage innovation activity rather than target companies because of their size, which is a distributional objective. Following this argument, PDPs should be designed to encourage innovation in order to meet very specific goals. NEDCO and BDC can be transformed to accomplish these objectives.

6.2 Free Trade Zone (FTZ)

6.2.1 Institutional Setting: Origins and Main Actors

In Trinidad and Tobago, a Free Trade Zones Program was designed to encourage local and foreign investment in export-driven projects so as to create jobs, develop skills and create external markets for products. The program is administered by the Trinidad and Tobago Free Zones Company Limited (TTFTZ) under the Free Zones Act (1988).

The TTFTZ, which is in charge of the establishment of new firms, reviews applications taking into account foreign exchange earning capacity and potential employment generation. No sectoral limitation is applied. Approved companies are allowed to supply domestically a maximum of 20 percent of goods produced, subject to the payment of import duties. Under the Trinidad and Tobago Free Zones (Amendment) Act of 1995, an area may be designated a free zone eligible to the incentives under the Act. Free Zone enterprises are permitted to establish in any part of the country. They are 100 percent exempt from the following:

- Customs duties on capital goods, parts and raw materials for use in the construction and equipping of premises and in connection with the approved activity;

- Import and export licensing requirements;
- Land and building taxes;
- Work permit fees;
- Foreign currency and property ownership restrictions;
- Capital gains and income taxes;
- VAT on goods supplied to a Free Zone;
- Duties on vehicles for use only within the Free Zone.

The prescribed activities which may be carried on in a free zone include: a) warehousing and storing; b) manufacturing operations; c) transshipment operations; d) loading and unloading operations; e) exporting; f) importing; g) service operations including banking; h) insurance and professional services; i) packaging and shipping; j) assembling; k) processing, refining, purifying and mixing and; l) merchandising, including international trading on products. Production activity involving petroleum, natural gas or petrochemicals and activities involving investment in excess of US\$50 million do not qualify for the program.

Additionally, the Trinidad and Tobago Free Zones Company Limited regulates companies in free zones and makes recommendations to the Ministry of Trade and Industry on enterprises eligible for free zone status.

During the years when the TTFTZC was developed, Trinidad and Tobago was in a distressful economic situation. The unemployment rate rose suddenly, and the Government sought a stand-by agreement with the International Monetary Fund (IMF). The National Alliance for Reconstruction (NAR) government in power wanted to create jobs quickly, and an international consulting firm was hired to assist in this process. It was subsequently decided that Trinidad would adopt the Free Trade Zone framework, which had proven highly successful in Jamaica.²¹ The company would operate like a private company, with the Government owning shares and State limited to appointing the Chairman. Although the trade unions strongly opposed its creation, the Act was passed, following the model of Jamaica's legislation.

The Point Lisas Area was subsequently declared a Free Trade Zone. Although everything was in place, the Point Lisas area remained closed and no activity ensued. There were no tenants or employees, only a board of directors.

²¹ According to Madani (1999, p. 66) "The success of Mauritian, Dominican Republic and Jamaican EPZs highlights the importance of allowing geographical diversity and EPFs [Export Processing Firms]".

At the beginning of the 1990s, the TTFTZ came under new management, accompanied by changes such as revised policies, development of plans, and a shortening of approval times. Initially the Free Trade Zone was developed to focus on the garment industry, but it was soon realized that Trinidad had no competitive advantage in that area. Soon after, companies such as Newcor and Nestlé were approved for activity in the Free Trade Zone.

6.2.2 The Case for Policy Intervention

Free trade zones (FTZ) can be seen as a horizontal PDP that attempts to solve basically a government failure. If the country is not attractive to investment because of insufficient infrastructure, high tax burden, policy instability or other government failures, a FTZ can be seen as a mechanism to provide specific public goods in a more efficient way and to isolate firms from other risks of appropriability (since, generally, the FTZ is protected by law from changes in regulations and the tax burden is considerably lower). Clearly, this is a second-best alternative given that the optimal policies involve removing market distortions in domestic markets as well as tariffs and taxes on international trade.

In fact, FTZs are typically fenced-in industrial estates with companies specialized in selling to world markets. Firms operating inside benefit from reduced red tape, more flexible labor laws, tax holidays and other concessions, reasonable and modern infrastructure services and unlimited duty-free imports of raw and intermediate inputs and capital goods.

Advocates of FTZs emphasize that their primary goals are to increase non-traditional exports, to attract FDI and to help to promote jobs to alleviate unemployment. From the theoretical point of view, there are three different assessments regarding the social benefits of FTZs (Madani, 1999). The first one, the neoclassical approach, suggests that FTZs have more costs than benefits and the balance results in a net loss. This argument is based on the fact that this policy will increase inefficiency by distorting production away from the country's comparative advantages. A second strand of the literature, however, stresses the high mobility of capital, which can make a difference relative to the implications of traditional Heckscher-Ohlin model and thus offer some support for FTZs. Finally, a third point of view comes from the theory of endogenous growth, which emphasizes the zone's spillovers to the rest of the economy.

Generally speaking, special fiscal treatment given to FDI might justify the existence of FTZs. In fact, this implies a conceptually valid argument following optimal taxation theory:

given that foreign investment is more “footloose” than domestic investment, it should be optimal to apply a lower tax to the former, which has higher supply elasticity. Clearly, if several countries are engaged in this sort of tax competition, the result might be suboptimal, and some domestic firms can disguise themselves as foreign investors; this appears to have been the case with several Chinese firms that set up in Hong Kong to obtain tax breaks, a practice known as “round-tripping” (Rodríguez-Clare, 2005b). Also, FTZ policy can help to reduce uncertainty regarding a country’s commitment to private investment since it usually entails setting the “rule of the game” for an extended period.

Nonetheless, export promotion policies could be based on the Hausmann and Rodrik (2003) argument. If there is incomplete information about a country’s comparative advantages, public intervention may be optimal. Since the pioneer firm does not capture the full benefits associated with discovering a new product, there is likely to be a lower level of investment in innovation, as the activity would be rapidly imitated as soon as success were achieved. According to this line of reasoning, export subsidies or a depreciated exchange rate would be justifiable as a second-best policy. However, as argued by Rodrik (2004), the first-best policy for overcoming this sort of informational externality is to subsidize investment in new, non-traditional industries, which should be implemented in such a way that rents accrue only to the only to the initial investor and not to exports of a new line of products.

Reviewing the FTZ literature, Madani (1999) reached conclusions including the following: a) the first goal of FTZ, generating foreign exchange through exports, has shown mixed results, with some countries achieving high levels of net exports (South Korea) whereas some others were barely able to reach positive net exports (e.g. Jamaica);²² b) the linkage between companies in FTZs and those outside, which generally involves FDI, depends on the host country’s level of development, with stronger effects in countries possessing a relatively well-established industrial base (e.g., South Korea and Taiwan) or where firms in the FTZ use basic production processes with local inputs (e.g., the garment industry in Indonesia); c) the effect on jobs creation is varied, ranging from an important share of the labor force in the Dominican Republic (approximately 5 percent) to minuscule percentages as in Trinidad and Tobago and; d) companies in FTZs generally use low-tech production processes and require few

²² Net exports are gross sales minus imports. Recall that most of the exports are imports with some transformation.

industrial skills from workers, so the human capital accumulation effect on the local labor force is weak.

6.2.3 Policy Outcomes and Recommendations for Improving PDPs

At the time of writing there are 13 trading companies: one processing plant, two ethanol projects, five companies in services and five other companies doing different lines of business. These companies are not dependent on the local market. The Free Trade Zone in Trinidad and Tobago is smaller than others in the region; even compared to the domestic economy, its exports represent only a small percentage of the total (about 1 percent) and it employs less than 0.1 percent of the labor force. Its impact on domestic demand is likewise low. From the policy point of view, the FTZ evidently did not generate the expected impact on the economy. The advocated goals of export growth, FDI attraction and job creation have been fulfilled only partially and on a very small scale. Figures 5-7 illustrate these policies' relatively modest success.

In this sense, proper PDPs are those which ease the “self-discovery” process for innovation. For example, the strengthening of the venture capital fund for innovators with strong State support would help the diversification of the economy more than an FTZ with insufficient linkages to domestic production. There is no doubt that more effort should be put into linking activities in the zone with domestic production.

Regarding PDPs for attracting FDI, the same sort of comment may be made. The additional benefit that a foreign investor can bring depends on whether that investor generates spillovers to the rest of the economy through employment, technology or innovation. This, at the same time, is strongly associated with the type of activity and how the company connects to other producers. The evidence indicates that FTZs have stronger spillover effects in countries where the local technology can be complementary to the FDI and weaker effects in countries with a wide technological gap.

Figure 5.

Number of Companies and Employment in the TTFTZ

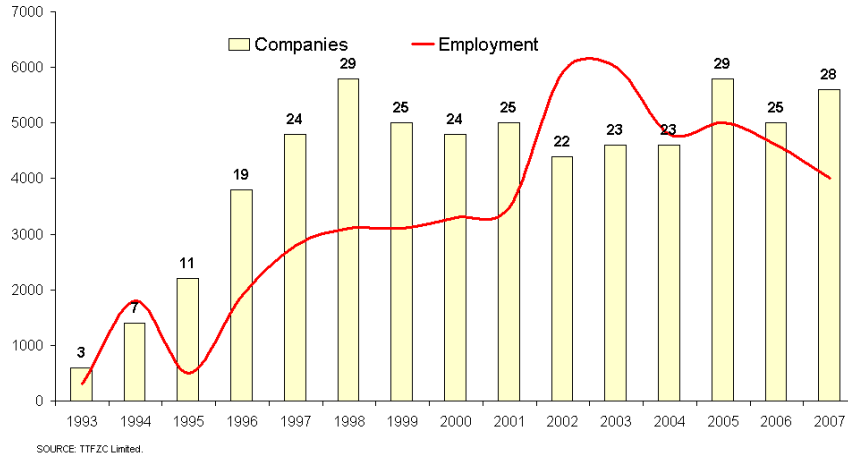


Figure 6.

**Exports from Companies located at the TTFTZ
In US\$ MM**

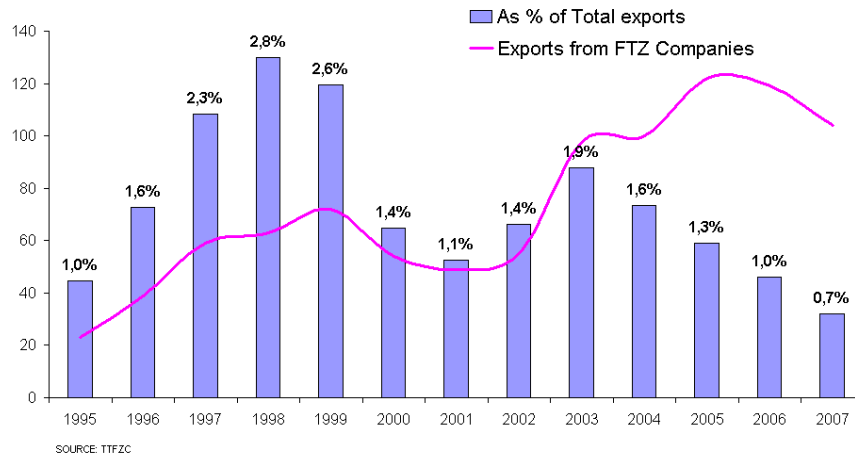
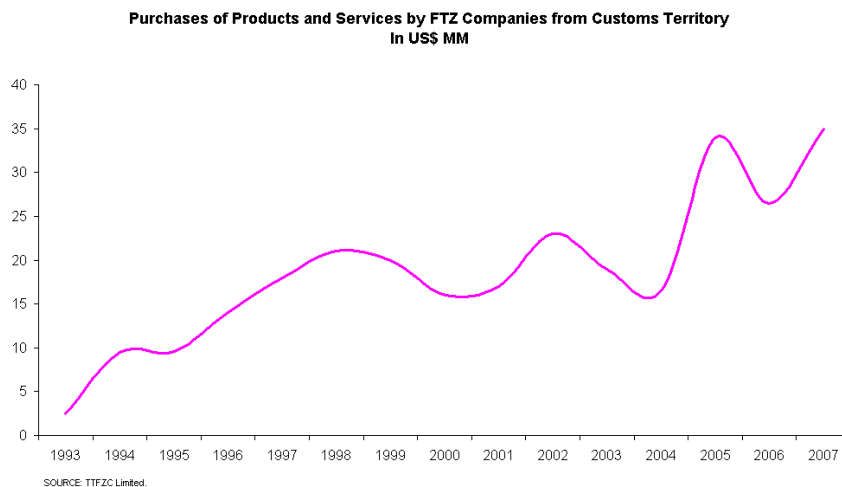


Figure 7.



7. Conclusions

The Government of Trinidad and Tobago has envisioned an unusually wide-ranging process of transformation that involves moving from the current emphasis on energy production to a more diversified economy. The desired process was largely outlined in the Vision 2020 program, and the creation of ad hoc institutions with private and public participation process of consultation and discussion led to several preliminary results. Noteworthy among them is the selection of seven sectors for development through industrial policy. Afterwards, some PDPs were proposed as a consequence of public-private discussions.

One important question to be answered about the PDPs in general is whether they will be sufficient to reverse the country's pattern of deep dependency on energy production. Clearly, the efficacy of the implemented PDPs depends largely on broader policies to mitigate the Dutch disease problem. In fact, most of the analyzed policies are strongly related to encouraging the production of tradable sectors (the chosen sectors in Vision 2020, tourism and the FTZ).

Several important PDPs have yet to be proposed, implemented or evaluated. In some sectors PDPs were implemented but are far from being completed. In other sectors, proposals have been made but their viability has not even been evaluated. To be fair, there is an ongoing process of discussion and evaluation, but the accountability of the agencies and bodies in charge is still weak.

Nonetheless, the major contribution of the Vision 2020 exercise is the successful coordination of several consultative bodies with the private sector in designing policies to address market failures. In this regard, rather than stressing the policy outcomes, we must point out that a sound foundation was created for a policy process that can be used to continue improving the PDPs. Rodrik (2008) has emphasized that the analysis of industrial policy does not need to focus on policy results, which can be inherently uncertain, but on getting the process right to solve what the market cannot.

However, one of the pervasive problems in the region, including the case of Trinidad and Tobago, is the absence of quantitative data to assess the scale of intervention as well as intervention's outcomes and impacts (Melo and Rodríguez-Clare, 2006). This is a basic requirement because PDPs and the agencies in charge must be flexible enough to solve the market failures revealed by the private sector. This is the spirit of the modern approach of industrial policies which should be followed.

Finally, it should be noted that the selection of sectors could be misleading. The fact that one industry may have strong externalities—an issue not evaluated here—does not necessarily mean that it should be developed. What have to be supported are activities which generate those externalities, such as the process of innovation or the discovery of new products, as favoring supposedly more advanced sectors might not lead to clustering, that is, to strengthening externalities. In fact, as the same good can be produced using different technologies, a selected basket of goods can be produced with a “backward” technology rather than with the expected high-productivity process. It is therefore advisable for Trinidad and Tobago's PDPs to move towards supporting new processes and new goods, even among the chosen group of sectors.

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Appendix A: PDPs for Targeted Sectors

A.1 Food and Beverages

A.1.1 Creation of Large Farms

In 2007, 15 sites were selected for the creation of the Large Farms (LFs). The available land, a total of 2,644 acres, was to be distributed for the production of vegetables, livestock, root crops, mixed farming and livestock.

These sites were selected by the State according to criteria such as topography, soil fertility, land capability and access to utilities. The model for the operations of the LFs will be joint ventures and leasehold arrangements with private investors. The private sector will be required to undertake on-farm infrastructural development and investments, and the Rural Development Company of Trinidad and Tobago (RuDeCOTT) will be contracted to implement the LF Programme, which comprises i) advertising locally and internationally for investors to develop the farms and ii) development of infrastructure up to the farm gate and subdivision of lands where necessary.

Infrastructure development at LFs will include the conduct of surveys and subdivisions and the provision of access roads, drainage and utilities (water, electricity and telephone) up to the farm gate. Contracts were awarded to four consulting firms for the design of the infrastructure for the seven LF sites.

Two additional LFs are being developed in Tucker Valley, Chaguaramas. These farms will be the subject of an arrangement between the Governments of Trinidad and Tobago and Cuba. A technical team from Cuba visited Trinidad and Tobago in July 2007 and has submitted recommendations for developing the farms.

In 2008, two farms located at the Mon Jaloux site were allocated to the Sheep and Goat Society. In relation to the remaining 13 farms consultancies were awarded for the infrastructure and utilities construction at these sites, and requests for proposals were made for the investment, development, management and operation of these commercial farms. These proposals are being reviewed by Cabinet.

A.1.2 Agricultural Access Roads

In the first three quarters of 2007, 32 km of access roads were constructed, providing improved road access to 876 farmers. Another 17 km of access roads were upgraded (sealed with oil sand) to the benefit of 425 farmers. This is in addition to the 188.52 km of access roads that were constructed, upgraded and maintained, to the benefit of 4,740 farmers over the period 2002-2006.

During the 2007/2008 fiscal period, progress continued on the upgrade and rehabilitation of agricultural access roads and bridges. As of, May 2008, 28km, representing 31 access roads were upgraded (sealed with oil sand) and three bridges were rehabilitated. This is in addition to 28km representing 24 roads being paved with gravel. These improvements are to the benefit of 657 farmers. Furthermore, a Roads Rehabilitation Maintenance Programme for approximately 29.82km of roads and eight bridges has been planned for 2009.

A.1.3 NAMDEVCO Development Activities

The National Agricultural Marketing and Development Corporation (NAMDEVCO) was created through Act No.16 in 1991 as a state agency within the Ministry of Agriculture, Land and Marine Resources, Trinidad and Tobago, W.I. This agency has the goal of achieving and maintenance of commercially viable, sustainable agribusiness sector, by identifying new market opportunities both locally and abroad for agricultural and agro-industrial products.

Retail Markets

Several retail markets were established to create a more direct link between farmers and consumers in 2006. The elimination of middlemen resulted in better prices for both farmers and consumers. In 2007, two additional markets were established at St. Lucien Road and River Estate, Diego Martin to the benefit of 21 farmers.

There has recently been an even greater thrust in production and marketing efforts by way of promotion in the agribusiness sector. Emphasis was placed on institutionalizing retail markets via promoting farmers' markets. Given the success of these markets, plans are proposed for the establishment of three mobile farmers' markets. This project's main objective is to enhance the food security of every citizen by providing cheap, accessible and safe foods to consumers and afford farmers a fair return on their investment.

Market Information

The following initiatives were successfully implemented in order to facilitate greater sharing of market information between producers and consumers:

- The Greenvine newsletter, a monthly bulletin that provides information to the agriculture sector.
- The Market Price Watch, which provides weekly information on wholesale and retail prices for select produce in the three main daily newspapers.
- The National Agricultural Market Information System (NAMISTT) Website, which provides a range of information including agricultural prices and volume of produce at wholesale and retail markets, a buyers' and sellers' forum and a traders' contact database.

A.1.4 Agricultural Land Information System and Inventory of State Lands

Over the period 2002-2007, an inventory of approximately 17,720 acres of lands was compiled. This database, which is updated annually, provides critical information for decision-making on the efficiency and effectiveness of land use. Based on the information collected, approximately 1,042 new agricultural leases for 6,037 acres of land were allocated to persons occupying and actively cultivating State lands.

A.1.5 Youth Apprenticeship Programme in Agriculture

YAPA seeks to build human capital at the professional, entrepreneurial and laborers' level through agricultural education and training for persons between 18 and 25 years of age. YAPA is comprised of two phases: YAPA I, which is an introductory eight-week phase, and YAPA II, which is a more intensive nine-month phase. For 2008, YAPA I-Cycle 1 had 146 graduates, while Cycle 2 (in progress at the time of writing) had 208 students enrolled. The second phase, YAPA II, inducted 64 trainees as at May 2008. In addition, YAPA training centers in Cedros and Penal are nearing completion.

A.1.6. Grow Box Development

The Grow Box initiative was launched in May, 2005. The program targets households with limited land space and provides the necessary inputs and skills to engage in subsistence farming, using the grow box technology. This program is expected to improve citizens' standard of living

while promoting food security in the country. Since the initiative's inception in May 2005, over 1,600 Grow Boxes have been put in place around the country. The Grow Box initiative was also expanded to include the nation's schools, and to date 37 schools in three counties have benefited.

A.1.7 The Food and Beverage Industry

Initiatives undertaken to promote the food and beverage industry during the last fiscal year (2007/2008) focused mainly on food safety, strategic planning and new product opportunities for the sector. In terms of food safety, the process of establishing a National Agriculture Health and Food Safety Agency (NAHFSA) commenced with stakeholder discussions. In addition, an Assessment of the Food Safety Systems in Trinidad and Tobago was completed by the Inter-American Institute for Cooperation in Agriculture (IICA) in April 2008. In planning for the holistic development of the sector, a draft strategic plan was produced and is currently under review by the Food and Beverage Industry Development Committee (FBIDC).

A.2. The Entertainment Industry

The T&T Entertainment Company's (T&T Ent) Revolving Investment Fund provides financial assistance of up to 70 percent of any project. Funds are granted on the condition that T&T Ent receives a negotiated return on investment on the funding it provides, which is subject to a separate agreement. Many artists in music, dance and other cultural arenas have benefited from this Scheme. In the area of Marketing and Promotion, T&T Ent gained media coverage in Caribbean newspapers and community radio stations in Toronto-Canada. Other successful projects that have come on stream include the establishment of an Entertainment Directory in February 2008, which facilitates the online registration of artists

A.3. The Film Industry

Government continues to develop and promote the film and television industry as one of the country's key creative industries as well as position Trinidad and Tobago as a prime destination for film production. The Trinidad and Tobago Film Company (TTFC) has marketed the country through several initiatives including contracting an international marketing agent, developing promotional material and hosting United States film scouts and producers on a familiarization tour in fiscal year 2008. Additionally, the Company conducted Business Partnering Meetings in

five international cities as well as participated in trade fairs such as American Film Market (AFM) and Association of Film Commissioners International (AFCI) Locations.

Consequently, for the period July 2007 to July 2008, the TTFC facilitated 32 film crews from a number of countries including Japan, France, and Argentina, resulting in a total cash injection into the local economy of approximately TT\$12 million. As an incentive to encourage more on location filming in Trinidad and Tobago by nationals and foreign crews, the TTFC honored its first application for an expenditure rebate and a second application is currently being assessed.

In an attempt to increase the capacity of agencies and individuals involved in the local film industry, the Government continued to place emphasis on training in feature film production, screenwriting and business planning.

A.4. Fish and Fish Processing

Extensive work has been undertaken to transform the fish and fish processing industry into a modern, profitable, sustainable, and environmentally responsible sector. Government's efforts concentrated on providing support and continued growth for the industry through initiatives such as training and certification, exploring commercial opportunities, and marketing and promotion.

Over the last year, the Seafood Industry Development Company (SIDC) continued its Hazard Analysis and Critical Control Points (HACCP) certification courses for fish processors and technicians. These capacity building training programs were aimed at promoting business development, improving the livelihoods of fishermen and increasing employment opportunities in rural coastal communities, and included:

- Seafood HACCP compliance for processors
- Eight training sessions on Sanitary Practices Onboard Fishing Vessels
- Two workshops on proper icing practices

Furthermore, training courses in organizational management, financial planning, business development and life skills were conducted with representatives from 25 fishing communities around Trinidad and Tobago.

In terms of support to agencies involved in the sector, the SIDC collaborated with the Women in Fishing Association to establish a processing facility for the production of a smoked cured product (smoked bonito) in the Mayaro/Guayaguayare community; an icemaking facility

at the Toco Fishing Depot was also established in conjunction with the Toco Fishing Cooperative. The latter provides a ready supply of ice to both fishermen and the wider community from Salybia to Matelot.

In order to better streamline development initiatives within the sector, a needs analysis of the industry and a socio-economic assessment were conducted. In addition, a study on transshipment operations in Trinidad and Tobago was undertaken to investigate and make appropriate recommendations on the procedures and practices employed by foreign fishing vessels which transship fish and fish products through the country's ports.

To improve the quality of seafood available for local and export markets, educational material was distributed to industry stakeholders and seminars were conducted on product development. To further boost the economic viability of the sector, information on the use of traditionally underutilized species was made available. Infrastructure to provide adequate facilities at fish landing sites to meet the required HACCP/EU standards are being undertaken at various sites throughout country.

Regarding the development of commercial opportunities within the sector, aquaculture is being promoted to supplement dwindling marine resources. SIDC in collaboration with the Institute of Marine Affairs is developing a commercial aquaculture pilot system which can be used to demonstrate to potential investors the feasibility of tank culture systems.

A.5 Merchant Marine

Further diversification of the economy would be realized by the development of the maritime industry. To this end, in December 2007, a comprehensive business plan was developed encompassing key maritime clusters, including Ship ownership, Marine Construction and Ship Building and Repair services. In addition, reports on the development of key sub-sectors in the marine industry and the human resource requirements were produced and are being finalized at the time of writing.

A.6 Printing and Packaging

To strengthen the Printing and Packaging industry, a needs analysis for the establishment of a Packaging Laboratory was conducted in 2007 and the findings of the study are under review at the time of writing. In November 2007, a Workforce Development Study commenced which would inform the Skills Foresight Report and Workforce Development Plan. The PPI Workforce

Survey was conducted to develop the Skills Foresight Report, and in April 2008, the Workforce Development Plan was completed. Updated job classifications and training report for the industry were also completed, and training programs are being conducted in keeping with a PPI Training Plan.

A.7 Yachting Industry

A National Yachting Policy was developed by the Yachting Steering Committee (YSC). The Committee also commissioned a regional competitive analysis on the domestic Yachting Industry, which provides a framework for the further development of the industry. It is coordinating this country's participation at international yachting industry events and has been collaborating with the National Training Agency and the University of Trinidad and Tobago on the development of a skills training and certification program for existing and potential employees. The YSC also produced and disseminated brochures on the Yachting Industry.

The Yachting Steering Committee (YSC) is currently evaluating research findings on the domestic Yachting Industry. These findings will inform the conduct of the regional competitive analysis for further development in our yachting industry. In order to build networks and develop business relationships to further strengthen the industry, the country attended the 46th Annual Antigua Charter Yacht Show in December 2007.

Appendix B.

Relative Growth in Workers' Productivity Between 1998-1999 and 2006-2005

Ranking	Targeted Sector	Industry	Relative Growth	
			To industrial average	To industrial avg., exc. Oil, gas and derivatives
1		Metal furniture	8.8	6.9
2	FB	Fruit and Vegetables processing	6.7	5.2
3		Iron, steel and related products	2.9	2.3
4		Batteries, mufflers and tires	2.9	2.2
5		Textile and garments	2.7	2.1
6		Metal building materials	2.6	2.0
7	FB	Alcoholic beverages	2.6	2.0
8		Furniture/mattresses	2.1	1.6
9		Petrochemicals	1.8	1.4
10	FB -F	Meat, poultry and fish	1.5	1.2
11	PP	Printers	1.3	1.0
12		Pharmaceuticals, cosmetics and household chemicals	1.0	0.8
13	PP	Newspaper publishers	0.9	0.7
14	FB	Edible oils and fats	0.8	0.6
15	FB	Bakeries	0.7	0.5
16		Motor vehicles	0.6	0.5
17		Tobacco	0.4	0.3
18		Industrial gases and paints	0.3	0.3
19	FB	Grain and feed mills	0.3	0.3
20		Clay bricks and blocks	0.3	0.2
21	FB	Non-alcoholic beverages	0.2	0.2
22		Household appliances	0.1	0.1
23		All other metal products	0.0	0.0
24		Concrete Products	0.0	0.0
25		Cement	-0.1	-0.1
26	FB	Dairy Products	-0.1	-0.1
27		Footwear	-0.5	-0.4
28		Sawmills	-0.5	-0.4
29	Y	Ship boat building materials	-0.5	-0.4
30	FB	All other food	-0.5	-0.4
31	PP	Paper Converters	-0.6	-0.4
32		Metal containers	-0.6	-0.5
33		Glass and plastic products for construction	-0.7	-0.5
All industry Index (excl. petrochemicals, oil and natural gas exploration, production and refining)			1.3	1.0
All Industry Index (Including oil and sugar)			1.0	0.8

Source: Authors' compilation based on Central Statistical Office Information.

Note: FB is Food and Beverage Industry, PP is Printing and Packaging Industry, F is Fish and Fish Processing Industry and Y is Yachting Industry.

Appendix C.

TOURISM: COMPARATIVE INFORMATION

Destination	Arrivals 2007	%	# Of tourists per sq km of land	# Of tourists per inhabitant	Rooms per sq km of land	Tourism expenditure as % of GDP
Anguilla	77,652	0.4%	853.3	6.21	8.3	63.7%
Antigua & Barbuda	261,786	1.4%	595.0	3.27	7.4	49.5%
Aruba	772,073	4.0%	4,289.3	7.92	38.3	n.d.
Bahamas	1,527,622	8.0%	110.2	4.76	1.1	35.8%
Barbados	574,576	3.0%	1330.0	2.11	13.8	33.1%
Belize	251,655	1.3%	11.0	0.89	0.2	22.4%
Bermuda	305,548	1.6%	5,765.1	4.93	55.5	7.9%
Bonaire	74,309	0.4%	258.0	7.29	4.1	n.d.
British Virgin Is.	358,056	1.9%	2,387.0	16.50	12.5	44.7%
Cancun (Mexico)	2,022,302	10.6%	n.d.	n.d.	n.d.	n.d.
Cayman Islands	291,503	1.5%	1,121.2	6.69	20.1	30.3%
Cuba	2,152,221	11.2%	19.4	0.19	0.4	7.4%
Curacao	299,782	1.6%	675.2	2.25	7.8	n.d.
Dominica	83,916	0.4%	n.d.	n.d.	n.d.	n.d.
Dominican Republic	3,979,582	20.8%	82.2	0.44	1.2	18.9%
Grenada	129,118	0.7%	375.3	1.24	4.3	44.1%
Guyana	131,487	0.7%	0.6	0.18	0.0	13.3%
Jamaica	1,700,785	8.9%	148.9	0.64	2.2	18.0%
Martinique	503,107	2.6%	474.6	1.29	7.8	n.d.
Montserrat	7,745	0.0%	75.9	1.65	3.4	28.1%
Puerto Rico	1,361,083	7.1%	153.4	0.35	1.4	3.9%
Saba	11,673	0.1%	897.9	8.34	0.0	n.d.
St. Lucia	287,435	1.5%	466.6	1.77	6.5	51.2%
St. Eustatius	11,568	0.1%	550.9	4.63	3.0	n.d.
St. Kitts and Nevis	91,769	0.5%	341.1	1.92	6.5	32.7%
St. Maarten	469,407	2.5%	13,806.1	14.14	103.9	n.d.
St. Vincent & the Grenadines	89,637	0.5%	230.4	0.89	4.6	19.4%
Suriname	162,509	0.8%	992.1	0.37	7.8	4.4%
Trinidad & Tobago	449,452	2.3%	87.6	0.35	1.2	2.3%
U S Virgin Islands	693,372	3.6%	2,027.4	6.22	14.6	n.d.
Total area	19,132,730	100.0%				

Source: Authors' calculations based on Caribbean Tourism Organization data.