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STRATEGIES OF 'INDUSTRIALIZATION BY INVITATION' IN THE CARIBBEAN

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Abstract

This paper analyses the policies inspired by the strategy of ‘Industrialization by Invitation’ formulated by Nobel Laureate Arthur Lewis (1915-1991), and their effects on the English-speaking Caribbean countries and Puerto Rico. The strategy consisted in a nutshell of attracting foreign capital through a series of incentives. Foreign capital was a means of overcoming limitations to industrial development imposed by the small volume of trade of Caribbean economies. It was also a means of acquiring entrepreneurial skills and capital resources which were lacking in small developing economies. The paper argues that in both the English-speaking Caribbean and Puerto Rico the policies guided by the strategy of ‘industrialization by invitation’ succeeded in attracting foreign direct investment. However, the expansion of foreign direct investment was accompanied by a stagnation of domestic investment. More important, the policies followed actually increased the dependency of the economies in question on foreign capital flows.

Introduction

This paper describes the main elements of the development strategy known as 'industrialization by invitation' and also analyses its effects and implications using two source cases: the English speaking Caribbean countries and Puerto Rico. The strategy was first formulated by the Saint Lucian economist and Nobel Laureate, Arthur Lewis (1915-1991).

Lewis envisaged industrialization as a process requiring the simultaneous development of agriculture and industry. Industry would absorb the surplus labour emanating from agriculture allowing the sector to increase its productivity and standard of living. The improvement in agricultural conditions would allow it to generate a demand for manufacturing products.

In the case of the English-speaking Caribbean countries (the West Indies), the low levels of income prevailing at the time meant that income would be spent mostly on food and shelter rather than on manufacturing. Lewis envisaged that the West Indies would be characterized by a coexistence of an excess demand for food and an excess supply of manufacturing. The solution lay in exporting manufacturing products and using the proceeds to purchase agricultural products.

However, the small volume of islands' trade prevented these economies from exporting on a competitive basis and Lewis recommended that instead of exporting, the West Indies should, through a series of policy measures, court foreign entrepreneurs to install and open their businesses and factories in the islands. Hence, the term, 'industrialization by invitation.'

Foreign capital would contribute to the acquisition and development of fundamental managerial, entrepreneurial and administrative skills that were absent in newly-developing economies, such as those of the Caribbean. Over time, after a learning period, local entrepreneurs would possess the capacity to start their own ventures and the creation of their respective national industrial bases.

From the time of their independence, the 'industrialization by invitation' strategy shaped the development path adopted by Caribbean economies and remains to this day a fundamental pillar of their economic policy.

This paper is divided into three sections. The first describes the strategy of 'industrialization by invitation' as conceived in Lewis' seminal paper, The Industrialization of the West Indies (1950). The second section focuses on the economic policies that were followed by English-speaking Caribbean countries and Puerto Rico and that were inspired by the strategy of 'industrialization by invitation'. The last section centers on their effects and more precisely on whether they managed to spur the development of domestic industry and entrepreneurship.

The industrialization of the West Indies

Arthur Lewis (1950) first formulated the rationale and main elements of the development model of 'industrialization by invitation.' Lewis' argument for industrialization rested on over-population in agriculture and even more so on the need to improve the productivity of agriculture

by shifting labour to the manufacturing sector. Thus 'the creation of new industries is an essential part of a programme for agricultural improvement" (p.831). Lewis did not view industrialization as an alternative to agricultural development but as a complement to it. As he put it (p. 832):

> "There is no choice to be made between industry and agriculture. The islands need as large an agriculture sector as possible, and, if they could even get more people into agriculture, without reducing output per head, then so much the better. But, even, when they are employing in agriculture the maximum number that agriculture will absorb at a reasonable standard of living, there still will be a large surplus of labour, and even the greatest expansion of industry which is conceivable within the next twenty years will not create a labour shortage in agriculture. It is not the case that agriculture cannot continue to develop if industry is developed. Exactly the opposite is true: agriculture cannot be put on to a basis where it will yield a reasonable standard of living unless new jobs are created off the land."

In much the same way that the development of manufacturing was a pre-condition for the improvement in agricultural conditions, the latter was needed to provide a demand for the increase in manufactures.

However, the small size of the market and the shortage of cultivable land in the West Indies were two main constraints that prevented the complementarity between agriculture and manufacturing. The small size of the market for manufactures implied that the demand for manufacturing output would fall short of its supply. At the same time, the shortage of cultivable land meant that the supply of food would fall short of demand.

The solution proposed by Lewis was to export the excess supply of manufactured products, which would finance the required imports of food products. The equality between manufacturing exports and agricultural imports would then provide the necessary balance for the simultaneous development of agriculture and manufacturing.

Nonetheless, Lewis doubted that Caribbean manufacturers would be poised to compete with existing suppliers in international markets. The limited amount of island trade precluded them from incurring into the cost of breaking into established export supplier markets. Based on the experience of Puerto Rico, he proposed "to persuade existing suppliers to open factories in the islands to supply their trade."

The strategy of industrialization by invitation consisted of three elements: the creation of a customs union; the creation of a special agency, the Industrial Development Corporation, to drive the industrialization process; and the provision of special incentives. The Industrial Development Corporation would put in place the necessary infrastructure and would offer the required incentives (protection, subsidies, or tax holidays) to attract foreign investment.

According to McIntyre (1995, p.60), the attraction of foreign investment was a means to acquire two of the main resources that were crucial to any development process, capital and

entrepreneurial skills, which were lacking in the islands. In addition, foreign investment would generate processes of 'learning by doing' and Caribbean entrepreneurs would eventually be able to start their own domestic firms and national industrial base.

The strategy of industrialization by invitation was applied in two different variants in the English-speaking Caribbean and in the Hispanic Caribbean, namely, in Puerto Rico. The following sections examine the main instruments used in each and the respective results.

Industrialization by invitation in the English-speaking Caribbean: The evolution of the tax incentives schemes

Guided by Lewis, English-speaking countries, following their independence, passed a series of fiscal legislation incentives. They also formed a regional integration scheme, the Caribbean Community (CARICOM) that provided the framework for a customs union and, at least during the 1970s, a common and regional approach to industrialization and tax incentives polices.

The regional policy of fiscal subsidies was formalized in the Agreement for the Harmonization of Fiscal Incentives (1973).[1] This agreement conceived fiscal policy as a microeconomic tool providing incentives to develop the manufacturing, mining and tourism sectors. More specifically the agreement sought to promote investment from domestic and foreign sources; reduce competition among members by placing a ceiling on benefits; target incentives at enterprises with high value added; and seek regional convergence by giving greater fiscal incentives to the Less Developed Countries (LDCs).

The instruments included profit tax holidays, tariff exemptions, export allowances for extraregional exports following the expiration of the tax holidays, dividend payments, loss-carry forward, and depreciation allowances. Table 1 below summarizes the fiscal incentives under the harmonization scheme.

The scheme of fiscal incentives had a number of characteristics in terms of exemptions, its implementation procedure and its sectoral distribution.

First, the scheme was targeted mainly to promote industrialization in the LDCs of CARICOM. A World Bank report (1990) found that relative to their size the LDCs had a greater number of firms receiving fiscal incentives that the More Developed Countries (MDCs). As an example in 1989, the number of firms that benefited from fiscal incentives in St. Vincent and the Grenadines and Saint Lucia was 85 and 82, respectively while Barbados and Belize had 48 and 39 firms each receiving fiscal incentives.

Second, the government's provisions included in the scheme, such as, rental subsidies, the facilitation of infrastructure, and human capital enhancement through the provision of training jointly with the perception that the incentives scheme was of a temporary nature, encouraged the establishment of labor intensive and footloose firms.

[1] See, Treaty establishing the Caribbean Community (Chaguaramas, 4th July 1973), p.43. Caribbean Community Secretariat. November, 1982.

Third, at the sectoral level, the incentives schemes promoted the diversification of the productive base and stimulated the establishment of firms that specialized in non-traditional products. Firms in LDCs specialized in textiles, food processing and electronics. In the MDCs, firms under the incentives scheme specialized in electronics and plastics.

Fourth, while the legal framework was conceived at a regional level, its implementation was carried out at the national level. Thus the regional interests in targeting did not necessarily coincide with that of the individual countries. As a result CARICOM countries exhibited a different distribution of fiscal incentives by firms and sector.

Table 1:
Fiscal Incentives of CARICOM economies
Harmonization of Fiscal Incentives Act, 1973

Profit Holiday	**Duration (number of years)**		
	MDCs	**Barbados**	**LDCs**
When 100% of sales are exported extraregionally.	10	10	15
When the local value added exceeds 50% of total sales.	9	10	15
When the local value added is comprised within a range of 25%-49%.	7	8	12
When the local value added is comprised within a range of 10%-24%.	5	6	10
When the industry is highly capital intensive: LDCs when the initial investment > EC$25 million MDC when the initial investment > EC$50 million	10	10	15
Tariff exemptions	For the duration of the above tax holidays, inputs, machinery and spare parts can be imported duty free; all materials and equipment for new factories can be imported duty-free.		
Export allowance for extraregional exports after expiration of tax holiday When exports profits > 61% of the total. When export profits are comprised between 41% and 61% of the total. When export profits are comprised between 21% and 41% of the total. When export profits are comprised between 10% and 21% of the total.	Tax relief of 50% up to 5 years Tax relief of 45% up to 5 years Tax relief of 35% up to 5 years		
Dividend payments	During the validity of the above tax holiday dividends paid to shareholders are tax exempt.		
Loss carry-forward	Can carry forward losses for up to five years after the tax holiday expires.		
Depreciation allowance	After the tax holiday expires, a deduction of up to 20% on any capital expenditure incurred.		
Source: McIntyre, 1995 & World Bank, 1990			

At the same time that countries implemented the Harmonization Fiscal Incentives Act, they applied a comprehensive package of domestic tax incentives policy as part of their national development policies that were suited to the specificities of each of these economies and

overhauled the regional incentives scheme. The national schemes remain to this day the main vehicle for the provision of tax incentives and the main tool for developing sectoral policies.

In the case of the member States of the Organisation of the Eastern Caribbean States (OECS), fiscal incentives policies are mainly aimed at enhancing the development of the manufacturing and services sector. These consist, for the most part, of a Fiscal Incentives Act dating back to the 1970s or the 1980s; a Hotel Aids or Ordinance Act, and a range of tariff and duty exemptions. Some of these duty exemptions are granted under the Conditional Duty Exemptions of the Common External Tariff (CET) while others are granted on a government discretionary basis. In some cases (such as that of Dominica and St. Kitts and Nevis) these are also complemented with the granting of residential rights in order to attract foreign direct investment.

In Antigua and Barbuda, Dominica, Grenada, Saint Lucia and St. Vincent and the Grenadines, the fiscal legislation grants tax exemptions according to definite criteria including the content of local value and export orientation of production. Local value is defined as the difference between realized sales over 12 months and the cost of imported raw materials, components and part of components, fuels and services and wages and salaries. The fiscal incentives act also allows the duty-free importation of machinery, equipment, spare parts, building materials, raw and packaging materials. For its part, the Hotels Aid Act can grant a tax holiday of up to 20 years for approved hotel and resort developments in the cases of Antigua and Barbuda and Dominica.[2] For Grenada, the Hotel Aids Act grants exemption on taxes from profits for 10 years including hotels, apartments, and guest houses and also provides exemptions from customs duties and taxes on articles of hotel equipment, service vehicles, materials for construction and repair renovation and extensions to hotel properties.

In addition, the recent World Trade organization (WTO) trade policy review of the OECS notes that, "companies that are registered under the International Business Companies Act of 1982 are exempt from the payment of taxes, duties and fiscal charges for a period of 20 years from the date of incorporation." In the case of Dominica the 1992 amendment to the Fiscal Incentives Act of 1974 introduced an income tax credit granted in the case of capital expenditures for the construction, acquisition or improvements of assets.

Dominica also has approved an Aid to Development Enterprises Act which grants duty exemptions for raw materials, inputs, materials, tools, plant, machinery and building materials which are used in the production of manufactures, construction of factories, hotels and packaging activities. Between 1996 and 2000, the tourism sector firms accounted for 53% of all firms receiving fiscal incentives followed by the manufacturing sector (45%). (See Table 2 below).

[2] In Dominica the Hotels Aid act was passed in 1984. In Saint Lucia, the Tourism Incentives Act was passed in 1996.

Table 2: Distribution of tax incentives by economic sector (1996-2000) The case of Dominica	
Beneficiary	**Percent of the total**
Manufacturing sector	45
Tourism sector	53
Other services	22
Source: World Trade Organization	

Grenada, Saint Lucia, St. Vincent and the Grenadines have further extended the benefits derived from tax concessions. The former has provided tax relief on the export profits that are realized on the external sales of approved manufactured products. The authorities also permit firms that do not qualify for the benefits of the Fiscal Incentives Act and which have a local value in their production of 40% and above to obtain imports duty concessions as provided in the List of Conditional Duty Exemption of CARICOM CET. Saint Lucia has provided a similar set of provisions. In 1999/2000, the Saint Lucian authorities announced further stimulus by exempting manufacturers from the payments of customs service charge and the introduction in the next fiscal year of a consumption tax rebate. Finally, in Saint Lucia primary producing agricultural enterprises are exempt from income tax.

The larger Caribbean countries have also opted to promote the expansion of their productive base through tax incentives. Among these, Guyana has perhaps the largest set of fiscal incentives. Guyanese legislation provides incentives to all the productive sectors.

Table 3: Fiscal incentives in Guyana	
Sector	**Fiscal incentives**
Manufacturing	
Forestry	
Mining	
Tourism	
Fisheries	
Housing	
Information and communications technology	
Tourism	
Source: Go-Invest	

Barbados is another case in point. The country uses a policy of tax incentives and government support to reduce transport costs and build infrastructure for its main sector, which is the tourism sector. The Barbadian economy depends mainly on tourism. Even though tourism represents 14% of GDP in real terms, it is linked to almost every other activity in the country from the construction sector to agriculture. It is also an important contributor to tax revenues and by far the most important foreign exchange earner in the economy (90% of the total).

The recent tourism legislation seeks to develop tourism as a niche market. The legislation boils down to: (a) a range of fiscal and tax incentives; (b) the virtual elimination of small hotels or guesthouses; and (c) a programme of government capital expenditure support for the tourism industry. [3]

A number of incentives are also granted to the manufacturing sector**.** Sugar benefits from subsidies (payment per ton of harvested cane) and transfers and sugar exports have a preferential access to the European market at a fixed price. The government is seeking to change the orientation of sugar to the local market by fixing a price for sugar for domestic consumption above that obtained by selling sugar in the European market.

Manufacturing benefits mainly from high tariff protection levels, fiscal incentives and export facilitation schemes. These benefits compensate for the lack of competitiveness of the sector, which is due to high labor costs; transport costs; an appreciating real exchange rate; and size constraints, which prevents the sector from realizing economies of scale. In addition, manufacturing firms, which produce an 'approved product' or are 'approved firms' can receive special incentives that are detailed in the Fiscal Incentives Act (1974).

Tax holidays are given to firms according to the percentage of local value added to their manufactured product. When the local value is greater than 50% of the total approved, firms receive a tax holiday equivalent to 15 years. When the local value added comprises between 25% and 50% of the total, the tax holiday is 13 years. When the local value added comprises between 10% and 25%, the tax holiday is reduced to 11 years. After the expiration of the tax holiday firms can receive tax deductions contingent on their export potential. Firms can also carry forward their losses.

Moreover, highly capital intensive firms with an investment at least equal to US$25 million receive a 10-year tax holiday. Finally, manufacturing firms exporting outside the CARICOM region can obtain the same benefits given to an International Business Company (IBC). (See Table 4 below).

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[3] The fiscal and tax incentives were granted originally through the Hotel Aids Act (1967) which was replaced with the Tourism Development Act (2002). The underlying principle of the tourism act is that firms in the tourism sector must be supported throughout their lifecycle and not only at the starting stage.
The most important features of the Tourism Development Act are as follows:

- Hotels are defined as any building containing not less than 10 bedrooms each of which is valued at US$87 000.
- Hotels are allowed a write-off of 150% of interest expenses to refurbish a hotel, construct a new hotel with no less than 250 rooms with conference facilities, the consolidation of hotels administered as a group.
- Hotel owners are given 15 years to write-off capital expenditures against income accruing to the business for hotel properties with a value of up US$100 million. An additional year is provided up to a maximum of 20 years for every additional expenditure of US$10 million over US$100 million.
- Tax free payments of dividends to the owners of a tourism product.
- 150% tax write-off on expenditure on tourism research, enhancing tourism capacity, organization of trade fairs, development of linkages with other sectors, development of community tourism programmes, development of computer software to measure the performance of the tourism industry.
- Similar tax concessions are provided for restaurants, villas, attractions, sports and recreational facilities.

Table 4: Barbados Tax incentives in the financial sector (2002)				
	Exempt insurance companies	IBC	Offshore Banks	SRL
Tax rate	0	2.5%-1%	2.5%-1%	2.5%-1%
Withholding tax				
Dividends	No	No	No	No
Interest	No	No	No	No
Royalties	Yes	No	No	No
License required	Yes	Yes	Yes	Yes
Exemption from exchange controls	Yes	Yes	Yes	Yes
Exemption from duties on imports	No	Yes	Yes	Yes
Requirement to file financial statements with regulatory agency	Yes	Yes	Yes	No
Financial statements open to public scrutiny	No	No	No	No
Exemptions from taxes and duties on sale of securities and assets	Yes	Yes	Yes	No

Note:
IBC = International Business Company.
SRL = Societies with Restricted Liabilities Act.
The corporation income tax is 40%.
The personal income tax ranges from 10% to 40%.
The withholding tax ranges from 12.5% to 40%.
The value added tax is 15%.
The hotel accommodation tax is 7.5%.

Barbados has furthermore passed a series of tax legislation to foster and encourage the growth of the financial sector. There are a number of incentives in place for international businesses including lower company tax rates, tax exemptions. In addition the legislation states that 35% of the remuneration of qualified personnel of international business institutions can be paid free of income tax and in any foreign currency.

Industrialization by invitation in the Hispanic Caribbean: The case of Puerto Rico

From 1950 until 1986, 'Operation Bootstrap' guided the orientation of economic policy. As stated by Bonilla and Campos (1982, pp.133-134):

> "Bootstrap strategists argued that the intolerable population pressures on resources constituted the root obstacle to economic advance and the necessary modernization of Puerto Rico. Their prescription was to find a low-cost approach to channel the movement of redundant Puerto Rican workers abroad while drawing energetic entrepreneurs to the Island from the United States. The necessary economic and social operations envisioned in Bootstrap were to be carried out through the agency of a newly designed political structure the commonwealth" [4]

[4] The Commonwealth of Puerto Rico was established in 1952.

It was conceived as a two-stage strategy. In the first stage, Puerto Rico would provide the social capital and the required infrastructure (Holbik and Swan, 1975; Cabán, 2002). These would be financed through the sale of bonds in the United States capital market and local taxes. Government expenditures and policies would provide, in turn, an important stimulus to the expansion of private investment, which took, in fact, a leading role during this phase. In the second stage, American firms would 'be induced to locate through industrial sites through an elaborate incentives programme. The incentives included: tax concessions, grants, subsidized rentals and utility rates and low wage rates' (Holbik and Swan, 1975, p.16).

The first stage of the strategy was accompanied by significant government capital expenditures (education, transportation, housing, communications, and irrigation) to provide a basis for the development of private enterprise. [5] This policy continued well into the 1960s as the focus of expenditure centered on roads and education (Holbik and Swan, 1975).

Besides government intervention, the development of private enterprise was further enhanced by a policy of tax incentives deliberately aimed at encouraging domestic investment. One such example is the 1948 law granting tax incentives.

The 1948 law exempted from income, property and excise taxes in Puerto Rico, new industries established in 1947. The level of exemption granted was established at 100% until 1959 and 75%, 50% and 25% in the following three years (Lewis, 1949). As Lewis saw it the law benefited only:" (a) Puerto Rican capitalists who establish new industries; (b) U.S. capitalists who move from the U.S. to Puerto Rico; (c) by a special provision of the U.S. but who derives 80% of his income from Puerto Rico, including 50% from active conduct of a business in Puerto Rico (probably a rare species)….Tax exemption thus benefits the small American capitalist who is willing to transfer to Puerto Rico, ands the large American capitalist who is willing to use his Puerto Rico profits to expand his assets in Puerto Rico. But it would not help a large American corporation which built a branch plant in Puerto Rico and wished to use the income to declare dividends to its American shareholders." Thus the tax laws and incentives benefited domestic investment.

The attraction of foreign direct investment was directly tied to a policy of federal and local fiscal incentives.[6] At the local level during Phase II, the Industrial Incentives Act (1978)

[5] Holbik and Swan (1975, p.25) write: "Heavy expenditures were made in subsequent years on education, transport, housing, telephones, irrigation, and power. A permanent improvement programme was established outside the budgetary process to ensure steady progress. By 1967 the economy had developed to the point that it could support a $69 million program to finance expenditures of $14 million in industrial and tourist facilities, $11.4 million for new schools, $10.8 million for new housing, $9 million for land purchases, and $7.4 million for rural water supplies. In addition, a highway allocation of $7 million was to be lent by a New York bank in a project that would reach $40 million, the largest single credit transaction ever handled by Puerto Rico." The expenditure in infrastructure can also be seen as a component of social tranquility required for the success of Operation Bootstrap.

[6] Arthur Lewis sought that the main incentive to attract foreign capital to the Caribbean was lower labor costs. Lewis sought to supplement this by a policy of fiscal incentives. The protectionist side to this development model came at a later stage. In fact, Lewis, rather than arguing in favor of protection from imports stated the case for export subsidies. As he put it (Ibid, p. 886): "Most of the industries will have to export, and if they are to do this, they must be able to compete on the world market; and if they can compete there, they will not need protection in the domestic market."

sought to homogenize the existing Puerto Rican tax legislation with that of the rest of the United States. This meant the elimination of the regime of local tax exemptions, which had been in place since the late 1940s and which had provided a stimulus to the expansion of domestic investment. More importantly the 1978 Act encouraged the development of the services sector by granting a tax break of 50% to export-oriented service firms engaged in 'distribution, consulting, accounting, banking and computer systems.' According to Dietz (2001) 'this contributed to the shift in overall production toward services and the emergence of…the 'high finance' stage of industrialization.'

At the federal level, Section 931 of the United States internal revenue tax code in force until 1976, allowed United States corporations to 'exclude their profits from any US tax liability on so-called possessions income, as long as these profits were not repatriated to the US during the 'life' of the corporation.' As also noted by Dietz (2001), this law 'led to 'ghost' closings of corporations at the end of their Puerto Rican exemption period so that profits could be repatriated. These firms would be then reconstituted with a new exemption period in Puerto Rico until a subsequent ghost liquidation took place so that profits could again be remitted tax free.'

The tax reform act of 1975 replaced Section 931 with Section 936. It provided a tax credit "equal to the full amount of the United States corporate income tax liability on income generated by production, trade or investment activities of an active business in a United States possession". This incentive "sheltered a large proportion of corporate income taxes generated by profits of production facilities located in Puerto Rico. The intent was to promote development of the Puerto Rico economy and the reduced costs also encouraged production of materials for export."[7] Investment income was also exempted from the federal income tax provided that at least three-quarters of all profits came from trade or production activities and provided that the income was earned and invested in Puerto Rico.

Section 936 was without doubt, a significant tax incentive act as it was estimated that more than 90% of those corporations that qualified for tax exemptions under Section 936 were located in Puerto Rico. However the law also led to a concentration of industry in manufacturing and pharmaceuticals. In fact the drug and pharmaceuticals industry received half of the tax benefits granted by section 936 of the tax reform act of 1975.

While Puerto Rico officially abandoned the policy guidelines of 'operation bootstrap' in the late 1980s and early 1990s, the government still viewed tax incentives as a fundamental part of their development policy.

In the 1990s the tax legislation underwent important changes whose effects are not yet visible for the last years of the sample but which could have an important effect on the convergence trajectory of Puerto Rico to the United States.

Since 1993 the United States has gradually sought to suppress the special and differential tax treatment received by Puerto Rico. In 1993 the Omnibus Budget Reconciliation Act imposed cutbacks in the programme of tax incentives for new investments by retaining the investment tax credit while imposing limits on the income-based tax credit. The latter decreased by five

[7] See, The Urban Institute. Targeting Export Markets for Puerto Rico. 1997.

percentage points a year in 1995 –from 60% of profits in 1994 to 40% of qualified labor costs in 1998.

In 1996, Section 936 was repealed through the Small Business Job Protection Act and granted a phase out of 10 years for current beneficiaries. The authorities have proposed an amendment to Section 956 of the federal tax code, which would allow controlled foreign corporations (CFC) to repatriate 90% of their profits to related or parent operations in the United States tax-free. The income-based option of the Omnibus Budget Reconciliation Act will remain at its 1998 level. The reduction of tax incentives is estimated to increase from $111 million in 1996 to $2,686 in 2006 (Dusenbury and Lines, 1997).

At the local level the authorities have sought to offset the negative effects of the 936 Section phase out. As a result they passed the Tax Incentives Act of 1998 providing an exemption from Puerto Rican taxes for approved firms.[8] As well there are tax incentives for employment. An important change in the structure of the tax incentive system is that it "has shifted from large tax exemptions to low tax rates".[9] (See table 13 above). In 2001, the authorities approved the Export Law (August 2001) in an effort to "promote the distribution of products through existing channels such as multinationals retailers and joint venture agreements."[10] This law raises the tax credit from 10% to 25% when buying products, which are manufactured in Puerto Rico.[11]

'Invitation by industrialization': Economic effects and implications

This section analyses the effects of the policies followed in the English-speaking Caribbean and Puerto Rico that were inspired by the strategy of industrialization by invitation. The focus is on whether the policies that were followed were successful in attracting foreign capital and on whether foreign capital was bale to spur the development of domestic industry.

In the case of the English-speaking Caribbean, official assistance aid constituted the main form of net long term foreign financial flows at least until the end of the 1980s. Available data indicate that these represented on average 65% per year of the total between 1981 and 1990.

During the 1990s the trend was reversed and official aid flows diminished considerably. Net official flows of resources, including grants, declined from 59% to 6% of the total between 1990 and 2000. This highlights the greater reliance on private capital flows to finance development projects. Private capital flows, increased eightfold, from US$ 326.4 million in 1990 to US$ 2 929 million in 2000.

This trend responded partly to domestic policy changes of donor countries as well as the adoption of structural change and outward-oriented policies in receiving countries and the reduction of capital controls and development of international financial markets. It also reflected

[8] The law establishes the levy a 7% flat corporate tax.
[9] See, Commerce in Puerto Rico. EIU. 2003.
[10] Promoexport and the internationalization of Puerto Rico's Producers. Promoexport. Memo. 2003.
[11] See, Ley Num 110. (2001) in Nuevas Leyes para Promover el Desarrollo Económico de Puerto Rico. San Juan, Puerto Rico (2002).

a modification in the perception of the usefulness of official capital flows as a major contributor to development. Official capital flows switched their role from a fundamental engine of development to a complement of private flows. Finally, successful developing countries such as some Caribbean countries, were viewed as graduates of concessional aid ready to take on the challenges of commercial borrowing. This allowed donor countries to reorient official aid regions with high levels of poverty or that were in the process of restructuring their economies towards market based systems.

Foreign direct investment (FDI, hereafter) increasingly substituted official assistance flows. FDI represents the main component of private capital flows in the Caribbean increasing from US$618 million in 1990 to US$1,919 million in 2001 (8% and 10% of GDP) and averaging more that 85% of the total in the same period.

During the 1990s, net FDI in the subregion grew significantly, representing an increase from 8% to 10% of GDP on average. The bulk of foreign direct investment is sourced in the United States followed by Europe. During the 1990s, at the sectoral level, FDI inflows were concentrated on mining (bauxite and precious metals) (Guyana, Jamaica and Suriname), energy (petroleum) (Trinidad), agriculture (Barbados, Belize, OECS), forestry (Guyana), and tourism services (OECS, Bahamas, Barbados) (CARICOM, 2000).

In the case of Puerto Rico foreign direct investment did not increase at least during the first decade of the implementation of 'Operation Bootstrap' (1950 to 1960). In this regard Padin (2003, pp.285-286) states: 'US firms attracted to Puerto Rico in the 1950's were relatively small, labor intensive operations in declining sectors with a grim future in the United States…The turn to private foreign direct investment was initially so uncertain that each new plant was celebrated with the orchestrated fanfare of a development agency fearful of losing public support for its efforts.'

For the following decade (the 1970s) Morley (1980, p.183) stresses that, "The number of new factories in operation as a result of 'Operation Bootstrap' grew from 548 in 1957-1958 to 1,003 in 1964-1965 and then jumped dramatically to 1,674 in 1967-1968 when heavy capital investments were beginning to establish a foothold in the Puerto Rican economy."

Foreign direct investment, which represented 5% of GNP in the period 1947-1971 rose to 11% in the period 1971-1986.[12] The take off in foreign investment at the beginning of the 1970s responded in part to the change in the tax legislation, as the 1948 act was replaced with a new and more comprehensive tax exemption act in 1963 and later in 1969 by the increase in the flexibility in the granting of tax incentives given to the government. The 1963 tax act granted exemptions of up to 100% on earnings ranging for a period of 10 to 17 years. Also the tax exemption period could be expanded when a firm opted for 50% exemption on earnings combined with full exemption on local taxes.

[12] The scant empirical data available on foreign direct investment validates this hypothesis. Between 1960 and 1967 total United States investment in Puerto Rico increased from $1.4 to $5 billion and continued to expand to $10, $15 and $20 billion in 1973, 1976 and 1978, respectively (Bonilla and Campos, 1982, p.135 and p. 136)

The rise in foreign direct investment was reinforced by the adoption and implementation of sections 931 and later 936 of the United States tax code. Section 936 was without doubt, a significant tax incentive act as it was estimated that more than 90% of those corporations that qualified for tax exemptions under Section 936 were located in Puerto Rico. However the law also led to a concentration of industry in manufacturing and pharmaceuticals. In fact the drug and pharmaceuticals industry received half of the tax benefits granted by section 936 of the tax reform act of 1975.

Table 5:
Composition of net financial flows for CARICOM economies
In percentage of the total 1990-2000

	1990	**1991**	**1992**	**1993**	**1994**	**1995**	**1996**	**1997**	**1998**	**1999**	**2000**
Total net financial flows	100	100	100	100	100	100	100	100	100	100	100
Total net long term	85.73	107.64	90.94	102.54	103.70	72.10	128.90	72.68	105.29	73.27	100.00
Official flows	**59.25**	**92.44**	**29.22**	**39.18**	**14.85**	**23.50**	**14.56**	**5.82**	**13.43**	**6.86**	**6.34**
Grants	33.88	64.12	20.43	35.32	20.66	24.11	25.78	16.10	20.70	17.38	4.76
Loans	25.37	28.33	8.79	3.86	-5.82	-0.61	-11.22	-10.28	-7.26	-10.51	1.58
Private flows	26.49	15.19	61.71	63.36	88.85	48.60	114.34	66.86	91.86	66.40	93.65
Debt flows	-42.55	-27.52	-12.64	-14.16	-11.22	-19.88	-6.28	-4.77	7.32	-0.04	33.69
Commercial bank loans	-12.07	-1.12	-4.07	-1.86	-3.30	-6.26	-8.27	-2.46	-2.69	-4.65	4.99
Other	-24.56	-26.41	-8.57	-12.30	-7.92	-13.63	1.98	-2.31	10.01	4.62	28.70
Foreign direct investment	**69.04**	**42.71**	**74.35**	**77.53**	**100.07**	**68.48**	**120.62**	**71.63**	**84.54**	**66.44**	**59.96**
Short term debt flows	14.27	-7.64	9.06	-2.54	-3.70	27.90	-28.90	27.32	-5.29	26.73	0.00

Source: On the basis of World Bank and ECLAC data.

In both the English Caribbean and Puerto Rican cases the large increases in foreign direct investment did not translate or trigger corresponding increases in domestic investment.

In the case of the English-speaking Caribbean economies there is preliminary empirical evidence that shows that foreign direct investment flows went into those economies that had the highest levels of domestic investment. The correlation coefficient between foreign direct investment and gross domestic investment as a percentage of GDP was found to be 0.53. However, the change in foreign direct investment is not in any way related to the change in gross domestic investment (the change between both as a percentage of GDP is 0.003). The data shows that domestic investment as a percentage of GDP has remained unchanged at the regional level and in many country cases this ratio has decreased. On average for CARICOM countries the ratio of investment to GDP was 25.96% during 1980-1990 and remained at that level in 2000 (25.61%) (See Figures 1 and 2 at the end of the paper).

Table 6:
Gross Domestic Investment (As percentages of GDP)
1980 – 2000

Country	1981-1990	1991-2000	1998	1999	2000
Antigua and Barbuda	33.8	33.6	32.4	32.8	29.9
Barbados	18.6	15.2	18.5	19.4	18.1
Belize	23.6	25.9	25.8	26.1	31.6
Dominica	31.1	29.0	27.0	28.5	29.3
Dominican Republic	22.4	22.1	23.4	24.2	23.7
Grenada	34.0	34.9	37.4	35.7	38.6
Guyana	28.0	31.3	28.8	24.5	22.3
Haiti	15.2	7.5	10.7	11.0	10.7
Jamaica	23.1	28.1	27.2	25.6	26.8
St. Kitts and Nevis	37.7	42.6	43.0	37.4	45.0
St. Lucia	26.8	23.6	23.8	25.8	24.5
St. Vincent and the Grenadines	28.9	28.7	31.8	32.6	28.0
Suriname	19.9	16.4	18.1	15.6	11.0
Trinidad and Tobago	20.3	20.7	27.9	21.4	19.1
Average	25.96	25.69	26.84	25.76	25.61

Source: World Bank (2002); ECLAC (2002)

In the case of Puerto Rico, gross formation of fixed capital as a percentage of GNP averaged 21% during the first two decades of Operation Bootstrap reaching a peak of 31%. During the last decade of Operation Bootstrap the said ratio declined to 17% reaching an overall low of 11% by the end of the 1960s (see Table 7 below).

Table 7:
Puerto Rico: Selected indicators 1947-2002

	1947-1971	1971-1986	1986-2002
(GDP-GNP)/GNP (In percentages)	0	23	47
Gross fixed capital formation as % of GNP	21.0	17.0	21.9
Foreign Direct Investment as % of GNP	5.2	10.94	n.a.
Foreign Direct Investment as % of Gross Fixed Domestic Investment	10.9	41.32	n.a.

Note: GDP is the Gross Domestic Product and GNP is the Gross National Product.
n.a.= not available. a/ Includes the first and last data points of the corresponding phases. In the case of Phase II the ratio of Foreign Direct Investment as % of GNP and that of Foreign Direct Investment as % of Gross Fixed Domestic Investment covers the years 1971 to 1976.
Source: On the basis of official information. United States Department of Commerce (1979).

In the case of the English-speaking Caribbean, the revealed preference for foreign over domestic investment has underpinned a pattern of productive specialization characterized by the predominance of the services sector and natural resource activities, the decline of agriculture and the stagnation of the manufacturing sector. The contribution of the manufacturing sector has remained during the 1990s at 12% while tourism has risen from 39% to 47%.

The respective governments have actively promoted those activities which are foreign exchange intensive through a gamut of fiscal incentives which impaired the use of taxation as a tool to achieve a more equitable distribution of income or to equilibrate the budget. Fiscal policy is mainly a microeconomic tool providing incentives to develop activities in selected economic sectors. The instruments include profit tax holidays, tariff exemptions, export allowances for extraregional exports following the expiration of the tax holidays, dividend payments, loss-carry forward, and depreciation allowances.

This, in turn, has encouraged the development of the duality of existing productive structures and sectors. But most important, in the English-speaking Caribbean, the productivity and performance of the ‘dynamic sectors’ have never been able to compensate or offset the decline and underperformance of the ‘stagnant and laggard sectors.’ This is reflected in the roughly steady deterioration of the export performance of goods and services.

The deteriorating export performance can be measured by the export performance ratio. It is measured by the ratio of exports to the average propensity of import (i.e. the ratio of imports to GDP). When exports are equal to imports, the export performance ratio is equal to GDP. The export performance ratio can be computed in terms of percent deviation from GDP. A value of 0 would indicate a state of external equilibrium. A value greater than 0 in percentage shows the percent deviation of the external account from its equilibrium value.

This measure was obtained for each CARICOM economy and then an average was obtained. As can be seen from Figure 3 in the Annex the export performance ratio expressed as a percentage deviation from GDP is characterized by three movements. The export performance was computed for CARICOM and for a subgrouping, excluding Trinidad and Tobago and

Guyana. The first is a decline lasting from 1991 until 1994. During this period the export performance of CARICOM economies on average improved. The year 1994 marks a point of inflection from the previous trend after which the export performance deteriorates steadily until 2002. In 1994, CARICOM economies on average had an equilibrium in their balance of payments. Eight year later in 2002, their export performance had deteriorated to a value equivalent to 20% of their combined GDP. The third period shows some improvement in the export performance ratio.

The deteriorating export performance has made these economies forever dependent on foreign capital. The pressing need for foreign exchange has shaped and geared most of their internal policies to the attraction and capture of foreign exchange rather than to goals linked to domestic economic development. The opportunity can be partly measured by the monetary value of the fiscal incentives referred to above.

The cost of fiscal incentives has been exceptionally high as illustrated by some of the smaller economies of the Caribbean. In the case of St. Kitts and Nevis, according to the International Monetary Fund (IMF) data, more than 58% of imports (equivalent to 31% of GDP) are exempt from import duties, 50% from the consumption tax and 39% from the service charge. Of this total the fiscal incentives act accounts for 14% of all the imports (representing 7.3% of GDP) that are exempted from the payment of duty, consumption tax and service charges.

In the case of Puerto Rico, 'Operation Bootstrap,' encouraged the development of 'highly capital intensive' industries such as the pharmaceutical industry, which is highly capital intensive and did not favor the creation of employment. Indeed it was estimated in 1987 that the level of employment in pharmaceutical companies represented less than 3% of the total employment generated in Puerto Rico. Also they represent less than 18% of the total employment generated by companies benefiting from the tax exemptions granted in Section 936.

'Operation Bootstrap' ultimately also boosted profit repatriation flows. If the repatriation of profits is measured by the difference between the GDP (income produced in Puerto Rico) and the GNP (income available in Puerto Rico) as a percentage of GNP, it is seen that throughout the 1940s and 1950s the ratio was negative, standing at 6% of GNP on average. It turned positive in 1960 and rose steadily throughout the period. During the 1960s the ratio equaled 4.4% on average. In the following three decades, the difference of GDP and GNP to GNP increased to 17%, 37% and 48%, respectively. In 2002, it again risen to 57%.

The widening gap between the income produced and that available in Puerto Rico was accompanied by a marked shift in the distribution of wealth towards foreign owned assets. Puerto Rican nationals saw the share of non-local direct investment increase from 26% to 44% between 1970 and 1980. At the same time Puerto Rican National Wealth, expressed as a percentage of total assets, steadily declined from 81% to 23% between 1950 and 1980.