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Assessing Export Platforms: The Case of the Dominican Republic

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Assessing Export Platforms: The Case of Dominican Republic[1]

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Table of Contents

List of Tables

List of Figures

I. Introduction

In 1998, the Dominican Republic experienced its third consecutive year of real GDP growth of over seven percent, bringing its 1996–98 average to 7.3 percent. This was the highest growth rate in the western hemisphere, and was achieved despite the devastation of Hurricane Georges in September of that year (which caused close to $2 billion in damage) and an ongoing political crisis. The growth rate was due largely to the remarkable growth of the free zone sector (7.4 percent in 1998 and 10.6 percent in 1997), which is now the fastest growing sector of the economy.

Few would have predicted this state of affairs in the years following the civil war of the mid-1960s, when sugar was by far the island's most important commodity. Yet, since this time the succession of Dominican government has not pursued, by any means, aggressive or far-reaching economic or political reforms. However, even in the context of import substitution policies, it has encouraged consistently and supported both exports and foreign direct investment through a continually expanding and improving free trade zone program.

This paper investigates the free trade zone sector of the Dominican Republic, studying its characteristics, the domestic and international environment (economic as well as legislative) in which it operates, its strong points and shortcomings, and its impact on the domestic economy. The discussion is organized as follows. Section II presents a brief overview of the growth of the free trade zone sector in the context of the country's economic development over the past three decades. Section III profiles the zones and the firms operating within them. Because the U.S. market is central to this sector, a review of relevant U.S. trade legislation and its impact on Dominican exports is presented in Section IV. Section V examines and evaluates the operating environment of the Dominican Republic (specifically , its free trade zones) based on important criteria for exporters. Section VI evaluates the impact of the free trade zone sector on the domestic economy, and Section VII concludes.

II. Historical Context

Although U.S. manufacturers began shipping cut pieces of fabric to the Dominican Republic (D.R.) and Haiti beginning in the 1950s, it was not until 1969 that the first free trade zone was not established. It was located in La Romana (in the east), and was built and managed by the U.S. multinational, Gulf and Western Corporation. The second free trade zone was built in San Pedro in 1972, and the third in Santiago in 1973.

During the 1970s, the island largely pursued policies of import substitution. The oil shock and decreased sugar output caused a decline in the D.R.'s terms of trade, and caused a shift to domestic substitutes for necessary imported goods. In 1981, the U.S. began to severely reduce its sugar quotas, and in 1982 the second oil shock hit. These factors, combined with import substitution policies, caused major economic problems such as the complete depletion of foreign exchange reserves. The overvalued peso and high minimum wages also meant that by 1983, the free trade zones had attracted only about one hundred companies.

In 1983, the International Monetary Fund (IMF) imposed a structural adjustment program and a currency devaluation. This caused a dramatic increase in the number of firms and the number of workers in free trade zones. In 1985, economic growth began to pick up again, largely as a result of (mostly foreign) investments in free trade zones and tourism. The Caribbean Basin Initiative (CBI) instituted under the Reagan administration in 1983 also gave a push to Dominican exports during the 1980s. The value of Dominican exports increased by an average of almost 10 percent each year between 1983 and 1988, despite the impact of the U.S. sugar quota policy. Free trade zone exports alone grew by almost 187 percent during this period, from almost 19 to almost 37 percent of total exports. (See table 1.)

Table 1. Total exports and free zone exports, 1980-98.
(FOB Millions of USD)

Year	Total Exports	Zone Exports	% of Total	Year	Total Exports	Zone Exports	% of Total
1980	1077	117	10.9%	**1990**	1583	839	53.0%
1981	1312	128	9.8%	**1991**	1712	1053	61.5%
1982	912	155	17.0%	**1992**	1759	1194	67.9%
1983	962	181	18.8%	**1993**	3113	2609	83.8%
1984	1066	196	18.4%	**1994**	3342	2716	81.3%
1985	950	215	22.6%	**1995**	3665	2907	79.3%
1986	973	246	25.3%	**1996**	3943	3107	78.8%
1987	1041	332	31.9%	**1997**	4613	3596	77.9%
1988	1418	520	36.7%	**1998**	4989	4100	82.1%
1989	1667	735	44.2%	**1999**	…	…	…

Source: Banco Central de la Republica Dominicana. Obtained from Informe Estadistico del Sector de Zonas Francas, 1998 and the EIU, 1999.

The growth rate of free trade zone exports has continued unabated since that time, and they now account for over eighty percent of the island's total exports and approximately 3 percent of GDP.

Despite the fact that free trade zone growth did not begin until the mid-1980s, the Dominican Republic was the world's fourth largest export processing zone economy by the late 1980s, in terms of both number of firms and employment. It has maintained this position ever since. This is shown in table 2.

Table 2. Countries with the largest number of EPZs, 1997.

Country	No. of EPZs
United States	213
China[1/]	124
Mexico	107
Dominican Republic	35
Philippines	35
Indonesia	26
Honduras	15
Kenya	14
Turkey	11
Colombia	11

Source: International Labor Organization.
[1/] Does not include special economic zones in China.

During the 1980s, however, the government continued with policies of import substitution in the rest of the economy, including tariff and non-tariff protection and multiple exchange rates. In June of 1988, the government instituted once more a major devaluation of the currency, and in 1990 it began implementation of a stabilization program and important structural reforms. These reforms included a major tariff reform that simplified the tariff structure, reduced the maximum tariff level (to 35 percent), and replaced all quantitative restrictions with tariffs. It also passed the Free Trade Zone Law 8-90, which combined all free trade zone legislation in one act, and gave all administrative responsibility to a single government agency. Multiple exchange rates were removed in 1991. By 1993, only in Mauritius and Singapore did free trade zones account for a larger share of total employment (Kaplinsky, 1993).

The Dominican economy had stabilized by 1995, when the Dominican Republic became a member of the World Trade Organization (WTO). Free trade zone activity continued to grow during this period in terms of exports, number of firms, and total employment. This occurred despite the appreciating Dominican peso, the implementation of the NAFTA agreement with Mexico, and the devaluation of the Mexican peso. The growth of the free trade zone sector, both in terms of number of plants and total employment, from 1969 to 1998, is given in table 3.

Table 3. Number of parks, companies, and employees in the free trade zone, 1969-1998.

Year	Parks	Companies	Employees	Year	Parks	Companies	Employees
1969	1	1	…	**1984**	3	120	25,657
1970	1	2	126	**1985**	3	136	30,902
1971	1	5	362	**1986**	4	156	51,231
1972	2	10	1,675	**1987**	8	199	66,012
1973	3	15	1,826	**1988**	13	220	83,815
1974	3	22	3,244	**1989**	19	299	122,946
1975	3	29	5,872	**1990**	25	331	130,045
1976	3	33	6,673	**1991**	27	366	135,491
1977	3	39	8,975	**1992**	30	404	141,056
1978	3	48	11,545	**1993**	31	462	164,296
1979	3	61	14,160	**1994**	32	467	176,311
1980	3	71	16,440	**1995**	33	469	165,571
1981	3	77	18,137	**1996**	36	436	164,639
1982	3	87	18,721	**1997**	40	446	182,174
1983	3	101	19,255	**1998**	43	496	195,193

The free trade zone sector is now the fastest growing sector in the economy. Although agriculture was hit particularly hard by the hurricane, endured a drought in 1997, and experienced problems with the state sugar company, the free zone industry grew rapidly enough for the Dominican Republic to achieve remarkable growth rates during this period.[3]

[3] Reportedly, although certain free trade zones were hit by the hurricane, production was able to shift rapidly from damaged zones to those that were not hit, which limited the impact of the hurricane on this sector (*The Economist Intelligence Unit*, Second Quarter, 1999).

III. Profile of the Dominican Free Zones.

This section will profile the Dominican free trade zone environment in terms of the distribution of ownership, export markets, sectors, demography, and geography.

Ownership Distribution

In the early 1980s, U.S. firms comprised eighty percent of the firms in Dominican free trade zones. Today, slightly over half of free trade activity is owned by the U.S., either in terms of total number of firms or in terms of total investment. The interesting trend, however, has been the considerable growth of domestic participation. By 1998, domestic investment had increased to 20 percent of the total, and almost 30 percent of the total operations were owned domestically. South Korea and Taiwan are also major investors in the zones, as they take advantage of cheaper labor and Caribbean quota levels, which are generally higher than those in Asia. Table 4 shows the distribution of ownership by number of firms and total investment level in 1998.

Table 4. Principal sources and amounts of capital to the zones, 1998.

Source Country	No. Firms	% of Total
United States	249	50.2%
Dominican Republic	147	29.6%
South Korea	32	6.5%
Panama	11	2.2%
Taiwan	8	1.6%
Puerto Rico	5	1.0%
Italy	5	1.0%
Other	39	7.9%
Total	**496**	**100%**

Source Country	Investment ('000 RD$)	Investment as a % of Total
United States	6,208,379	53.4%
Dominican Republic	2,388,968	20.5%
South Korea	1,735,274	14.9%
Taiwan	369,000	3.1%
Panama	230,125	1.9%
Cuba	162,500	1.4%
Holland	108,540	0.9%
Other	407,145	3.5%
Total	**11,609,931**	**100%**

Source: Informe Estadistico del Sector de Zonas Francas, 1998.

The domestic economy in the Dominican Republic is still largely protected by tariff and non-tariff barriers to trade. However, the strong presence of Dominican owned firms in the zones is clear evidence that they are capable of competing in the international marketplace without protection, if given a "level playing field."

Distribution of Export Markets

The United States is by far the most important market for Dominican exports, followed by Puerto Rico. (See table 5.) As will be shown in the following section, this has meant that U.S. trade policy has a large impact on free trade zone activity in the Dominican Republic.

Table 5. Ten major free zone export destinations, 1998.

Country destination	No. of firms	Percentage
United States	389	78.4%
Puerto Rico	36	7.3%
Dominican Republic[1/]	36	7.3%
Canada	29	5.8%
France	18	3.6%
England	17	3.4%
Spain	16	3.2%
Germany	16	3.2%
Switzerland	12	2.4%
Italy	10	2.0%

Source: Informe Estadistico del Sector de Zonas Francas, 1998.
[1/] Products supplied from one company to another in the zones are considered exports in this table.

In our study, 11 of the 17 firms surveyed shipped 100 percent of their product to the United States, with two more shipping over 90 percent.[4] In 1990, Mathews surveyed 46 firms and found that only one did not ship its output to the United States (Mathews, 1992).

Sectoral Distribution

The free trade zones are dominated by the garment industry. As shown in table 6, textile and apparel firms made up 60 percent of the firms operating in Dominican free trade zones and almost 70 percent of total employment. Its proximity to the U.S. market, specifically to the major textile centers in Virginia and Georgia, gives the Dominican Republic an advantage in this field.

Table 6. Number of firms, employment, and investment by industry, 1998.

Industry	No. Firms	% Total	Employees	% Total	Investment[1/]	% Total
Textiles	293	59.1%	135,634	69.5%	6,222,432,647	53.6%
Tobacco	32	6.5%	17,736	9.1%	1,467,037,545	12.6%
Electronics	28	5.6%	9,121	4.7%	1,256,259,357	10.8%
Medical Products	12	2.4%	3,960	2.0%	789,244,823	6.8%
Footwear	25	5.0%	13,291	6.8%	606,953,261	5.2%
Services	27	5.4%	4,097	2.1%	410,680,416	3.5%
Electric Products	2	0.4%	1,965	1.0%	309,199,197	2.7%
Jewelry	16	3.2%	2,655	1.4%	119,881,156	1.0%
Luggage	…	…	1,876	1.0%	95,000,000	0.8%
Leather Goods	6	1.2%	995	0.5%	85,129,105	0.7%
Plastics	4	0.8%	…	…	80,805,734	0.7%
Metals	5	1.0%	…	…	34,134,543	0.3%

Source: Informe Estadistico del Sector de Zonas Francas, 1998.
1/ Investment in RD$.

[4] Of the remaining, two shipped to Europe, one to Canada, and one supplied other firms in the free trade zones.

Production Characteristics

Operations of the firms in the Dominican zones are overwhelmingly labor- intensive, light industry operations. Firms typically have low capital labor ratios, low value added, and are engaged in routine assembly processes. In our survey, every firm engaged in assembly operations, although a few had a small manufacturing component to their operations. Mathews' 1990 survey of 46 firms found that two thirds engaged exclusively in assembly operations.

Often, free zone firms operate as cost centers for larger firms, or on subcontracts. In these subcontracts inputs are often not purchased—meaning that firms are a source of labor only—or inputs are not purchased at "arms length" prices. A 1990 survey of 63 companies found that all of them produced under a subcontract and none sold products under its own name (Rhee, 1990, in Kaplinsky). Our survey confirmed these findings. Eleven firms produced goods on a subcontract for another or several corporations; four produced their own products for sale, and two operated as a direct division of a parent company (one of which was a Puerto Rican twin plant). Nine firms operated as profit centers and eight operated as a cost reduction center.

In our survey, eight of seventeen firms purchased their inputs, and the average percentage of total costs comprised by input purchases was only thirteen percent. In Mathews' survey, of those that engaged in assembly or in a mixture of assembly and production, only half purchased their inputs.

The wage bill in our survey was 45 percent of total operating costs on average and capital and overhead was 20 percent.[5] Although these calculations are rough, they indicate broadly a capital/labor ratio of just under one half. Mathews's survey found that for firms that did not purchase their inputs, the wage bill was about 65 percent of total costs. For those that did, the wage bill was almost 49 percent of total costs.

Demographic Distribution

The wide majority of workers are unskilled or semi-skilled labor, and the wide majority are female. In our survey, labor accounted for 87 percent of total workers, on average.[6] For these positions, four firms required no education at all, an additional four did not require formal education but required the ability to read and write, six required an elementary education, and three required a secondary education. For supervisory positions, the requirements were slightly more demanding: eight required elementary education and four required college or technical school training. Mathews found that an educated labor force ranked only ninth on the list of important advantages for locating in the Dominican Republic.

Free trade zone employment is largely female, especially in the unskilled laborer positions, where females are close to 60 percent of the labor force. They also represent 35 percent of total technicians. Table 7 shows the female participation rate by occupational category.

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[5] Taxes, transportation, and land rental were 5 percent each.

[6] Supervisors or technical workers were 6.7 percent, administrative staff and management both averaged about three percent of total employees.

Table 7. Gender of zone employees by occupation, 1998.

Occupation	Total employees	Males	Females	Percent Female
Laborers	175,338	72,342	102,996	58.7%
Technicians	13,689	8,839	4,850	35.4%
Administrators	6,166	3,301	2,865	46.5%
Total	195,193	84,482	110,711	56.7%

Source: Informe Estadistico del Sector de Zonas Francas, 1998.

Although the textile industry is seen traditionally as "women's work," for the most part there does not seem to be a significant difference in female participation rates across industry types. See table 8. However, jewelry production has the lowest percentage of female participation (35 percent), which might be because this industry has a longer artisan tradition in the country. Of the managers in this survey that were asked this question, none said that they had a specific gender preference.

Table 8. Gender of zone employees by industry, 1998.

Type	Males	Females	% Female	Total
Textiles	57,767	77,867	57.4%	135,634
Tobacco	7,520	10,216	57.6%	17,736
Footwear	6,974	6,317	47.5%	13,291
Electronics	3,320	5,801	63.6%	9,121
Services	1,955	2,142	52.3%	4,097
Medical Products	756	3,204	80.9%	3,960
Jewelry	1,750	905	34.1%	2,655
Electric Products	756	1,209	61.5%	1,965
Luggage	1,187	689	36.7%	1,876
Leather Goods	581	414	41.6%	995
Other	1,916	1,947	50.4%	3,863
TOTAL	**84,482**	**110,711**	**56.7%**	**195,193**

Source: Informe Estadistico del Sector de Zonas Francas, 1998.

The relative decline of the sugar industry, a traditionally male-dominated occupation, as well as the rising importance of the free zones have meant that women are increasing their participation in the Dominican economy. Female economic activity in the Dominican republic more than quadrupled from 1960 to 1990, rising from 9 percent to more than 38 percent of total employment (Safa, 1994).[7] In her 1992 sample of women workers in export manufacturing, Safa found that 38 percent considered themselves to be the major economic providers of their households.

Geographic and Ownership Distribution of Free Zones

Most free zones and companies are located in the northern part of the island. This is close to Santiago, the island's second largest city, and the home of the first established park. As a result,

[7] She also found that found that fertility levels declined markedly over this period.

there is a qualified workforce nearby and adequate infrastructure. In addition, the principal Dominican investors in the free zones have been from the north, especially Santiago. FInally, the fertile land in the north area is well suited to tobacco growing, and in some free zones tobacco manufacturing is the sole activity. Table 9 shows the geographic distribution of zones on the island.

Table 9. Distribution and type of parks in the free zone, 1998.

Geographic Zone	No. Parks	No. Companies	No. Employees
North	18	214	91,327
South	8	74	23,748
East	8	105	45,651
National District	6	92	27,580
Northeast	2	11	6,887
Southeast	1	0	0
Total	**43**	**496**	**195,193**

Source: Informe Estadistico del Sector de Zonas Francas, 1998.

Most companies are located in privately owned parks. These tend to be more upscale and offer a greater variety of services. They are also more expensive. The differences between private and public park administration is explored in table 10.

Table 10. Distribution of companies and employees by type of park, 1998.

Type of Park	Companies		Employees	
	Number	Percentage	Number	Percentage
Private	214	43%	71917	37%
Public	166	33%	64319	33%
Mixed	91	18%	50632	26%
Special Zones	25	5%	8325	4%

Source: Informe Estadistico del Sector de Zonas Francas, 1998.

IV. The Impact of U.S. Trade Legislation

U.S. trade legislation impacts the export industry of the Dominican Republic in several important respects. It influences the decisions of multi-national enterprises (MNEs) to locate in the Caribbean versus other locations; it helps define the types of products exported from the Dominican Republic; and it dictates, in part, the amount of value added produced there. These decisions are influenced not only by U.S. legislation regarding the Caribbean, but also by U.S. legislation toward other countries, the most important example being the North Atlantic Free Trade Agreement (NAFTA) with Mexico.

In addition to the Generalized System of Preferences (GSP)—which allows approximately 2,800 products into the United States duty-free from developing countries throughout the world—there are four U.S. trade or investment regimes that are relevant to the Dominican Republic. These are the Caribbean Basin Initiative; Harmonized Tariff Schedule Items 9802.00.80 and 9802.00.8010; Provision 936 of the U.S. Tax Code; and NAFTA. This section summarizes briefly the way in which relevant U.S. trade legislation has impacted the Dominican Republic.

The Caribbean Basin Initiative

The CBI was started under the Reagan administration in 1983 as a way to promote economic development and diversification through private sector initiative in Central America and the Caribbean islands. The program provides economic assistance to the region, duty-free treatment to many types of goods entering the United States, tax deductions, and a range of government programs. A full description of the terms and conditions of the CBI is attached as Appendix I.

The CBI offers duty-free access to the U.S. market for a wide range of goods, but it excludes textiles and apparel (as well as luggage, footwear, and certain leather goods). Two requirements must be met to get duty-free treatment. First, 35 percent of the value added must be added in a CBI country, and second, if an article contains materials originating in a non-CBI country, a "substantial transformation" of these materials must take place. Both of these requirements are designed to prevent other countries from setting up "pass through" operations in the Caribbean to take advantage of CBI benefits.

The CBI offers several important advantages to Caribbean countries over developing countries operating under the more general GSP:

- The list of qualifying goods is larger than those under the GSP, and the quotas are more generous.
- The 35 percent domestic content requirement can be met through processing in several CBI countries, whereas GSP requires all 35% to occur in the recipient country.
- 15 percent of the 35 percent can be made up of U.S. materials, including (significantly) Puerto Rico.
- If goods are made of 100 percent U.S. materials, they may enter the U.S. duty-free (excluding, again, textiles and apparel).
- A country cannot "graduate" out of duty-free privileges under the CBI, the way that certain countries (Hong Kong, Singapore, Taiwan, and Korea) have graduated out of the GSP.

The Dominican Republic has benefited the most from CBI, (followed by Costa Rica) and accounts for 37 percent of total CBI exports to the United States. However, apparel is the biggest export of the Dominican free trade zones, and CBI does not extend benefits to this sector. Thus it is of limited significance to these industries. Mathews' survey found that only 8 of 46 companies operated under the CBI regime.

However, CBI legislation does impact production decisions in the Dominican free zones, even in these areas. For example, footwear is not allowed to enter the U.S. duty-free under the CBI program, but footwear parts are allowed—including footwear uppers. Footwear is a significant export industry in the Dominican Republic free trade zones, but almost all companies make only uppers, and ship them back to the U.S for final assembly. [8]

[8] In 1988, 92% of Dominican footwear exports to the United States were uppers only.

Harmonized Tariff Schedules Item 9802

The Harmonized Tariff Schedules (HTS) of the United States allow for reduced duties for U.S.-origin products assembled or processed outside of the United States, under certain circumstances. Under this regime, a duty (of 19 percent) on the re-imports of U.S. companies applies only to the portion of value added that is produced abroad. Significantly for the Dominican Republic, textiles and apparel may enter under this regime.[9] By 1994, 80 percent of the region's apparel exports to the United States entered under this program.

The main providers were from free trade zones in the Dominican Republic and Jamaica. Soon, several Caribbean countries, including the Dominican Republic, began to run up against quota barriers. In response, The U.S. implemented a program of Guaranteed Access Limits under HTS Item 9802.00.80.10 (then known as 807a; this was part of the amended CBI).[10] It provides Guaranteed Access Levels (GALs), or automatic extensions to quotas, provided that the firms can demonstrate that they have the capacity to produce under these higher quota levels. These GALs are available only for fabric that has been "wholly formed and cut in the United States." The use of this provision rose sharply after its implementation, in both the Caribbean and in Mexico.

Since wages in China are still about one fifth of those of the D.R., the D.R. benefits from the country-specific apparel quotas implemented under the multi-fiber agreement, and even further from the GALs. Table 11 shows the percentage of quota filled by the Dominican Republic for its most common exports. Under 9802 specific limits, exporters filled or came close to filling their quota limits for a number of products, and thus moved to the GAL program.

Table 11. Dominican quota performance, 1992-98.

Category	**Specific Limits (% filled)**				**Guaranteed Access Level (% filled)**			
	1992	**1994**	**1996**	**1998**	**1992**	**1994**	**1996**	**1998**
448	90	100	86	42	21	85	70	24
633	100	90	71	89	78	88	88	89
347/348/647/648	84	85	72	98	81	95	88	93
342/642	56	67	26	100	18	12	16	17
340/640	95	90	68	86	29	20	33	28
339/639	94	91	65	100	90	96	82	87
338/638	96	94	94	91	77	84	91	83
351/651	100	93	99	88	59	69	55	82
433		93	92	85			56	94
442		16	41	45			77	57
443		93	78	89			66	50
444		100	25	22			51	80
352/652			36	29			63	71

9 An important restriction is that U.S.-manufactured components do not lose their physical appearance or identity in the foreign assembly process. Thus, they may be sewed, glued, laminated or welded, for example, but may not be stonewashed or dyed.
10 This program was extended to Mexico in 1989.

Category	Description		
448	Female wool pants/shorts	**351/651**	Cotton and mmf nightwear
633	Male mmf[1/] suit-type coats	**433**	Male Suit-type coats, wool
347/348/647/648	Cotton and mmf pants/shorts	**442**	Wool skirts
342/642	Cotton and mmf skirts	**443**	Male suits, wool
340/640	Male cotton and mmf shirts, not knit	**444**	Female suits, wool
339/639	Female cotton and mmf blouses, knit	**352/652**	Cotton and mmf underwear
338/638	Male knit cotton and mmf shirts		

Source: U.S. Department of Commerce.
1/ mmf = man-made fiber.

Another way that quotas impact the Dominican Republic is through the location of Asian firms. As has been mentioned, to compensate for restrictive quotas under the multi-fibre agreement, Asian investment in textiles and apparel has moved increasingly to the Caribbean. A common operation is to ship Asian domestic fabric to the region to perform cut, make, and trim (CMT) operations. These operations do not qualify for 9802 or CBI duty reductions, but can fall under the more liberal quota limits accorded to the Caribbean countries.

In part as a result of the changes in trade legislation, especially the preferential treatment given the Caribbean and Central American countries under CBI, and to Mexico under NAFTA, Asia's share of total U.S. apparel imports has been decreasing.[11] Asia's share declined from 84 percent in 1980 to 41 percent in 1996, although certain countries, especially China, continue to show increases in absolute numbers. Figure 1 shows the trend of apparel exports of several major exporters to the United States.

Section 936 of the U.S. Tax Code

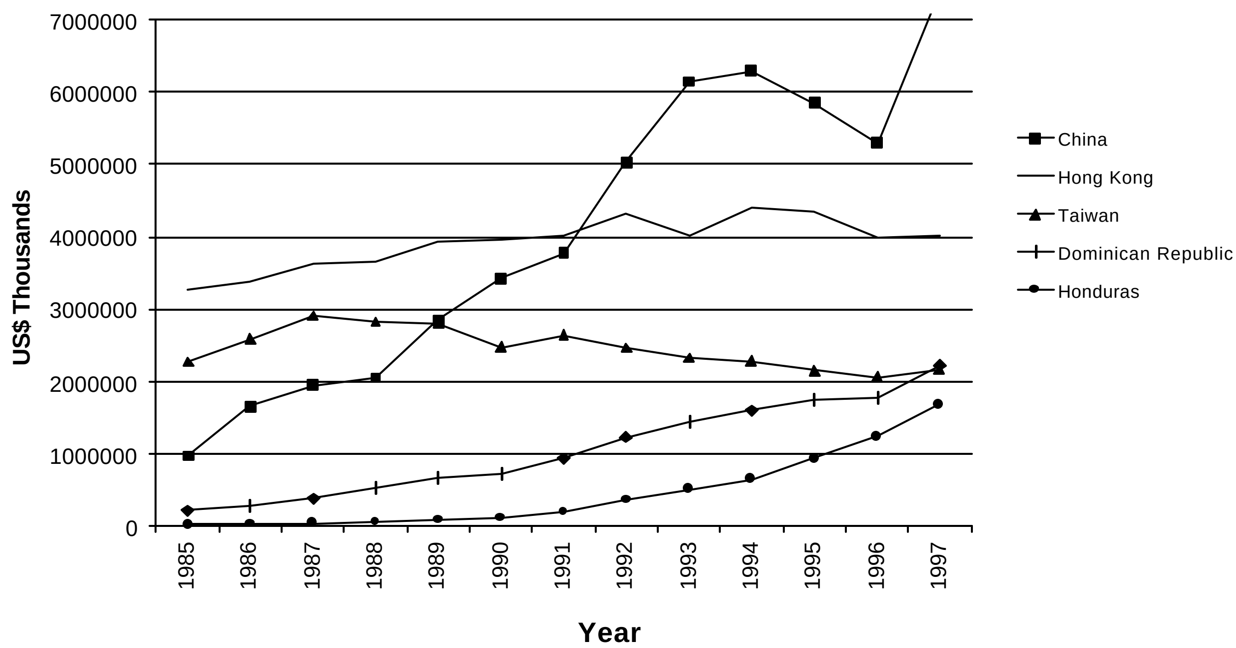
Since 1976, U.S. companies operating in Puerto Rico have been able to gain considerable tax exemptions for reinvesting their profits on the island. They do not pay taxes as long as their investments are kept on the island, paying only an adjustable "toll gate" tax to the government of Puerto Rico if and when these funds are repatriated to the mainland. This tax is lowered according to the length of time that funds are kept in Puerto Rico.

These tax advantages have meant that profits have been available to invest in island projects at lower than normal required rates of interest. To give the CBI "financial teeth," in 1987 the U.S. Tax Code was changed to allow these funds to also be invested in development projects in the Caribbean, provided that these loans "are of benefit to Puerto Rico" (Daubon, 1991).

In practice, most investment under this incentive has been direct—taking place as part of Puerto Rico's twin plant scheme. The U.S. federal minimum wage applies to Puerto Rico, thus this scheme has allowed U.S. firms operating in Puerto Rico to reduce costs by transferring the lower skilled, labor-intensive portion of their production process to the Dominican Republic, while maintaining the skilled labor portions in Puerto Rico. The revised 930 has meant that firms can do this without losing their tax exemptions.

[11] Conversely, as multi-fiber agreement phaseouts are implemented under the Uruguay round, quota liberalizations will benefit Asian apparel exporters.

Figure 1: Major Apparel Export Trends, 1985-1997



Although this provision applies to all Caribbean economies under CBI, in practice the Dominican Republic benefits most strongly from it, due to its proximity to Puerto Rico (which can be as short as a 25 minute plane ride). In 1991 there were 35 Puerto Rican twin plant operations in the Dominican Republic. Most are U.S. owned.

The Impact of NAFTA

NAFTA has the following provisions that affect the competitive balance between Mexico and the Dominican Republic. A chart laying out the differences by type of item is attached as Appendix II.

- NAFTA permits apparel assembled from fabric “formed and cut” in the U.S. to enter duty-free, whereas a firm operating in the Dominican Republic must still pay duty on the value added portion.

- Goods imported from Mexico under NAFTA can undergo finishing processes in Mexico after they have been assembled. Again, for a D.R. firm, this constitutes “further fabrication,” disqualifying it from the partial duty exemption, even if the product is made of 100% U.S. materials.

- Caribbean Basin producers have a temporary competitive advantage for articles that are eligible for duty-free treatment under CBI, but for which there is a staged tariff elimination under NAFTA. This advantage will end in 2008, when this staging process will be complete.

- For most products CBI offers equal or better protection than NAFTA. Mexico's most important advantage is now in textiles and footwear, which are not eligible for duty-free treatment under the CBI.

Since the 1994 initiation of NAFTA, Mexican exports of manufactured goods to the United States have seen incredible rates of growth. This has been due in part to the almost simultaneous collapse of the Mexican peso. Nevertheless, the difference in the growth rates of Mexican and Caribbean manufactured exports to the United States is striking.

From 1990 to 1994, exports to the U.S. from the Caribbean countries and from Mexico had similar growth rates of about 23-24 percent, but in 1994, the growth rate of exports from Caribbean countries was 13 percent, compared to 33 percent from Mexico. In 1995, the growth rate of Caribbean exports was 21 percent, but Mexico's climbed to 52 percent. In Mexico, these exports increased from USD 709 million to USD 3.8 billion in the period from 1990 to 1996. During the same period, exports from the Dominican Republic went from a similar initial starting point (USD 723 million) to a much lower USD 1.7 billion in 1996 (U.S. ITTR, 1994).

The Caribbean Textile and Apparel Institute reports that since NAFTA was introduced in 1994, over 150 companies and 123,000 jobs have been lost in the apparel industry in the Caribbean, and many companies have relocated to Mexico. There is also some anecdotal evidence that companies have returned to the Dominican Republic after initially relocating to Mexico. Jose Tomas Perez, Director of the Corporación de Fomento Industrial, said some investors had returned and reinvested in the Dominican Republic, citing a better qualified labor force (News Briefs, Oct 17–22, 1996).

The U.S. embassy and several other sources claimed that the Dominican Republic has remained competitive, despite NAFTA. Several firms that we interviewed said they were still hoping for NAFTA parity. One manager said that he stayed in the Dominican Republic to see if he could be competitive under NAFTA, because if he was, he knew he would be profitable once NAFTA parity was instated. Another said that he would expand operations only if NAFTA parity was instated.

V. The Policy Environment in the Dominican Republic

The fact that manufacturing processes can be separated, the existence of considerable factor price differentials, and the ongoing reduction of communication and transportation times and costs have enabled firms from industrialized countries to lower costs by conducting some of their manufacturing activities abroad. A firm from an industrialized country keeps at home those stages of production in which the country has a comparative advantage (R&D, and technical and capital intensive work) and outsources the stages of production in which it does not (mostly labor intensive activities). It weighs the advantages of cheaper labor against the disadvantages of operating abroad, such as distance from markets and suppliers, less adequate infrastructure, cultural and language barriers, and increased risk.

In general, firms consider the following broad factors.

- the price and quality of the labor force (and considerations like stability, the presence of unions, the ability to fire workers);
- the infrastructure of the country (ports and roads, communications and utilities);
- the distance from markets and suppliers;

- business uncertainty (due to government policy, and political or economic stability);
- the existence of similar industries;
- the legal and institutional framework (the regulatory environment, tax laws, etc.); and
- specific incentives offered by the government.

Developing countries try to accent their advantages and minimize their shortcomings. The above list demonstrates that there is tremendous scope for sound policy and intelligent public sector investment to create conditions that make a developing country competitive to foreign investors.

This section will examine the free zone environment in the Dominican Republic based on the following criteria: location, the labor market and the cost of labor, the infrastructure, the regulatory environment, and the quality of industrial parks. This analysis rests in large part on the results of a survey of plant managers and other participants in the free zone program. A short profile of survey participants begins the section.

Profile of Firms Surveyed

Seventeen firms were surveyed in this study by interviewing Plant Managers, for the most part.[12] A detailed questionnaire asked about each firm's production structure and operating organization, its markets and suppliers, its location criteria and attitude toward the business climate in the Dominican Republic, and its labor practices. Additional interviews were conducted in an open form.

This formal questioning was supplemented by more open-ended discussions in many instances. Additional interviews were held with managers of two private free trade zones, several people at the Overseas Investment Promotion Council, the Economics officer of the U.S. embassy in the D.R., a free zone expert in a Dominican law firm, and several people at the U.S. Commerce Department.

Although the sample size is too small to yield results of statistical validity, care was taken to represent the broadest cross-section of firms possible. Thirteen different zones are represented: seven private, five public, and one of mixed public/private ownership. The average size of the firms surveyed was 723 employees. The largest had 5,000 employees and the smallest had only 100. On average they had been in operation in the Dominican Republic for thirteen years, since 1986. The oldest set up operations in 1966, and the most recent in 1998. Seven of the firms interviewed were Dominican owned, nine were foreign owned, and one was a joint venture.

Ten of the firms surveyed produced textiles or apparel; one produced tobacco products; two produced electrical products; one wire devices; one breaks and one produced dental products. Eleven produced final goods for sale, four produced intermediate inputs and two produced a mix of both final goods, and intermediate inputs.

Location Decisions

Six of the firms surveyed did not consider other locations for their activities, and none of the Dominican firms considered alternative locations. Of those that did, Mexico was the alternative most often mentioned (by six firms). Other alternatives included Central America, India, Sri

[12] Interviews were conducted primarily in person, but were supplemented by telephone interviews and mailed questionnaires.

Lanka, and China. When asked the most important reason that the Dominican Republic was chosen, the most often cited reason was the low cost and/or high quality of the domestic labor force (7); the location (5), political stability (3), and zone infrastructure (1). The most important government incentives mentioned were tax incentives, duty exemptions, and customs facilities inside the zones.

The advantages or disadvantages to locating in the Dominican Republic that are directly or indirectly associated with the policy environment (regulatory environment, infrastructure, quality and cost of labor, and policies of the zones) are explained more fully in the next section. This section looks specifically at one of the main natural advantages that it possesses, its proximity to the United States.

Location. The Dominican Republic is near both its final markets and important parts used by the centers of textile production in the United States (Savannah, Norfolk, and Mobile) and distribution points to final markets (New York, Miami, and Baltimore). Of the firms that we surveyed, the average time that it took shipments to reach the United States was 5.5 days. Of the seventeen firms interviewed as a part of this study, twelve felt that proximity to their foreign market or to their suppliers was a very important factor in their choice of location, and an additional three felt that it was a somewhat important factor.

The short flight times are also important for executives and management to visit plants for brief visits to solve problems or attend meetings. The average flight time to New York is three hours; Miami, two hours; and Puerto Rico, 40 minutes. This is important in a new flexible production business setting and is not possible for operations located in Asia. It is not unusual for management to live in Puerto Rico and work every day in the Dominican Republic.

Shipping. There are frequent container ships sailing between the United States and the Dominican Republic.[13] The most frequented routes are to South Florida (Miami, Port Everglades, and West Palm Beach). There are a number of carriers, each with 1–3 departures weekly. Container ships to these ports come from both the south coast (Rio Haina and Boca Chica) as well as from the north coast (Puerto Plata) of the Dominican Republic. Routes to the northeastern United States are the second most frequent, with fewer carriers, which sail 1–2 times per week. Shipments to Gulf and west coast ports are even less frequent, with only 2–4 carriers who sail once a week or bi-weekly.

There is a pronounced imbalance of container traffic. According to our survey of leading shipping companies, for every five containers heading south, there is only enough demand in the Dominican Republic to send two back to the United States. Dominican exporters, therefore, have an advantage from the “fierce competition” among carriers to win their northbound business.

Table 12 gives a sample of shipping costs to selected destinations in the United States. Shipping rate information is attainable only by specifying the item shipped, and two examples are given here. The information is based on a survey of prices provided by five shipping companies.

[13] Information based on telephone interviews.

Table 12. Shipping costs from the Dominican Republic to the United States, 1997.

Commodity	Destination	Price	
General cargo	Miami	$841-1361	$975-1970
	Los Angeles	$1820-2295	$2200-2725
	New Jersey	$880	$1,625
	Houston	$1,500	$2,100
Fruit	Los Angeles	$1,700	$2,400
	New York	$880	$1,625
	Houston	$1,095	$1,525

Air transport. Air transport is a far less common method of transporting goods to the United States than is shipping. Some light-weight, high-value commodities are shipped this way, however, including flowers, cigars, and some kinds of vegetables. As with container traffic, there is a directional imbalance of air traffic as well. As a result, there are sufficient northbound flights to satisfy the transport needs of Dominican exporters.[14]

The Policy Environment

Companies that want to export from the Dominican Republic have two legislative options. They can locate anywhere on the island and export under the Export Incentive Law, Law 69 (passed in 1979); or they can locate in a free trade zone, which are regulated by Law 8-90. Beyond these two options, there are no special export promotion programs such as preferential financing or government funds for export promotion in the Dominican Republic.

The regulatory environment and the advantages of each option will be compared in the first part of this section. Then the operating environment for companies exporting in the free trade zones is examined in more detail, as the majority of manufactured exporters choose this option. The regulations as they impact zones, the administration of the zones, the labor market and other factors are addressed.

Law 69 and Law 8-90. Law 69 is administered by the Dominican Export Promotion Center. It is a duty exemption system. It gives tax rebates and duty-free treatment of imported inputs, provided that they are re-exported as part of final products. Under Law 69, companies may locate anywhere in the Dominican Republic. In addition, they may produce certain products under Law 69 for the export market while at the same time producing other products for the domestic market, to which the duty and tax advantages do not apply. Most exporters do not use this program.[15]

Free trade zones are regulated by Law 8-90 and managed by the Free Trade Zone National Council (CNZF). This law provides firms with a 100 percent exemption of all taxes, duties, and fees affecting production and export activities for a period of fifteen years. In addition, the CNZF has discretionary authority to extend these benefits.[16] Companies that sell products to other free

[14] Information obtained through phone and email conversations with Juan Tavares of Maritima Dominicana, S.A.

[15] Smaller operations, for which it is not worth the expense to relocate to a zone, will use this program.

[16] To promote the growth of the severely impoverished border region with Haiti, these benefits are extended to 25 years for companies choosing to locate in zones set up in that area. However, this program has not been successful. Companies have not located in the zone set up on the border in 1997, citing the insufficiency of the labor force in that area.

trade zone companies or to companies outside of the free trade zones operating under Law 69 are considered exporters and are entitled to the same tax benefits as free trade zone companies.

In addition, upon approval certain companies may set up special zones outside of the fenced-in free zone areas and receive the same benefits as companies operating inside the zones. This approval is granted if the firm needs to locate near a source of important raw materials, for example. A full explication of government incentives for free zone companies is given in Appendix III.

The regulatory environment. The U.S. Country Commercial Guides (CCG) for the Dominican Republic each year have cited several deficiencies in the Dominican operating environment. Criticisms include a weak protection of intellectual property rights and weak judicial institutions; corruption; poor organization of ports and customs; excessive tariff and non-tariff barriers to trade; a highly centralized regulatory and administrative system; and the arbitrary interpretation of laws.

In many of these areas, the operating environment is considerably better in free trade zones. The firms surveyed as a part of this study did not feel that the regulatory environment in the Dominican Republic free zones was particularly onerous. Firms felt that there were either few (8) or an average (6) number of regulations. And they were very easy (6) or relatively easy (5) to comply with. The others felt that the regulatory environment was improving.

The difference between free trade zone operations and domestic operations can be illustrated in two important areas: customs clearance and the ability to retain foreign exchange.

Customs. A major non-tariff barrier to trade is the fact that customs officials do not accept commercial invoices or use a WTO approved system for customs valuations. The current customs system of licensing and approval is complex and valuations are often arbitrary. Not surprisingly, customs and other decisions become highly politicized. Although a computerized list of many products is being developed, officials can use discretion for any good that is not on this list. In addition, to import a good, a firm must get a consular invoice from a Dominican overseas office. These fees are not nominal and are arbitrarily assessed. There are also delays, so that customs clearance outside of free zones can take an average of 3.5 days.

Customs delays are even worse for exporters attempting to take advantage of duty-free treatment under Law 69. According to the CCG and other sources, attempts to import under this regime can result in customs delays of anywhere from 20-60 days. This uncertainty with customs delays makes contract fulfillment difficult and unpredictable, and as a result exporters rarely make use of this scheme. It is more convenient to pay the full duties for more rapid and predictable customs clearance.

However, materials coming into or being shipped out of zones are reported to move quickly without the problems mentioned above. Furthermore, the CCG, as well as the firms and officials surveyed in this study, all reported that enormous improvements had been made in customs administrations for zone firms in the last couple of years. Two specific examples are worth mentioning. First, zone firms can now pre-declare shipments and thus pay duties before their goods arrive at port. Second, each zone has its own customs office. Exported goods are approved at the factory and then trucks are sealed so that they do not have to be inspected at the port, where it is much more congested. Incoming goods travel under seal with a customs guard to the zone where they are opened and inspected on the company's premises. This eliminates much delay and annoyance.

Profit remittances. Exporters outside of free trade zones are not automatically allowed to keep foreign exchange earnings. There are also "onerous" restrictions on profit remittances outside of the zones: firms must get approval from the Foreign Investment Directorate of the Central Bank to keep foreign exchange. According to U.S. CCG, the process is time consuming and the procedures are unclear, although improvements have been made since 1995 and approval has become more automatic.

Free zone companies are not subject to currency exchange restrictions, except that they must pay for their local operating costs in Dominican pesos obtained from the Central Bank. This is considered an "essential component" of the free zone program and is strictly enforced.

The remainder of this section examines the operating environment of the free trade zones specifically. It will focus on issues of concern to both domestic and foreign operators, including infrastructure (utilities, road and port facilities, telecommunications, etc.); the labor market (labor laws, labor supply and quality, and the cost of labor); and factors specific to the zones themselves (infrastructure, location, administration, and costs and benefits).

The Free Trade Zone Environment

Our study asked each plant manager to give a mark of 1-5 to sixteen factors of doing business in the Dominican Republic on the basis of the degree to which they considered this factor to be an obstacle to their daily operations. A mark of 5 meant that the factor was considered a major obstacle and a rank of zero indicated that it was not at all an obstacle (the same number could be assigned to more than one factor). In a similar study in 1992, Mathews asked a sample of 43 firms to indicate those things that were considered obstacles or burdensome. The percentage given in his table is the percentage of firms in his sample that claimed this factor to be an obstacle.

The results of both studies are presented in table 13, listing each factor on a ranking of worst to best. The two studies were undertaken eight years apart and because of the differences in methodology, results should not be compared across studies to indicate an improvement or deterioration with respect to a given factor.

Table 13. Major obstacles to operations.

Obstacle	Severity
Utilities	3.33
Difficulty finding employees	2.40
Customs	1.93
Corruption	1.80
Dominican policies	1.60
U.S. trade policy	1.60
Employee turnover	1.50
Absenteeism	1.50
Supplier delays	1.40
Transport of goods	1.20
Transportation/housing	1.13
Intellectual property rights	0.93
Unions	0.83
Environment regulations	0.80
Economic instability	0.77
Telecommunications	0.60

Source: Survey of Dominican plant managers, 1999.

Obstacle	Percentage
Utilities	89%
Unions	72%
Customs	57%
Social/political tensions	43%
Quotas	33%
Productivity	26%
Training	22%
Managerial availability	20%
Investment tax	15%
Other	13%
Transport/infrastructure	11%

Source: Mathews Survey, 1992.

Utilities. Both studies considered utilities to be the biggest problem with doing business in the Dominican Republic. The firms in our study specified that they were talking about the poor quality and shortage of electricity specifically. The Compania Dominicana de Electricidad is a government owned electricity monopoly and there is not enough capacity to serve the island. In addition there is poor maintenance of transmission and distribution.

A British Study in 1990 focussing on specific industries found that electric shortages harm the food processing industry in particular, due to the high costs of refrigeration. They also found that production costs in the textiles and apparel industry increased from 3–5 percent as a result of electricity blackouts and inefficiencies (UNDP, Univ. of Sussex study, 1991). Today, blackouts still occur almost daily, as do power surges. Virtually all companies or zones have their own independent supplies of electricity.

However, the Dominican government is currently in the process of privatizing all aspects of electricity generation and distribution. The state owned company is to be split into five companies, each responsible for a different stage of the process. At the time of writing, the companies eligible to bid had been selected. The privatization is expected to be complete by the summer of 1999.

The telecommunications system in the Dominican Republic, on the other hand, is excellent, and is in fact one of the best in Latin America. It was privatized in the 1940s, but was held in monopoly by GTE until 1988. Since the passage of a telecom bill in 1988, which opened up the sector to competition, there has been a telecomm "boom," with several private companies competing for regular, cellular, and other electronic communications business. On our list of problems with operating in the Dominican Republic, telecommunications problems ranked last, with an average score of less than one.

Roads, Ports, Airports. The transportation infrastructure of the Dominican Republic is better developed than many of the other Caribbean countries. It has seven international airports, and all major cities are serviced by port facilities. Outside of the Santo Domingo, the Capital, for example, the Haini port has a 2,600 foot long, 35 foot draft wharf, a 40 ton container crane, and a 60 acre container yard.

There is a well developed road network, but according to the CCG, haulage prices are excessive due to the syndication of truckers. In a 1990 study (Rhee, in Kaplinsky), a plant manager showed documentation that the trucking cost of transporting his goods to the harbor was half the cost of transporting his goods from Santo Domingo to New York.

In our survey, most firms felt that their location (on the island) was very good or excellent. Complaints were that the roads to port could be improved, that the port was too congested, or that there might be a suitable port closer to their zone that could not be used because it had not been adequately developed.

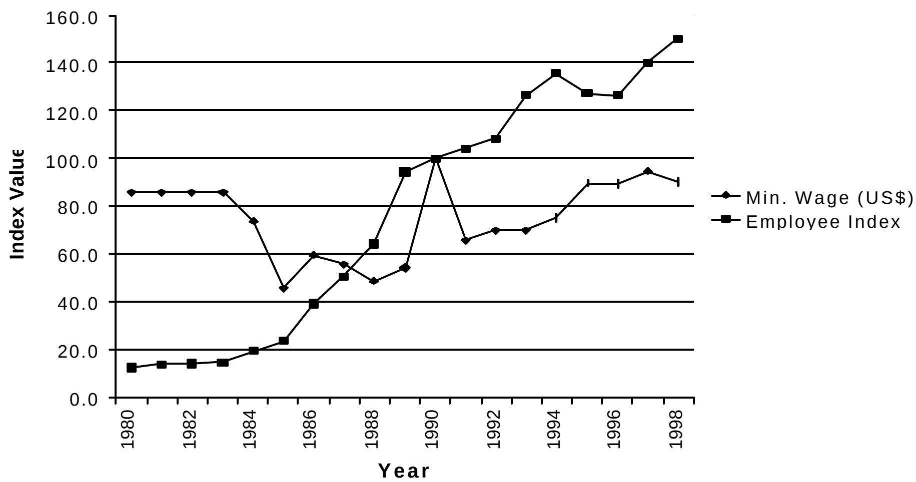
The Labor Market

Free zone companies are subject to nearly all Dominican labor and social security laws that regulate employment contracts, employment conditions, unions, economic conflicts, strikes, salaries, and fringe benefits. The few exceptions are that zone companies are exempt from the annual worker's share profit tax of 10 percent, and that they must notify both the CNFZ and the labor authorities at least three months in advance of business closure. Managers interviewed in the study did not find the labor law to be a major impediment to their operations, but several stated that the social security program was not run efficiently and not worth the required payments.

There is one minimum wage for free zone enterprises, in contrast to the national minimum wage which has eleven different groups and several levels within each group, according to the industry, firm size, position, etc. The free zone wage is higher, for example, than that paid in the sugar industry and by small enterprises but it is lower than that of large enterprises outside zones. There is also a lower “training period” minimum wage, allowed for three months in regular zones and six months in zones on the border with Haiti. Firms take advantage of this training period wage for the most part, but then generally pay above the minimum wage.

Figure 2 charts the growth of employment in the free zones against the index of minimum wages (in USD) in the zones, from 1980 to 1998.

Figure 2. Index of minimum wage (USD) against free zone employment, 1980–98.



The two sharp declines in the minimum wage index result from currency devaluations.

The supply and quality of labor. In contrast to the extremely tight labor market on the border in Mexico, the firms interviewed were more or less content with both the quality and availability of labor in the Dominican Republic. For the most part, firms claimed that finding workers for laborer positions was very easy (9) or somewhat easy (7). Only one firm found it “somewhat” difficult. It was more difficult to find supervisory or technical people, and several firms said that the more experienced the position, the more difficult it was to find qualified people. Firms interviewed found it very difficult (4) or somewhat difficult (7) to find supervisory workers.

Upper scale private zones such as Itabo and San Isidro offer recruitment services for firms. They supply all labor for the firms located in the zones and also do initial screenings for health and pregnancy, etc. This service is used by almost all of the firms located in those kinds of zones, and it costs, according to two managers, about fifty dollars per hire.

Monthly turnover averaged four percent per month, which was also considerably lower than in Mexico, although the rate was said to rise considerably during the Christmas holidays. Severance pay for firing a worker can reach a number of months' pay. One manager said that due to the difficulty of getting credit in the Dominican Republic, this is sometimes the only opportunity for laborers to accumulate such a large sum of money at one time. As a result, his workers "constantly beg" to be fired. The firm recently instated a policy of agreeing to fire any worker who was insistent.

Absenteeism averaged about 4 percent as well, although several firms said that the number could be considerably higher on Mondays. Most firms offered some kind of mixture of incentives and punishments to combat labor turnover, absenteeism and tardiness. Incentives included subsidized transportation, assistance with housing for supervisors, subsidized meals, and group incentives for perfect group attendance. Punishments included monetary fines for absenteeism and locking the doors (so that late workers would miss the entire day). All but five of the firms offered some kind of worker assistance with transportation, meals or other subsidized services (e.g. medical).

Mathews found that turnover rates averaged about nine percent per month, and that they were higher during December and January. He also found that firms used a variety of incentive schemes, including bonuses for showing up at work and piece rate payment systems where a base salary is supplemented by payment according to quality and quantity of pieces produced.

Free Zone Infrastructure and Services

Respondents were also asked to name the advantages and disadvantages of locating in a free zone in the Dominican Republic. Beyond the government incentives offered to do so, firms felt that the most important advantages to locating in zones were:

- Zone administration helps with problems.
- Services such as recruitment, accounting, etc. are provided.
- Rent is low and worth the money.
- Customs offices are located inside the zone so clearance at port is avoided.
- The presence of other firms.
- Security.

Disadvantages cited were:

- Rent is high and getting higher.
- A firm cannot own its site unless it owns the entire zone.
- There are constant unforeseen and rising costs
- There is increased competition for labor due to zone growth.

All respondents said that they would locate in a zone again, if given the choice, although one said that his company would buy its own zone instead of paying rent in somebody else's zone.

The importance of clusters of companies making similar products can lead to industry wide economies of scale and become self-perpetuating. However, in our survey of Dominican managers, the existence of similar industries seemed to be only a secondary advantage to locating in a free zone. Of the eight respondents that said that there were factories that produced items similar to theirs, five said that it did not matter for their decision to locate or remain in that zone. Three said that it was a factor, because there was a pool of trained labor, such as workers that knew how to sew.

Public versus private zones. Many different zones were sampled in this study, and ideally the responses should be grouped by zone so that the advantages and disadvantages of particular zone can be outlined. Unfortunately, the sample size was too small to permit this kind of analysis. However, firms were specifically asked if in the future they would chose to stay in their same zone or relocate, and whether they would in the future choose a publicly or privately operated zone. Two respondents said it did not matter, and all of the others elected to remain with their current choice.

Five firms had located in public zones. They said that the major advantage was the lower cost, that the services were adequate, and that "it's your responsibility to make your own environment." However, of the three firms interviewed that felt that zone administration was poor, all three were located in public zones. Complaints about public zones were that the aesthetics were poor, there was corruption, there were not enough facilities for workers, and problem-solving was slow because decision making was too centralized in Santo Domingo.

Of the six firms that said that zone administration was very good or excellent, all were located in private zones. For example, at the Itabo Park, administrative meetings are held each month with a representative from each factory, a customs representative, and a representative from the zone administration to discuss issues and solve problems. Additional advantages cited by firms operating in private zones were superior facilities, better services, more organized administration, and non-political administration.

Private zones are considerably more expensive, however. The Itabo and San Isidro free zones are among the most expensive in the Caribbean region, for example, but they are true "oases", set apart from their surrounding areas. Each is beautifully groomed with flowers, water fountains and/or private beaches. They offer numerous additional services including high quality buildings, payroll and accounting services, private health care, and the hiring and screening of applicants. For this reason, they target larger companies in more sophisticated industries. Itabo, for example, targets only Fortune 500 companies and has mainly pharmaceutical and electronics firms. Only four percent of its companies are from the textile and garment industries.

Table 14 offers a comparison of rental and salary costs between the upscale private zone, San Isidro, and a large public zone, Parqe Industrial. A full accounting of services offered and costs associated with operating in the San Isidro zone is given in Appendix IV.

Table 14. Sample costs of San Isidro compared to Parque Industrial.
(US Dollars)

	San Isidro	Parque Industrial
Park Service Fee (sq. ft./year)	0.48	0.35
Avg. Secretary (Monthly wage)	327	214-250
Avg. Manager (Monthly wage)	856-1391	1070-1428

Source: Adapted from Zona Franca San Isidro and Parque Industrial.
Note: Exchange rate used: RD$14.02=USD1.00.

Conclusions

Ten of the firms felt that the infrastructure in the Dominican Republic was good, four felt that it was fair, and two felt that it was poor. Most every firm was complimentary about the quality of the telecommunications system in the D.R. and every firm complained about the electricity problems. Some felt that the supply of potable water was not adequate.

Those regulations considered most burdensome were social security legislation (low quality of services for the payments required), labor laws, customs clearance, and “ambulance chasing” attorneys. Two firms felt that they frequently had to make “extra payments” to officials in order to expedite procedures or avoid difficulties. The other firms said that they rarely or never were asked to make these kinds of payments.

Additional complaints with the operating environment were:

- It is difficult for expatriate managers to find adequate, affordable housing, and adequate services for wives and children.
- Shipping schedules were not flexible enough.
- The currency is overvalued.
- It is difficult to get operating loans domestically.

All firms felt that the government followed through on the promises and incentives offered. All ranked government policies towards the zones as very good.

VI. Impact on the Dominican Economy

The promotion of exports and the attraction of foreign direct investment that takes place in free trade zones can offer, in theory, several advantages to the host country. They create employment and training opportunities for domestic labor; they become an important source of foreign exchange; they create linkages to the domestic economy through purchases of raw materials and sales to the domestic market; and they provide a “showcase” of the benefits of a liberalized economy, that can act as a catalyst to further liberalization.

This section discusses the free trade zones of the Dominican Republic on the basis of individual criteria.

Foreign Exchange Earnings

Estimates of average value added form EPZ firms exporting to the United States have ranged from 25–32 percent (Kaplinsky, ITTR). It is the second most important source of foreign exchange earnings after the tourism sector. Table 15 shows the amount and growth of foreign exchange earnings by the free zone sector. Before 1992, the numbers directly represent foreign exchange surrendered (by law) to the Central Bank. Since the law was repealed in 1992, the numbers represent an estimate of total local expenditures.

Table 15. Foreign exchange generated by the free trade zones, 1980–95.
(Millions of USD)

Year	Amount	Growth	Year	Amount	Growth
1980	44.5	…	**1988**	130.0	32.5%
1981	57.6	29.4%	**1989**	191.3	47.2%
1982	61.1	6.1%	**1990**	196.1	2.5%
1983	61.9	1.3%	**1991**	249.9	27.4%
1984	52.1	-15.8%	**1992**	305.7	22.3%
1985	44.6	-14.4%	**1993**	401.0	31.2%
1986	88.5	98.4%	**1994**	453.3	13.0%
1987	98.1	10.8%	**1995**	474.6	4.7%

Source: IMF *Staff Country Report*: Dominican Republic, 1996.

Labor

Employment Creation. Since 1980, employment in the free trade zones has gone from 2 percent of the workforce to 17 percent of the workforce by 1997. In May of 1999, The CNZF reported that during the first four months of the year it had approved the installation of 24 free zones and a new industrial park, for a total of RD$ 500 million in investment and about 5,000 new jobs. They stated that "contrary to past years when most of the companies being installed were textile assembly plants, today there is a diversity of types of industry being installed" (Press Release, May 1999). Table 16 shows the growth of labor force participation in the free zones, from 1980–97.

Table 16. Percent of total workforce employed in the free zones, 1980–97.

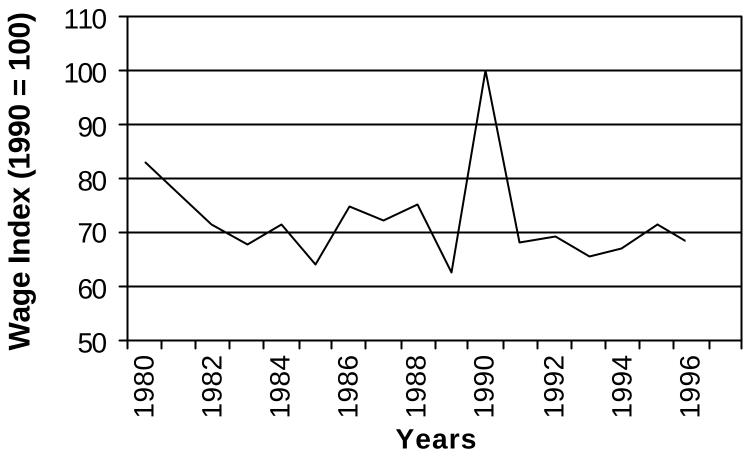
Year	Total Workforce	Percentage in Free Zones	Year	Total Workforce	Percentage in Free Zones
1980	2,111,500	2%	**1989**	2,904,000	13%
1981	2,185,400	3%	**1990**	3,000,000	13%
1982	2,266,300	3%	**1991**	3,100,000	13%
1983	2,350,100	3%	**1992**	3,180,000	13%
1984	2,437,100	3%	**1993**	3,190,000	16%
1985	2,529,400	4%	**1994**	3,200,000	17%
1986	2,617,900	6%	**1995**	3,240,000	15%
1987	2,710,000	7%	**1996**	3,295,000	15%
1988	2,805,500	9%	**1997**	3,155,700	17%

Source: Informe Estadistico del Sector de Zonas Francas, 1998.

An interesting question is the extent to which zones reduce the employment rate or increase the participation rate, especially because the majority of zone workers are women in the Dominican Republic, many of whom are often entering the workforce for the first time. A similar question is the extent to which new free zone employment draws workers from existing industries. In the Dominican Republic, the growth of free trade zones has coincided with stagnating growth in domestic industry and the decline of the sugar industry, which has suffered from a sharp reduction in U.S. quotas beginning in the early 1980s. Because the unemployment rate in the D.R. has remained relatively stable, this suggests that the free zone sector is either increasing the participation rate and/or drawing workers from other sectors.

Wage rates. Real minimum wages in the Dominican free zones have decreased since 1980, but have been trending upward since 1993. (See figure 3.) The sharp spike in wages in 1990 is due to the fact that the government more than doubled minimum wages just prior to its massive devaluation of the currency (by 51 percent) in 1991, and due to the removal of multiple exchange rates.

Figure 3. Index of free zone minimum wages, 1980–97.



Free zone companies typically pay in excess of the minimum wage for zones, as an index of that minimum wage, and raise wages as a matter of course when the minimum wage rises. The increase in the minimum wage in recent years, in excess of general price indices, has meant a rise in real wages for free zone workers. None of the firms interviewed in this study complained of excessive wage increases in recent years, however.

Working conditions. There are currently fourteen trade unions operating in the zones. Only one firm in our survey had a union, and that union had only ten people in it. Most (10) managers said that the absence of a union was a major or crucial factor in their decision to locate in the Dominican Republic. One manager said that he would “leave immediately” if a union started in his factory. Another said that a number of years ago union organization began to take place in his firm, but that he “took care of it” by firing everybody suspected of organizing it. As a result he had been to court on a number of occasions, but he had won on each occasion and felt that the time and effort was “definitely worth it.”

One source reports that unions have “considerable difficulties” in negotiating collective agreements. The seven returned as of the date of the study were very limited in scope, with no agreements on wages for example.[17] In addition, although it is against the law, the 1998 CCG reports that there have been “numerous reports” of forced overtime in the Dominican free trade zones, when the exit doors of the factory would be locked and workers fired if they refused to work overtime.

[17] Twenty percent or more of a company’s workers may form a union. The union then has to get 51 percent worker approval before they can enter into collective bargaining or call a strike.

Training. INFOTEP organizes training programs in the free trade zones. Each zone has a different program, to which the government makes a contribution and each of the firms in the zone makes a contribution. In Itabo, for example, the training program can be extensive, including math, reading and writing, sewing training on a variety of different types of machines, and other industry specific skills. In our survey, all firms but one had some kind of employee training program, usually an in-house training program in addition to that organized by INFOTEP. Training was usually industry specific and included tasks like sewing, safety procedures, procedures for handling tobacco, and basic math and measurement. A couple of firms said that they had extensive training programs and career path training programs that included sending more senior employees to Puerto Rico and/or the United States for higher level training.

Domestic Linkages

A 1988 study surveyed the extent of linkages from the free trade zones to the domestic economy, and found little evidence of linkages outside of the tobacco industry. Purchases tended to be office supplies and disposable materials, with production inputs used on an emergency basis only. These findings were confirmed by the work of Rhee, Mathews, and this study.

Only two firms obtained more than 10 percent of their inputs locally, one of which was a Dominican firm. Although local supplies were used occasionally in emergencies, firms usually avoided them. When used, they tended to be things that were not direct inputs into final products, such as packaging labels, cartons, and cleaning supplies, etc. As expected, the U.S. was the major source for intermediate inputs for production. Of 17 firms, eight obtained 100 percent of their inputs from the U.S. and four more obtained over 70 percent from the U.S. and/or Canada.[18] Of the 13 firms answering this question, proximity to suppliers was very important (for 6) or somewhat important (for 4) for firms.

However, eight of the ten firms that answered the question felt that it would be better for them if they could purchase more inputs locally. Moreover, they all gave a yes or qualified yes when asked whether they would offer financial or technical assistance to develop a local supplier.

There are several explanations for the lack of backward linkages. It may be that the quality of local inputs is not as high as that of imported inputs, or that costs are higher (due to lower volumes or other reasons), or it may be that locally produced goods are simply not available. Managers in this survey cited all of these reasons when asked why they did not source more locally. But the important question is, why is this the case?

A major cause is Dominican legislation and policy. First, before 1993, each sale from a domestic firm to a free trade zone company in the D.R. required a license, the obtaining of which required many forms and much time. Second, as mentioned earlier, Law 69 does not function well, and it is otherwise impossible for exporters to recover the duty paid on imported raw materials.

A third cause is the fact that before 1997, free trade zone companies were not allowed to sell their production on the domestic market. Now, they may now sell up to 20 percent, if they first obtain authorization from the CNZF, but in practice there have been few free zone sales to the domestic market. This means that domestic suppliers are deprived of higher quality and cheaper inputs that they could use in their production processes. Finally, the protection of domestic industry inflates

[18] Europe, Central America, China, and the Dominican Republic were also sources of inputs for the firms in our study.

prices and biases domestic firms against exporting (where there is price competition and stricter quality and reliability expectations).

In addition to government policies, another explanation is found in the purchasing policies of the firms themselves. To the extent that firms vertically integrate and source inputs on a global scale as a matter of policy, there is less opportunity for Dominican suppliers. Our small sample indicates that this is part of the story for these firms. Of the ten firms that had parents, five of them cited their parent as the source of 100 percent of their intermediate inputs, and an additional two firms sourced more than 90 percent from their parent. Mathews also found that half of the managers he surveyed identified their parent as their principal supplier.

One manager said that he found a lower cost local supplier for certain supplies, but had to get authorization from his parent firm, because by sourcing locally, he impacted the volume of purchases by his parent firm, and thus the price that his parent could get. His parent looked for lower regional price, which could often be obtained with high regional volumes, even if individual plants could potentially get goods at lower costs for their specific plant.

A study of the maquiladora industry in Mexico found that the organizational responsibility chart for firms impacted the amount of inputs purchased. The presence of somebody in Mexico with the authority to procure inputs was positively correlated with the probability of purchasing inputs locally. In our study, seven firms had an agent with purchasing authority in the Dominican Republic and five did not. However there was no correlation between this fact and the amount of local inputs purchased.

A third explanation is the impact of the U.S. trade legislation 9802, and especially 9802.00.8010 (807a), which provides direct incentives for U.S. firms in production sharing operations to supply as much of the value added as possible in the United States. This is an especially important factor in the garment industry, as textiles and apparel are not allowed under CBI. Mathews found, for example, that although seven firms in his sample used some degree of domestic products as direct inputs in the production process, none of the garment manufacturers in his sample did so.

VII. Conclusions

Free zone growth on the island remains strong, as documented above, and the island continues to attract foreign direct investment. This occurs despite the fact that the chances of obtaining NAFTA parity from the United States remain slim. In our study, 13 of 17 firms said that they planned to expand either the volume or variety of production on the island. Clearly, its location close to the United States has a lot to do with this success, but the island’s clear and effective policies toward the free zones have also been critical.

Although it is difficult to posit to what extent the free zones have impacted directly a change in the policy environment of the country as a whole, it is true that the D.R. has continued to move to an increased liberalization of its economy. So one can say that the zones have not been used as a means to pursue a dual policy and to enable the further protection of the domestic market, as some have suggested is a risk with export processing zones. Perhaps most significant is the continued increase in the participation of Dominican firms within the zones. Clearly, this shows that Dominican firms can be internationally competitive in a liberalized policy environment, open to foreign competition and investment.

An interesting area for further research will be to investigate carefully the value added generated by this sector, specifically the extent to which zone activities have evolved to more sophisticated production activities or processes with a higher component of domestic value added. ITTR data from the Department of Commerce has showed, for example, that there has been some move to higher value added sectors such as medical goods and electronic capacitors in the free zones. Even within apparel, certain items such as undergarments have a lower value added component than women's fashion items do.

The firms in our study were asked whether their production techniques had evolved during their time of operations in the Dominican Republic. Thirteen of seventeen said that they had improved their production process since they established operations. Of those that specified, four increased their mechanization or automation of their production and seven had transformed their organizational structure, moving from assembly line operations to a modular production system. Twelve said that they used or attempted to use just-in-time systems.

Increasing the benefits to the Dominican Republic in each of the areas discussed above—increasing foreign exchange earnings, increasing employment and labor training, and increasing backward linkages—will mean increasing the value added produced locally per unit, not simply increasing total investment volumes.

Appendix I. The Caribbean Basin Initiative

The Caribbean Basin Initiative (CBI) represents a comprehensive effort to promote economic development in Central America and the Caribbean through private sector initiative. The goals of the CBI are the expansion of foreign and domestic investment in nontraditional sectors, the diversification of Caribbean Basin economies, and an increase in their exports.

I. CBI Benefits

Currently, twenty-four countries enjoy the following CBI benefits.[19]

1) Duty-free entry to the United States for a wide range of products.
2) CBI Textile Program: guarantees markets for textiles and apparel assembled from U.S.-formed and cut materials.
3) CBI Government Procurement: National treatment for producers in CBI countries in bidding for certain types of U.S. government procurement opportunities.
4) Exemption for CBI exports from U.S. Import Merchandise Processing Fees.
5) U.S. economic assistance though the establishment of development banks and chambers of commerce, through technical training and infrastructure improvements, and through the financing of essential imports and business development missions. U.S. companies who hold business conventions in Caribbean Basin countries are eligible for U.S. tax deductions.

Guidelines for Inclusion in the CBI

With a few exceptions (see below), a product may qualify for duty-free entry under the CBI if the following are applicable.

1) It is grown, produced, or manufactured in one or more of the qualifying CBI countries, and it is exported directly to the United States.
2) Direct processing costs in one or more CBI countries total at least 35 percent of the article's customs value, or 20 percent with the additional 15 percent attributable to U.S.-made components.
3) The final product is an article of commerce that is substantially transformed from any foreign materials used in its manufacture. This transformation must entail significant effort.

Customs will require the posting of a bond equal to the amount of the normal duty that would then be refunded when the Customs Service finds that the shipment meets all duty-free requirements.

These guidelines are in place to ensure that operations taking advantage of CBI trade benefits are substantial enough to provide real economic benefit to the CBI countries. Simple processing or assembly (such as loading batteries) might injure U.S. industries while contributing little to the economic development of the Caribbean Basin.

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[19] These include Antigua and Barbuda, Aruba, Bahamas, Barbados, Belize, British Virgin Islands, Costa Rica, Dominica, Dominican Republic, El Salvador, Grenada, Guatemala, Guyana, Haiti, Honduras, Jamaica, Montserrat, Netherlands Antilles, Nicaragua, Panama, St. Kitts-Nevis, St. Lucia, St. Vincent/Grenadines, Trinidad and Tobago. The following five countries are potentially eligible but haven't requested to be included in the Initiative: Anguilla, Cayman Islands, Suriname, Turks and Caicos Islands

Calculating Value-added

In calculations for the value-added requirement, only direct costs of processing operations may be included. These do not include administrative expenses (e.g., supervision, rent for administrative space, electricity), profit, insurance, advertising, or salesperson's salaries. The Caribbean Basin exporter must keep well-documented evidence of these calculations on file for seven years or until final liquidation.

Double Substantial Transformation

Double substantial transformation can be used to increase the amount of CBI beneficiary country value-added to reach the 35% requirement.

Example: A raw, perishable hide is shipped from Venezuela to Grenada where it is tanned to create "crust" leather. The crust leather is then shipped to the United States. The crust leather is an article of commerce new and different from the raw hide. Substantial transformation has occurred, and the leather is now considered a product of Grenada, not Venezuela. Although the substantial transformation requirement has been met, it is doubtful that enough value has been added in Grenada through the direct costs incurred in the tanning process to satisfy the 35 percent value-added requirement for duty-free entry into the U.S. under the CBI. The cost of the raw hide may not be included in the percent-value calculations because the hide is a product of Venezuela, a country ineligible for CBI benefits. Thus, the crust leather would probably be fully dutiable. However, suppose that instead of shipping the crust leather directly to the U.S., the leather is cut and sewn in Grenada to produce a belt that is then shipped to the United States. In this instance, the cost of the raw hide (including shipping costs from Venezuela to the Grenada factory) may be counted toward the 35 percent value-added requirement. This is allowed as a result of a double substantial transformation.

Exceptions

There are a number of products that are excluded from CBI duty-free benefits including textiles and apparel, petroleum and petroleum products, canned tuna, footwear, leather accessories, and certain watches. Some tariff reductions are granted for handbags, luggage, flat goods, work gloves, and leather apparel.

Textiles. While textiles and apparel do not benefit directly from the CBI, the Dominican Republic (and other Caribbean countries) have bilateral agreements with the United States whereby they are guaranteed access to U.S. markets for apparel and other textile articles provided the fabric is produced and cut in the United States. These items may be re-imported into the U.S. virtually duty-free (the same duties apply as those for items under HTS 9802.00.80 below). In order for an item to qualify, it must be assembled in the Dominican Republic from fabric formed and cut in the United States. The U.S. exporter of components must be the same entity who later imports the finished product. Some apparel accessories such as lace, trim, findings, and threads are exempt from the U.S. origin requirement provided they do not exceed 25 percent of the total cost of the components of the final product.

"Wholly of U.S. Origin." Expands duty-free treatment to include textiles (subject to textile agreements) and petroleum and petroleum products provided that they are assembled, manufactured, or processed entirely of U.S. components.

II. Criteria for CBI Country Designation

The President of the United States may not designate a country for CBI benefits status (except for national economic and security reasons) if the following apply.

1) The country is Communist.
2) It fails to meet certain criteria regarding expropriation of U.S. property.
3) It does not take adequate steps to prevent entry of narcotics into the U.S.
4) It ails to recognize arbitral awards to U.S. citizens
5) The country provides preferential treatment to the products of another developed country that adversely affects trade with the U.S.
6) It engages in broadcast of U.S. copyrighted material without owner's consent.
7) It has not entered into an extradition treaty with the U.S.
8) It has not or is not taking steps to afford internationally recognized workers rights to workers in that country.

When a CBI designation is being considered, the President must take the following into consideration.

1) The expressed desire of the country.
2) Economic conditions in the country.
3) The extent to which the country is prepared to provide equitable and reasonable access to its markets and basic commodity resources.
4) The degree to which the country follows the accepted rules of international trade.
5) The degree to which a country uses export subsidies, or imposes export performance requirements and local content requirements.
6) The degree to which the trade policies of the country as related to other CBI beneficiaries are contributing to revitalization of the region.
7) The degree to which a country is undertaking self-help measures to promote its own economic development.
8) The extent to which the country prohibits its nationals from engaging in the broadcast of copyrighted material belonging to U.S. copyright owners without their express consent.
9) The extent to which the country protects the intellectual property rights, including patents and trademarks of foreign nationals.
10) The extent to which the country is prepared to cooperate with the U.S. in administering the provisions of the CBI legislation.

Appendix II. Comparison of U.S. tariff treatment (after NAFTA staging is complete) on products from CBERA-eligible countries and Mexico

Percentage of domestic, U.S., and foreign components	CBERA beneficiaries	Mexico
Textiles, Apparel, and Footwear		
Wholly domestic content	MFN rate of duty Ineligible for CBERA [1/] Ineligible for GSP	Free under NAFTA staging to yarn or fiber forward
At least 35% domestic content	MFN rate of duty Ineligible for CBERA [1/] Ineligible for GSP	MFN rate of duty Ineligible for NAFTA because of yarn and fiber forward
100% US fabric	Duty paid on value added Ineligible for CBERA [1/] Ineligible for GSP	Free under NAFTA
Other Products		
Wholly domestic content	Free under CBERA or GSP for eligible products MFN rate of duty if not eligible for GSP or CBERA	Free under NAFTA staging
At least 35% domestic content [2/]	Free under CBERA Free under GSP MFN rate of duty if not eligible for GSP or CBERA	Free under NAFTA staging if foreign content has undergone CTC [3/] MFN rate of duty if no CTC for foreign content
Less than 35% domestic content	MFN rate of duty	MFN rate of duty if no CTC for foreign content Free under NAFTA staging if foreign content has undergone CTC [3/]
100% U.S. content	Free under 9802.00.80.40	Free under NAFTA staging

Source: *Industry Trade and Technology Review*, 1995.

[1/] Since 1990, completed footwear assembled in CBERA countries entirely from U.S. components have been duty-free under the CBERA. Textiles and apparel not covered by the MFA are eligible for the CBERA, as are hand-loomed folklore products

[2/] The scenario is the same if the domestic content is less than 35%.

[3/] Change in tariff classification.

Appendix III. Government Incentives

I. General Incentives for Free Zone Companies

All free zone companies are exempt from the following duties and taxes for a renewable 15-year period, counted from the first day of production:

1) Corporate incomes taxes.
2) Taxes on construction, mortgage, registration, and real property transference.
3) Incorporation and initial and capital increase taxes.
4) Municipal taxes.
5) All export duties.
6) Business tax (patent), as well as the value added tax (ITBIS), which essentially consists of an 8% tax imposed on the total ex works value of products and services;
7) Consular fees.
8) Import duties for materials and equipment necessary for the establishment of subsidized cafeterias, health services, child-care and entertainment facilities, services for workers, and any other service or program dedicated to increasing the workers' well being.
9) Import duties for trucks, pick-up trucks, garbage trucks, vans and buses for the transportation of employees; these vehicles are not transferable for five years upon importation.
10) Import duty exemption for materials used in the construction of housing for free zone workers; companies located in the Haitian border zone receive 100% exemption, in the National District 80%, and the companies in the remaining areas of the country receive a 90% exemption.
11) All import duties for materials and equipment used in establishing and operating the company.
12) Free zone companies are not subject to the normal customs procedures at the port of entry. Instead, goods may be delivered directly to a company in a free zone where free zone customs agents clear the goods. The same is true of shipments out of the zones, that customs agents accompany the goods to the Dominican ports for export.

II. Special Incentives for Free Zone Companies

In addition to the above benefits, certain companies are eligible for additional benefits. These benefits are usually dependent on the location or type of the company.

Border Free Zones

For those companies located in a free zone on in the Dominican-Haitian border region, additional incentives include:

1) A 20-year tax exemption instead of the normal 15 years.
2) A rent subsidy.
3) Priority treatment for export of goods that are limited by foreign quotas.
4) Priority treatment for development funds under the preferential rates accorded the Central Bank.
5) Possibility of Special Free Zone classification even if *all* eligibility criteria are not met.

Special Free Zones

In certain rare cases, the President of the Dominican Republic may authorize a company to operate outside of a designated free zone. In order for this permission to be granted, several conditions must be met:

1) The nature of the product is such that it needs to be processed close to the center of production
2) The operation can be easily regulated for customs purposes.
3) Production of the same product does not already exist in the country.
4) The operation of the proposed plant in a free zone park is not feasible.

III. Installation Procedures for Free Zone Companies

Application

Applications for operating in a free zone must be presented to the CNZF along with information detailing the products to be manufactured, processes involved, types and origins of materials and equipment, sources of capital, types and numbers of workers, and any other information that the CNZF might request for evaluation. The CNZF will determine the fee to be included with the application. At the time that the application is filed, a short version must be published for two consecutive days in a local newspaper.

Evaluation Process

The application is evaluated by the CNZF and a decision will be reached within thirty days from the date of submission.

Termination of Operations

Free zone operators must give at least three month's notice to the CNZF before ending operations or they will lose the ability to repatriate capital abroad. Investments must be remitted abroad within six months of closing or the property will be auctioned to the public to pay for company debts and the outstanding amount will be confiscated by the Dominican government.

Appendix IV. San Isidro Free Trade Zone

San Isidro Services

Mandatory Services
For a mandatory maintenance fee of USD 0.04 per square foot of rented space per month, the following services are provided:

1) Maintenance of the park, grounds, landscape, streetlights, roads and sidewalks, and buildings. (The following maintenance services are available for a fee: electrical installations, emergency generators, plumbing, air conditioning, mechanical work, and janitorial work.)
2) Maintenance of the electrical sub-station.
3) Government customs office.
4) General park security (24 hours a day).

Waste Collection
Cost varies depending on the type of waste. Average cost ranges from US$80.00 to US$110.00 per month.

Water
Cost varies from USD 100.00 to USD 150.00.

Employee Medical Examination
For a fee of USD 25.00 per employee, a basic medical exam is provided prior to new hires.

Optional Services

Personnel Management
For a fee of USD 0.10 per regular hour worked, all matters pertaining to recruitment, benefits, administration, and training program set-up are taken care of by the CNZF administration.

Medical Services
There are a full-time doctor and nurse on duty at the park to handle emergencies, minor surgeries, and check-ups. Emergency care and minor surgeries are done free of charge.

Employee I.D
Park will provide an I.D. card for USD 6.

Security
Maintenance fees cover general security. Additional security is available for USD 0.85/hour.

Petty Cash
There is a general petty cash fund available to cover immediate local liquidity needs.

Gasoline
There is a station in the park that sells at a price comparable to the rest of a country.

Food
Most employees bring food from home. Tenants may contract to have a food service, and there is some delivery of food within the park.

Management Recruitment

Complete access to all salary and benefit packages being offered in the Dominican labor market is available in the park's Corporate Human Resources Department.

Expatriates

The following assistance is available:

1. Preparation of permanent residence documentation.
2. Providing character and economic references.
3. Securing of exoneration for personal furniture and vehicle.
4. Providing a selection of housing options.
5. Introduction to adequate social environment (can serve as a reference for applications to clubs).
6. Local custom guidance and advice.

San Isidro Laws and Regulations

Minimum Wage

The current minimum wage is RD$1932.00 (USD 138.00) per month.

Working Hours

The regular workweek is 44 hours: eight hours a day Monday though Friday and four hours on Saturday. The distribution of these hours varies with individual employers. Hours worked in excess of 44 and up to 68 are paid at a rate of 135% of base salary. Hours over 68, Sundays, and holidays are paid twice the worker's base salary.

Vacation

After a period of 5 months, and less than 12, a worker is entitled to one day per month plus one additional day. After one year, the allotment is two weeks per year.

Social Security

Only employees earning less than RD$ 2644.00 per month are eligible for Social Security Benefits.

Contract Termination

During the first three months of employment, a work contact may be terminated without payment of severance benefits. After three months, seven days' salary must be paid; between six months and twelve months, the payment is 14 days; more than a year and the severance pay must equal 28 days' salary.

Bibliography

American Chamber of Commerce of the Dominican Republic. *Free Zones as a Development Model in the Dominican Republic*. Obtained from www.amcham.org/do/laws/free.html on March 9, 1999.

American Chamber of Commerce of the Dominican Republic. *The New Law on Foreign Investment*. Obtained from www.amcham.org.do/laws/newlaw.html on March 9, 1999.

Bolin, Richard, Ed. *The World Impact of NAFTA*. Arizona: Flagstaff Institute, 1994.

Central Bank of the Dominican Republic. *Foreign Investment Law No. 16-95 of November 20, 1995 and Regulations for its Application*. Santo Domingo, Dominican Republic, 1995.

Consejo Nacional de Zonas Francas de Exportation. *Informe Estadistico del Sector de Zonas Francas*. Dominican Republic, 1998.

Daubon, Ramon. "Section 936 as a Development Resource in the Caribbean: Suggestions for a More Effective Policy." *Migration Impacts of Trade and Foreign Investment: Mexico and Caribbean Basin Countries*. Diaz-Briquets, Sergio Weintraub, Sidney, eds., Series on Development and International Migration in Mexico, Central America, and the Caribbean Basin, vol. 3. Boulder, Colorado: Westview Press, pp. 113-31, 1991.

De Castro, Norman. Dominican Free Zone Specialist, Pellerano and Herrera. Phone conversation on April 26, 1999.

Díaz-Briquets, Sergio and Sidney Weintraub, Eds. *Migration Impacts of Trade and Foreign Investment: Mexico and Caribbean Basin Countries*. Boulder, Colorado: Westview Press, 1991.

Dominican Republic One News Service. Various news articles obtained from this website, http://www.dr1.com/, on May 17, 1999.

Economic Comission for Latin American and the Caribbean. *Preliminary Overview of the Economy of Latin America and the Caribbean, 1997*. Obtained from www.eclac.cl/english/Publications/bal97/ on July 20, 1998.

Economic Commission for Latin America and the Caribbean. *Trade Liberalization in the Western Hemisphere*. Washington, D.C: Inter-American Development Bank, 1995.

Economist Intelligence Unit. *Dominican Republic 2nd quarter 1999* and *Dominican Republic 4th quarter 1998*. Obtained from http://www.eiu.com/ on May 10, 1999.

Embassy of the Dominican Republic. Dominican shipping and general information through numerous faxes and conversations with Virgilio Mota, Commercial Counselor.

Gonzales, Anthony. "The Future of EU-Caribbean Links." The Courier ACP-EU: No. 161, Jan-Feb 1997, pp72–73. Obtained from www.euforic.org/courier/161e_gon.htm.

Howell, Fred. GSP Specialist, U.S. Department of Commerce. Phone conversation on 4/27.

Institute of Development Studies. *A Strategy for Industrial Restructuring in the Dominican Republic*. University of Sussex: Brighton, 1991.

International Monetary Fund. "Recent Economic Developments: Dominican Republic" in *Staff Country Report, 1996*. Washington, D.C.: International Monetary Fund, 1996.

Kaplinsky, Raphael. "A Reply to Willmore." World Development, Vol 23, No 3: pp. 537–540, 1995.

Kaplinsky, Raphael. "Export Processing Zones in the Dominican Republic: Transforming Manufactures into Commodities." World Development, Vol. 21, No 11: pages 1851-1865, 1993.

Kramer, Susan M. "Incentives and Impediments to U.S. Foreign Direct Investment in the Caribbean: Case Studies of the Dominican Republic and Jamaica" in *Migration Impacts of Trade and Foreign Investment: Mexico and Caribbean Basin Countries*. Diaz-Briquets, Sergio Weintraub, Sidney, eds., Series on Development and International Migration in Mexico, Central America, and the Caribbean Basin, vol. 3. Boulder, Colorado: Westview Press, pp. 133–66, 1991.

Mathews, Dale. *Export Processing Zones in the Dominican Republic: Their Nature and Trajectory*. PhD thesis. Sussex University: Sussex, England, 1994.

Medina, Esther Hernández. *A Brief Profile of Free Trade Zones in the Dominican Republic*. Obtained from www.oneworld.org/textver/oxfam/campaign/clothes/ftz.htm on September 3, 1998.

National Free Zone Council. *Law 8-90: Encouraging the Establishment of New Free Zones and the Growth of Existing Ones*. Santo Domingo, Dominican Republic, 1990.

Pellerano and Herrera. *Legal Guide to the Free Zones of the Dominican Republic*. Santo Domingo, Dominican Republic: Pellerano and Herrera, 1998.

Safa, Helen I. "Export Manufacturing, State Policy, and Women Workers in the Dominican Republic." *Global Production: The Apparel Industry in the Pacific Rim*. Bonacich, Edna, et al., eds., Philadelphia: Temple University Press, pp. 247-67, 1994.

Tavares, Juan. Vice President, Maritima Dominicana, S.A. Phone and email conversations on 4/1599, 4/25/99, 4/30/99.

United States Department of Commerce, Trade Information Center. Document Nos. 0231, 0232, 0233, 0234, 0235, 0236, 4552, 4553, 4556, 4558, 4559, 4567. Received via fax.

United States International Trade Commission. *Industry Trade and Technology Review*. Office of Industries: February 1994 and September 1995.

United States Department of State. *Country Commercial Guide: Dominican Republic, 1999*. Washington, D.C.: U.S. Department of State, 1999.

United States Department of State. *Country Report on Economic Policy and Trade Practices*. Report to Committees on Forein Relations and Finance, International Relations, and Wages and Means of the United States House of Representatives. 1989, 1990, 1992–98.

Willmore, Larry. “Export Processing Zones in the Dominican Republic: A Comment on Kaplinsky.” World Development, Vol 23, No. 3: pages 529-535, 1995.

World Bank. “Caribbean Economic Overview, 1996.” Report prepared for the CGCED meeting in June, 1996.

World Bank. *Caribbean Region: Current Economic Situation, Regional Issues, and Capital Flows, 1992.* A World bank Country Study. Washington, D.C.: The World Bank, 1992.

World Bank. *World Development Report: Knowledge for Development.* New York: Oxford University Press, 1999.

Worrell, DeLisle. “Economic Policy in the Dominican Republic since 1966.” *The Latin American Debt.* Jorge, Antonio Salazar-Carrillo, Jorge, eds., New York: St. Martin's Press. pp. 170–78. 1992.