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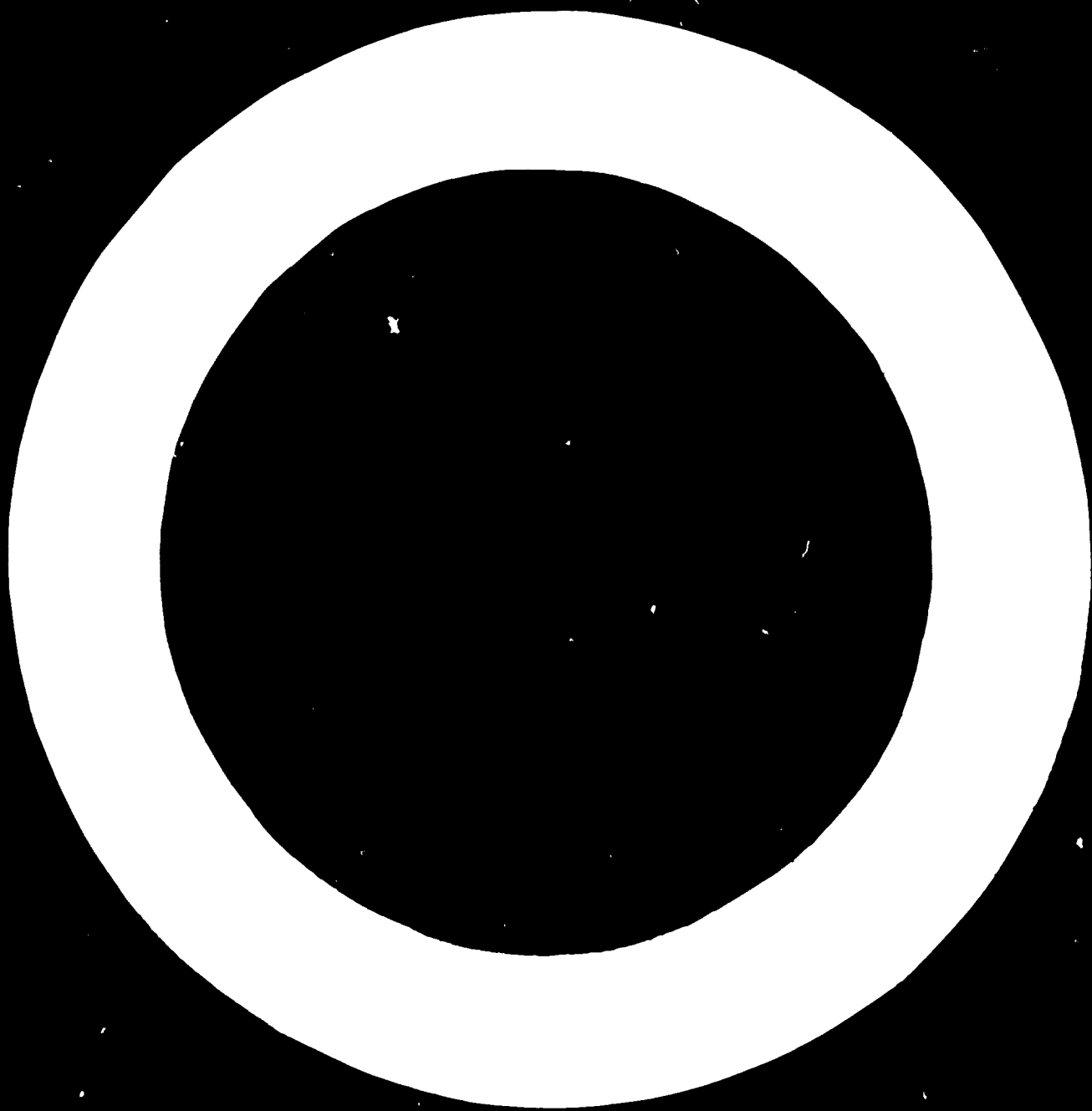
SOME PROBLEMS OF PROJECT DEVELOPMENT IN
THE EASTERN CARIBBEAN ^{1/}

by

Victor A. Richardson
Lecturer in Finance and Development Banking,
Project Planning Centre for Developing Countries,
University of Bradford,
England

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LIST OF ABBREVIATIONS

LDC	Less developed country in the Eastern Caribbean
MDC	More developed country in the Eastern Caribbean
EC	Eastern Caribbean
CARIFTA	Caribbean Free Trade Area (Trinidad, Jamaica, Guyana, Barbados, St. Kitts, St. Vincent, St. Lucia, Dominica, Antigua, Grenada, Montserrat).
ECCM	Eastern Caribbean Common Market.
CDB	Caribbean Development Bank.
IDC	Industrial Development Corporation.
SIC	Small Industry Credit.

NOTE: Numbers in parentheses refer to the corresponding numbers in the reference list at the end of the paper.

US \$1 = EC \$2 approximately.

INTRODUCTION

This paper examines some of the problems associated with industrial development in the Eastern Caribbean. The results of the recently concluded industrial survey of the region are taken as a starting point and sources of finance available for investment in industry briefly examined. Project possibilities are placed in a number of major categories, and certain problems common to the promotion, implementation and expansion of the projects within these categories are identified through the medium of outline case studies. Separate attention is given to the tourist industry since it is the leading sector in a number of territories, and suggestions are made for the development of a new type of tourist industry entity. Difficulties associated with the functions and staffing of island Industrial Development Corporations are examined, and in conclusion the solutions to some of these problems are shown to be feasible only within the context of a regional advisory and promotion service.

The remarks in this paper refer specifically to problems in Antigua, Dominica, Grenada, Montserrat, St. Kitts-Nevis, St. Lucia and St. Vincent i.e. the so-called 'Less Developed Countries' (LDC's) in the region; these remarks also apply, though to a lesser extent, to Barbados, Guyana, Trinidad-Tobago and Jamaica.

1. PROJECT POSSIBILITIES IN THE EASTERN CARIBBEAN

Industrial possibilities in the Commonwealth Caribbean have to be examined against the background of their geographical isolation, political fragmentation and similarly of limited resource base. Though island populations in the LDC's are tiny - below 100,000, land resources are limited, so that population densities are high; thus Table 1 shows population, land area, population density and population in relation to area farmed. Export agriculture will face severe problems as entrance to traditional markets becomes more difficult, and output for home consumption is constrained by a pattern of production based on thousands of mini-farmers producing usually on a part-time basis (1). Even if revolutionary changes were successful in increasing agricultural output, the expansion in population makes industrial development essential.

Table 1

Population, land area, population density and population in relation to area farmed in the Eastern Caribbean.

	Population Estimate 1965 '000	Land Area Square Miles	Population density per square mile	Population density per square mile farmed
Antigua	54.0	171	315	1016
Dominica	67.8	295	222	569
Grenada	103.0	135	766	1978
Montserrat	12.2	32	381	448
St. Kitts-Nevis	64.2	152	422	811
St. Lucia	97.9	258	411	709
St. Vincent	100.1	152	658	1604
Barbados	245.0	166	1476	1868

SOURCE: Derived from Economic Surveys and Projections (various territories) British Development Division in the Caribbean, Barbados and Economic and Political Changes in the Leeward and Windward Islands by C. O'Loughlin, Yale University Press, New Haven 1968.

The impact of industrialisation has so far been small in the LDC's, with such development as has occurred being primarily in the area of agricultural processing e.g. copra processing, rum distilling and sugar crushing and refining. Apart from the latter industries which exploit a locally available raw material, there are a number of other factories using imported raw materials which sell their limited output on their small island markets: cigarettes, aerated waters, beer etc, small boat building, jams and preserves, etc. In its efforts to identify and promote industrial projects in the region, one of the first efforts of the Caribbean Development Bank was to arrange for an extensive industrial survey (2) to be carried out; as a result of this survey, the lists shown in Table 2 below were compiled and these lists can be used as the starting point in an analysis of industrial problems at the project level.

In Table 2, List A, shows industries which could export all of their output to countries outside the region. All these industries can be categorised as the light manufacturing assembly type requiring considerable inputs of relatively unskilled labour. Relatively small amounts of capital per person employed are required, but because production tends to be closely integrated with the marketing of the product, it is likely that such operations would have to be introduced either by a foreign investor based in the importing country, or in association with such an investor. It is interesting to note that industrial plants producing goods in all the groups identified in List A have been successfully operated in either Trinidad, Barbados or Jamaica, for the most part either by foreign investors or in collaboration with such investors. As well, although these possibilities have been categorised as large-scale, this is a strictly relative concept: it refers more to market potential outside the Commonwealth Caribbean than to numbers of employees and capital invested: the other scale criteria were more than 100 employees and more

Table 2

Project Possibilities in the Eastern Caribbean

List A: Industries Exporting to North America and Europe (Large-scale)

Costume jewellery; sports goods; leather goods; soft toys; men's underwear; ladies' underwear/intimate apparel; other garments; assembly of electronic apparatus; assembly of electronic components; electrical accessories; suitcases, etc.

List B: Industries Exporting to Carifta Market (Large-scale)

Bicycles; footwear; builders' hardware; hand tools; cutlery; domestic dinnerware; canned fruit.

List C: Industries Limited to ECCM Market (Small-scale)

Aluminium products; animal feedingsuffs; automobile exhaust and tail pipes; banana fibre; brooms and brushes; cement bagging; ready mix concrete; clay bricks, blocks and tiles; clocks; coir fibre; drinking straws; flour milling; galvanised products; glass and glassware; hats and caps; leather tanning; plastics components; sails for yachts; umbrellas.

List D: Existing Industries for Expansion (Small-scale)

Beer; biscuits; boat building; food canning; cigarettes; cloth printing; concrete products; copra based products; fibreglass buoys, tanks etc.; foundries; furniture; garments; industrial gases; mattresses and cushions; packaging materials and containers; printing; aerated drinks; spices, jams and condiments; tissue paper products; tyre retreading.

Source: Eastern Caribbean and British Honduras Industrial Survey, Final Report, Economist Intelligence Unit, 1972.

Table 5

Distribution of the West Indian Market
by percentage of overall Commonwealth Caribbean G.D.P.

Windward Islands	4%
Leeward Islands	2%
Jamaica	41%
Guyana	11%
Barbados	6%
Trinidad	36%

Commonwealth Caribbean CDF (1964) EC \$ 2750 million

Source: Derived from Economic and Political Change
in the Leeward and Windward Islands, by C. O'Loughlin,
p.94, Yale University Press, New Haven, 1968.

than US \$100,000 fixed capital, but smaller plants producing similar goods have been successful in exporting the whole of their output to North America.

List B of Table 2 identifies those industries which would export the major part of their output to the wider Carifta market; here it is anticipated that the investors would either be wholly local or in partnership with foreign investors. A difficulty with this relatively short list, identifying as it does import substitution industries which will export not only to the other LDC's but also to Jamaica, Barbados, Trinidad and Guyana, is that these project possibilities have been examined in the past by potential investors in the latter more developed states, with the result that some investment has already occurred in certain of these areas, e.g. the footwear industry. The consequence of this is that there may be a significant amount of competition in the limited Carifta market. This may be offset by potentially lower input costs for some operations e.g. fruit canning, and marginally lower wage rates but potential investors will carefully examine overall comparative cost figures in deciding on location in one of the LDC's. Without wishing to exaggerate this difficulty, it is clear that within Carifta, the "easier" regional import substitution projects have already been taken up in Jamaica, Trinidad or Barbados; the latter countries have somewhat larger home markets and moreover began a serious effort towards industrialisation several years ago. Table 3 below shows the division of the Carifta market, by major group; the share of the LDC's together amount to only about six percent of the whole Carifta market. Thus, even ignoring the greater availability of skilled labour, the better infrastructure and the existence of complementary industries, the advantage of a non-minuscule home market as a base is denied to one of these industries locating in one of the LDC's. Article 39 of the Carifta agreement allows protection against specific imports from the MDC's; there is also the

provision that where one LDC member territory establishes an industry needing the whole ECCM market for economic survival, other LDC's should refrain from duplicating it. Thus, there would be a measure of protection, but this would be small since there would be nothing to prevent a competing plant from being set up in Jamaica, Guyana, Barbados or Trinidad - other than a barrier to six percent of the potential market; furthermore, it is unlikely that a more extensive measure of protection could be worked out with these more developed Carifta members: similar problems added to the factors which led to the breakdown of the short-lived West Indies Federation.

List C of Table 2 identifies some nineteen industries or industry groups which might be viable on the scale offered by the ECCM. A number of these small industries already exist in one of two LDC's, but given the nature of a specific industry e.g. cement bagging, might well be viable in each LDC bar the smallest. For those industries not in the latter category however, it is an urgent priority that agreement be reached among the ECCM countries on which of these new industries would be given tariff protection from competing plants in the MDC's. An essential piece of information in any judgement on the financing of one of these project possibilities is the likelihood or otherwise of protection, so that if delay is to be avoided by these participating in the finance of these projects, early agreement is essential.

List D of Table 2 identifies some twenty-one industries or industry groups for which there are good prospects of expansion. In a number of cases, e.g. furniture, tissue paper products etc., expansion based on export to the wider ECCM may be feasible only on the basis of some protection from competing goods produced in the MDC's. Here also agreement needs to be reached on protection at an early date for the same reason as stated above. The industries in this list vary

considerably in level of output and degree of sophistication - from the relatively simple hand crafted wooden boat building and the backyard workshops producing bottled hot sauces to the essentially modern brewery with its automated bottling plant which is operating below capacity. It is difficult to generalise other than to note that expansion in operations of the latter type will be governed principally by protection and by the extension of marketing arrangements relatively well understood by current management, whereas in the backyard workshop type of operation considerable inputs of technical assistance may be necessary at all the levels of the project cycle, including equipment specification, production operations, marketing, financial control etc.

II. PROJECT FINANCING IN THE EASTERN CARIBBEAN

The scarcity of long-term finance has been one of the major constraints to industrial development in the region. Short-term finance has been much less of a problem, and this has been facilitated both by the introduction and expansion of hire purchase and by the overdraft facilities offered by a relatively well developed commercial banking system; however, hire purchase agreements have tended to be based on near usurious rates of interest, while there have been complaints of a perhaps excessive conservatism and a lack of imagination on the part of the traditional commercial bankers. The raison d'être in the foundation of CDB was the provision of long-term development finance in the Eastern Caribbean and since CDB began operation long-term loan finance has become generally available in the following areas:-

- a) Loans channelled through island Development Corporations or similar intermediaries for on-lending to small business.
- b) Loans to governments for industrial estates and factory space made available on a lease/rental basis
- c) Loans direct to private business
- d) Loans to governments for industrial infrastructure

- e) Loans channelled through island Development Corporations for on-lending to students in technical and vocational education, to meet fees and living expenses.

Lending rates at the end of 1972 were as follows:-

Public Borrowers

Governments and Public Agencies other than Financial Institutions	- 8 percent
Government Financial Institutions lending to the Private Sector	- 7½ percent

Private Borrowers

Agriculture	- 8½ percent
Other	- 9 percent

These rates apply to loans from CDB's ordinary resources, these loans having maturities of about fifteen years and a grace period on repayment of principal of about five years when made to public borrowers, and slightly shorter maturities and grace periods when made to private borrowers. Loans from the bank's Special Fund are available to public borrowers only, and these carry an interest rate of 4 percent and a maturity up to twenty-five years.

It is useful to note that there is some discrimination in lending in favour of the 'small borrower', the latter being defined as a borrower whose net worth (husband and wife taken together) is less than EC \$ 100,000. Funds have been made available to the Development Corporations for on-lending to small borrowers and for the construction of multi-occupancy industrial buildings available on rental to small borrowers, these funds carrying the 4 percent interest rates; on-lending from these Small Industry Credits (SIC's) is permitted to these borrowers at rates up to 8 percent. At the end of 1972, a total of EC \$ 3.4 million had been committed (though not disbursed) under this programme of loans through intermediaries to small borrowers, and CDB had announced that these loans could be replenished as soon as

they were exhausted (7).

Small loans have been subject to a number of conditions, some of which illustrate the difficulties of industrial investment in these small communities. CDB funds may be used only for construction and the purchase of machinery, but not for short-term lending, land purchase and refinancing activity; since, however, small borrowers may also need funds for these activities, a condition of loan has been that CDB funds be matched to a significant extent (50 percent in the case of St. Vincent) by funds made available by the Governments to the Development Corporations. Although most island governments depend on bilateral aid to finance their current expenditure, there is no doubt that funds will be made available to get the small lending programmes started, and this government contribution will increase the sums available for industrial financing. In the future, however, despite the willingness of the CDB to replenish its contribution, there may well be difficulty for island governments in making additional funds available for the purposes noted above. There are a number of valid reasons for CDB policy in this area, but even if CDB wished to change its policy in the end we would be left with the resistance to such a change by the contributors (4) to CDB's Special Fund.

It is correct that there should be no major difficulty in securing short-term working capital from the commercial banks for the new and the existing small firms as they expand production; however, the expansion of production requires not only the provision of short-term working capital financed through overdrafts: injections of long-term working capital i.e. "permanent" working capital, are also required to finance a higher level of raw materials stock, work in progress, finished goods etc. This latter problem is exacerbated in the Eastern Caribbean since transport difficulties can often lead to higher levels of inventories

than would be justified in firms having the same turnover elsewhere. In any event, small firms in many parts of the world find themselves undercapitalised as they begin to expand, and such firms in the Eastern Caribbean will run into the same problem. An answer to this problem could be found in the CDB changing its policy that loans from its ordinary resources be used only for construction and equipment, but a better solution is that this type of finance should be found in an injection of equity.

CDB is prohibited in its charter from taking equity in private business. However, the Carifta governments have announced the creation of a new finance company for this purpose, though it is currently unclear what the precise policy of this new company will be with regard to taking equity in small firms. A third solution to the problem, given the administrative costs of supervising the financing of small business, is that loans from this new company be made to CDB for relending at this micro level. There may be other possible solutions, but it is quite clear that the costs of supervising both loan and equity contributions to small business would not allow two regional financing institutions to be involved in this supervision.

The cost of administering the SIC scheme will be high, both for the Development Corporations and the CDB; for this reason the smallest loan that can be financed from the SIC is EC \$6,000, despite the protest of some LDC governments who would have preferred a lower figure. Both CDB and the Development Corporations will face the same problem in financing their operations until the level of loan repayment reaches a reasonable figure, in perhaps three or four years. In common with small entrepreneurs, banks are normally self-financing, with their revenue being derived from the spread between their borrowing and lending rates. The costs of CDB operations have been borne, partly, by the proceeds of investing its

equity (as it is gradually paid up) in the short-term money markets (such as they exist) of its member countries; in addition about one half of its professional staff have been financed from a substantial UNDP grant which will soon be exhausted. The dimensions of CDB's problem are best seen by comparing its average loan commitment, amounting to US \$600,000 end 1972 with the average loan commitment of the World Bank and the Inter American Development Bank, amounting to US \$19 m. & US \$6m respectively (5). While an allowance can be made for a lower level of administrative costs, due principally to lower professional staff costs and great familiarity of its staff with its member countries, the problem still remains acute. A solution can be found in the short term by a further subsidy via either multilateral or bilateral aid in the form of technical assistance but in the long^{term}/serious consideration will have to be given to raising its minimum lending limit on both its normal operations (currently at EC \$100,000) as well as its SIC operations. Some of the practical problems of loan supervision are examined later, but it should be noted here that each small loan requires a prior written report and favourable recommendation from one of CDB's Small Industry Loans Officers to the Board of the Development Corporation. This report as well as other relevant papers laid before the Board must also be sent to CDB for every loan approved; loans between EC \$50,000 and \$100,000 require the prior approval of CDB. These rather strict control procedures are justified given the inexperience of both the small borrowers and the Development Corporations; they are expensive in CDB staff time and should be modified as soon as Development Corporation staff are trained and gain experience. The fact of the matter is that providing development finance for small borrowers is uneconomic; administrative costs flowing from staff time used for project identification, promotion, preparation, appraisal, implement-

ation, supervision and control, do not differ significantly between large and small projects. Small projects may require less detailed analysis than large projects, but small borrowers usually require more technical assistance than large borrowers. From a given quantum of staff resources the indirect economic benefits are greater for large than for small projects: below a certain project size the financing effort becomes uneconomic. Cost benefit analysis can be used in identifying the minimum size of project which should be considered, just as it can be used in any other area of economic decision making. Of course, small poor countries need development just as much as large poor countries, and in small countries most projects are small.

Development Corporations participating in the SIC scheme have to comply with the requirement that administrative arrangements, conditions of relending, etc., acceptable to CDB must be instituted and maintained, and furthermore that their governments should continue to make an adequate grant towards administrative costs for as long as necessary. It is difficult to see a way out of the problem; subsidised government lending to small borrowers as well as government provision of subsidised rental housing has had a sad history in parts of the Eastern Caribbean. In a number of islands governments had instituted schemes in the past in these areas, and these schemes have gradually petered out, leaving behind enormous sums of loan repayments and rentals in arrears. Government unwillingness to enforce payment may have been due, at least partly, to the conditions on which these subsidised benefits were allocated; the greater the subsidy element in these transactions, the greater is the excess demand for the facility offered. Non-financial criteria have to be applied: "deserving" cases have to be identified, and it may be difficult to ensure that the agreed criteria have been fairly applied: opportunities arise for nepotism, bribery or the buying of votes. If the latter factors are

widespread, how can government enforce repayment? There is a limit to the amount that CDB regulations can be expected to achieve - as a famous judge once said, in describing the duties of auditors, auditors are "watchdogs not bloodhounds".

A. Administrative Delays

A standard complaint of both large and small borrowers is that the procedures for obtaining finance from CDB are excessively time consuming. This complaint is common among those who have to deal with any multi-national institution and in the case of CDB decisions to commit funds are usually made within about six months of application. A more serious problem occurs over disbursement and in the process leading to disbursement. Disbursement involves a number of phases; after the decision to commit funds has been made by the Board of Directors of CDB, a loan agreement has to be sent by CDB to the borrower. The agreement is a legal document setting out the terms of the loan (interest rate, maturity, period of grace on repayment of principal, etc.) as well as actions which have to be taken by the parties to the agreement. The loan agreement has then to be signed and the prerequisites for disbursement completed; any designs and specifications are completed and invitations to bid for the supply of goods and services are followed by the award of contracts; the first disbursement to take place follows the award of Contract. In the period up to the end of 1971, the average delay between Board approval and dispatch of loan agreement was about 120 days, but this was followed by considerable improvement in that the delay was cut to below 50 days and was tending to stabilise to about 30 days towards the end of 1972, i.e. after a somewhat slow start, CDB had improved the efficiency of its administrative machinery considerably by 1972.

No such encouraging trends had emerged of reductions in the delay between loan agreement dispatch and loan agreement signature, in the

period up to October 1972; of the 33 loan agreements to be dispatched up to mid 1972, eighteen had been unsigned in October 1972, and among those agreements signed, the average delay amounted to about 95 days. Some agreements had been unsigned after periods of more than a year. Up to August 31st, 1972, disbursement had begun on only three loans, or on less than ten percent of the loan commitments made by CDB. To place the problem in sharper perspective, of the EC \$ 3.4 million committed by CDB in soft funds to assist small investors in industry, not a single dollar had been disbursed up to August 1972; the responsibility for most of these delays can be found in the administrative machinery of the Industrial Development Corporations and of the LDC governments.

The commitment/disbursement differential will be found in any lending institution which is in the process of expanding its lending operations: the World Bank is a good example, with its commitments doubling in 1969-73 compared with 1964-68, but with unspent loans doubling from US \$2,000 million in 1968 to US \$4,000 million in 1972 (6). Nevertheless disbursement delays are serious in the Commonwealth Caribbean, and can be anticipated to become more serious as CDB operations come into full stride; the many functions of the Industrial Development Corporations are examined later, but the observation can be made here that unless these institutions are properly staffed with trained personnel, and unless these institutions are provided with a range of back up services which, in the context of Eastern Caribbean ministates, can only be provided on a regional basis, it is likely that this initial push towards even a measure of industrial development will be still-born.

A major problem of this process of industrial development will be to create a climate and framework attractive to entrepreneurs, and to the extent that the delays identified above have been due to a lack of effective demand for loan finance, it is necessary that industrial

promotion be realistically carried out in a variety of ways. CDB has divided promotional activity into three segments: promotion among business interests in the LCCM countries themselves; promotion in Barbados, Guyana, Trinidad and Jamaica to attract interest in investing in the ECCM area; and promotion in Europe, North America and elsewhere. While CDB promotional activity might ultimately be confined only to the first area, in the absence of other agencies it has been initially active in all three areas. It is important that the IDC's of the ECCM countries should be successful in promoting investment at least among business interests inside their own countries.

III. TOURISM AND THE SMALL HOTEL

The flow of foreign tourists to the Eastern Caribbean has been relatively recent, and even today the numbers are small in comparison with those of the Bahamas or Puerto Rico. Tourism began as a luxury trade, and visitors have primarily been those from North America who could afford to stay in expensive hotels. Nevertheless, in the context of the small economies of the area, the industry has assumed a position of prime importance in some islands, e.g. Antigua, Grenada, and St. Lucia, and throughout the area is regarded as a major earner of foreign exchange.

There has been considerable criticism of the industry, with some critics pointing to the effects on society caused by hotel development and the presence of the foreign tourist; indigenous cultural expression is said to have been distorted, land alienated from the farmers, racial inequalities have been perpetuated and the personal dignity of the people eroded. Other critics have suggested that the net economic benefits flowing from the industry have been low and that this is a consequence of the predominant form of the industry, based as it is in some islands on large luxury hotels whose ownership has very largely been in foreign hands. While the latter criticisms have been derived from a perhaps subjective analysis of rather sketchy economic data (7), it is correct that measures could be taken to increase the net benefits accruing to island economies from the tourist industry.

The contrast between tourism in Spain, Yugoslavia and Italy on the one hand, and Jamaica, Barbados and Antigua on the other, is immediate. Spain for example receives about 14 million visitors, while Jamaica with the largest CARIFTA tourist industry receives only just over 300,000. A major reason for this disparity is that Spain has been able to tap the middle income and low income tourist market, while Jamaica still relies very largely on the affluent North American visitor and not on the middle income tourist. The middle income tourist cannot afford the luxury hotel and prefers cheaper

comfortable accommodation; he prefers good food but in plain restaurants and he wishes to have the right to choose his own entertainment rather than to have the whole range of luxury hotel amenities provided for him in the price, whether he requires these facilities or not.

A. The small hotel

The small hotel can offer a different kind of holiday experience for a large number of potential visitors, not only from North America, but also from Western Europe as well as Venezuela, Colombia, Mexico, and the larger Caribbean islands. Many small hotels can provide many different types of holiday experience and in doing so attract different types of visitors i.e. visitors with different holiday interests. As a result of this diversified consumer market, a measure of sales stability can be assured. Capital cost per tourist visitor can be lower with small hotels, and there is the opportunity for creative design to take the place of glass and ferro-concrete so that there can be a reduction of the overall costs per room, i.e. there can be an economic trade off between high capital costs and the designer's skill. Small hotels are more likely to employ a higher content of locally produced material in both construction and furnishing, as well as in operation; these purchases can provide opportunities for local producers and thus increase the net benefits flowing from tourism.

In large hotels, there are often several restaurants, bars, boutiques, a discotheque, a night-club, a swimming pool, a drug store, a travel agency and maybe also a whole range of different shops, while with a small hotel these are usually absent. A small hotel near a town centre can provide custom for a number of other businesses, so that there is a greater distribution of the profits arising from tourism. The small hotel can be regarded as a viable

form of intermediate technology for it can provide for the local entrepreneur an investment opportunity in which the managerial demands are perhaps lower than in other new business areas i.e. the skill requirements of the owner/manager could be more easily supplied from the available manpower resources, or could be more easily learnt. As indicated below in Appendix 2 on the screwdriver industries, these industries demand a high degree of managerial ability with the result that management is largely foreign and high priced, and this is usually complemented with an unskilled local labour force; the same situation exists in many of the large luxury hotels which require a bureaucratic structure of professional managers to operate these hotels effeciently. The net result of the latter is that local personnel are for the most part excluded from the higher ranks of the industry, and a valuable flow of income to citizens of the host country is lost.

Profits of large hotels tend to be repatriated to Europe and North America, whereas profits from small West Indian owned hotels are more likely to be reinvested at home. Besides, the West-Indian-ness of small hotels can be good for race relations: the impact of rich tourists living in expensive hotels where they are cut off from the local population may cause social tension. In small hotels middle income tourists would mix more easily with West Indians, and tourism could be assimilated into the racially mixed West Indian communities with less difficulty.

B. The Holiday Village concept

The essence of the holiday village is that it can encompass a number of small hotels of various types, none of which by themselves could provide the range of facilities required by the tourist. The facilities could be provided in some central location, and visitors could pay to use these facilities where required. Thus, at some central location there might be a beach, snack bar, swimming pool, childrens' playground, self-service laundry, petrol station supermarket, restaurants, and bars, boutiques and so on, Various types of hotel

would offer different residential facilities, i.e. a 20 room hotel with its own breakfast room, or with its own restaurant, a 10 room block of self service flats, a 10 room hotel with no catering facilities etc; thus a wide range of tastes could be satisfied.

Three types of entrepreneur are required in this type of tourism entity; one would be the land developer, who might be the land owner or the government, and who would have a vested interest in the holiday village infrastructure and facilities. Another type of entrepreneur would be the small local investors who would be willing to invest in the residential accommodation; among these entrepreneurs will be some who would wish to manage, while others may wish to employ a manager/housekeeper. The third type of entrepreneur would be the travel organiser, who could be an international airline or an overseas tour operator, and who would be interested in transporting tourists on a mass-air charter basis.

The success of a tourism development project such as this will depend on several factors. Major questions will be the financial arrangements among the three sets of entrepreneurs, a balance between the incentives offered to each group and the risks to which each group are exposed, and a mechanism for resolving the conflicts which will inevitably occur. A possible framework for such a project might be a holding company in which the three sets of entrepreneurs might have an interest, together with any institutions which provide loan or equity finance for any part of the project, in particular the CDB or the Finance Corporation proposed by CARIFTA governments. Promotion will be important, as will negotiation with prospective partners.

IV. THE DEVELOPMENT CORPORATIONS IN THE LDC'S

The Development Corporations in the LDC's have not been effective in tackling in a serious way the opportunities open for attracting industry; in sharp contrast has been the success in promotional activity of the Development Corporations in Trinidad and Jamaica, and in particular in Barbados where over the period 1960-1970 the Corporation has been successful in attracting a light industrial sector which employs about 10,000 workers. The latter has been due to the determination of the government in wishing to establish this sector, the enactment of a range of incentive legislation and the formation of an effective Development Corporation well provided with adequate back-up support; these factors have been the essential ingredients in the success of Barbados. While the governments in the LDC's have been making some effort to attract industry, a serious measure of determination seems to be lacking: there have been reports of bitter complaints from business men about delay experienced in getting decisions from government departments; it seems not to be realised that potential investors usually ask resident businessmen about what it is like to do business with the government - these investors are put off by unfavourable replies (8).

Most of the Development Corporations are seriously undermanned, and also seem to have little status. The latter may be reflected in their dealings with government ministries on behalf of investors; the Corporation seem to lack the "pull" in communicating effectively at the highest levels with more powerful ministries; and maybe for this reason fail to get decisions made in a speedy and effective manner.

A. Function

The major functional areas of the Development Corporations fall into three major sectors with respect to manufacturing industry; the Corporations should be active in Promotion, in the provision of Extension Services, and in the provision of Loan Finance. Currently the activity of the IDC's in some territories range far outside manufacturing, and their responsibilities may include real estate, tourism, liaison with public utility companies, and the operation of state owned agricultural enterprises.

The functions of the Development Corporation and some of the problems the Corporations face have been dealt with in other parts of this paper, in particular in Appendix 1 and 2. These functions can be summarised as follows:

- (1) The preparation of brochures indicating the industrial possibilities, the tax incentives and other facilities offered in each LDC, laws relating industry, natural resources, etc.
- (2) Identification of industrial opportunities on an ongoing basis as economic conditions, market trends etc. change; the preparation and/or commissioning of prerequisite project studies.
- (3) Seeking out and contacting potential investors inside and outside the CARIFTA territories, and answering the many enquiries which can be expected from these investors.
- (4) Participation in negotiations between new investors and the island governments.
- (5) Provision of loan and equity finance, factory sites on industrial estates, and factory space on rent or lease.
- (6) Assisting investors through the cobweb of government regulations, such as import licensing, pioneer status, exchange control and building licenses. Assisting new

employers with finding and training staff, helping with building contractors, water and power authorities, trade unions, etc.

- (7) Provision of an industrial extension service providing technical and managerial advice particularly to local entrepreneurs who may be weak in these areas.

B. Staffing

The list of the functions of a Development Corporation in the Eastern Caribbean gives an indication of the many skills which will be needed by the professional staff. Given the small size of LDC island economies it is unlikely that a professional staff of more than four, including one accountant, could be paid. Moreover for this same reason of small size it might well be that more specialist professional staff may be partially unemployed if on the payroll of any single Development Corporation - the diseconomies of the small scale are serious in staffing such institutions.

C. A regional industrial extension and promotion unit.

One sensible way out of the staffing dilemma is that some of the functions of the Development Corporations in each of the LDC's could be undertaken by a regional unit providing in particular services in the area of industrial promotion and industrial extension. To some extent this already occurs in a somewhat piecemeal fashion - both CDB and the ECCM Secretariat have employed Industrial Promotion Officers, while the Small Industry Loan Officers at CDB Headquarters have been carrying out a range of extension services as well as small loan appraisal. However, the roles of industrial extension worker and promoter are to some extent incompatible with the role of a banker engaged on appraisal; promotion involves risk

taking, risk taking bankers go bankrupt. In any case, as the CDB's loan programmes mature, less time will be available for CDB staff to provide industrial extension advice, particularly as demands for the latter increase.

It is difficult to be precise on how large this regional unit should be; initially it seems reasonable that it should start off with two promotions officers, one industrial engineer and one product development/marketing officer, specialised in export marketing. The unit should however be provided with a budget which would allow it to employ specialists on a short term basis; occasions will arise when a specialist consultant may need to be employed for one week only. Furthermore, in the interests of scale economies in overheads, the unit should be attached to one of the existing regional Institutions in the Eastern Caribbean; the ECCM Secretariat or the CDB.

APPENDIX 1

OUTLINE CASE STUDY : PROBLEMS FACED IN
FINANCING A SMALL GARMENT MANUFACTURER

The purpose of this outline is to examine some of the problems faced by a small manufacturer of garments and the type of technical assistance which may be required.

Background

Mr. A owns a small company in St. Andrew (a fictitious island among the more developed of the Carifta group) which manufactures shirts for the cheap end of the market. He employs forty female workers and sells about 75% of his output in the local market, with the remainder exported to Windward Islands and Barbados. He manages his firm himself with the assistance of four sons, two of whom supervise production, the others being engaged in sales. His firm does not sell through a wholesaler, but holds finished goods and sells directly to the retailer. As a result of a measure of past success he has some capital for expansion; however, he wishes to expand by producing some new product lines directed to a different type of consumer: the tourist as well as to the more affluent section of the local community. He has recognised that there has been a mushroom growth of 'boutiques' in the Eastern Caribbean islands, and most of the goods sold in these shops - particularly sports wear and swimwear - are high priced products of variable quality, none of these products being made in the ECCM area. Mr. A is initially undecided about the location of his new factory; after due consideration, his tentative intention is to site the new plant in St. David (another fictitious island among the Carifta LDC's). His reasons for doing so are as follows:

1. Labour rates seem to be about EC \$10 per week less than in St. Andrew.
2. The better possibility of obtaining useful loan finance from the IDC in St. David; he regarded the IDC in his own country as grossly inefficient and politically biased

against him.

3. His wish to have a base within the ECCM area with a measure of tariff protection.
4. The interest shown by Mr. B, a business acquaintance who is a citizen of St. David and who owns a small dry goods shop; Mr. B is willing to invest some capital in the enterprise.

A preliminary agreement is reached by Mr. A and Mr. B, as a result of which the AB Garment Company is formed.

Summary of problems encountered by the AB Garment Company

1. Product Identification and the Market

The company does not have the skill to translate its impression of market demand into specific product lines produced in specific quantities, nor can it devise a system to react to changes in consumer demand. A reasonable market analysis based on whatever statistics are available is required; as statistics are unlikely to be available, judgements have to be made based on retailers estimates of current turnover in the various product lines. The company has to devise some system of reacting to changes in taste and fashion. Some estimates have to be made of the potential market share of the new company, and how retailers will react to a product of perhaps similar quality but lower price. Closer analysis of the market may reveal that a section of consumers pay little attention to quality but are much more concerned with style/fashion.

The company is uncertain about how much advertising it should do, and how much emphasis should be placed on direct selling to the retailers. How large a sales force should it employ? Should the same methods be used in all the territories in which there is a potential market? Who should hold finished stocks?

2. Production : Capital Costs

Mr. A has had some experience in the production of garments, but he is unsure of the precise type of industrial sewing machines which

should be installed. Which type and which brands of single-needle lockstitch machines should be used, and how many? How many single-needle overseamers? What type of pressing equipment? Will the capacities of various equipment allow balanced flow or will bottlenecks develop? How flexible or how specialised should equipment be? How much in the way of spare parts for this machinery should be held, and should any guarantees be required from the manufacturers? Mr. A plans that the layout of the factory should be basically the same as at his factory in St. Andrew, but the product is different, and the product mix considerable; in any event, is the layout of his existing factory in St. Andrew efficient and does it make the best use of available space and does it provide for the efficient flow of materials and work in progress? The problems are complicated by the fact that Mr. A is a self-made man with some knowledge of garment production: over some matters advice is taken only unwillingly.

The company intends applying for a long-term loan to help finance production. Only with assistance of Development Corporation staff can an estimate of capital costs be drawn up, under the following headings :

- Land
- Site preparation
- Buildings
- Sewing room equipment
- Cutting room equipment
- Pressing equipment
- Spare parts
- Duty and Taxes on equipment
- Preliminary expenses and intangibles
- Contingency allowance (technical)
- Contingency allowance (inflation)
- Interest during construction

As the company's project develops, further help is required in phasing the estimate to a time schedule and breaking the components down into local and foreign currencies. This aspect of project development could possibly be performed by one of perhaps four or five firms of accountants based in the larger CARIFTA territories; however, it is

unlikely that a small self-made entrepreneur would willingly approach one of these firms. As the lending programmes of the Development Corporations and CDB mature, an effort will be required to persuade the local entrepreneur to make use of such competent local consulting services as exist. In the meantime, many of these services will have to be offered as part of the promotion/technical assistance package of the IDC's.

3. Raw materials and work in progress

The company does realise the importance of obtaining the correct balance between the stock and flow of a wide variety of raw materials, work in progress and stocks of finished goods.

Shipping services bringing raw materials are somewhat unreliable and suppliers offer useful discounts on orders above a minimum. In addition, duty at different rates has to be paid on raw materials as these are delivered, and some of the more expensive lines will be expected to have highly seasonal sales; there may be considerable demand for particular types of goods during the tourist season, so that the pattern of production and the product mix will vary during the year. Carrying stocks of raw materials and finished goods to meet this seasonal pattern of production and consumer demand will have as a consequence not only high working capital requirements, but also, the provision of adequate storage space. Thus in overall factory design, important conditions will be the layout of production equipment and storage, as well as possibilities for future expansion.

The company may recognise the importance of a high quality finish for much of its output: it wishes to sell at the more expensive end of the market. The management may have only the vaguest knowledge of quality control and inspection systems, but they see the dangers of a poor quality product and excessive rejection of finished goods produced from high cost fabrics. An acute sense of timing and judgement of changes

in taste will be important in producing the variety of product lines, if the company is to avoid being caught with a stock of unsaleable items.

Many of the problems above could be solved by a competent industrial engineer, experienced in the garment industry; the problem is that it is difficult to buy this specialist advice in the Eastern Caribbean.

Another problem relates to the identification of raw materials producers and wholesalers: there are very few textile producers in the Carifta region, and all raw materials will have to be imported from outside the region. Local wholesalers have a limited and inadequate range of materials; in addition, because they are also retailers, their margins tend to be wide. The company will require to identify a number of possible wholesalers and/or producers who export the specific types of fabrics and other raw materials used in production. Since these suppliers will probably be in different parts of the world, their trading terms may also be different; also, suppliers to the Carifta garment industry sometimes work through a local agent/trader in a particular island, who may have a franchise for supply to the whole region; this agent may sometimes obtain sales commission on any of his parent company's goods sold in the region, although he provides no back-up services in the sale of goods to customers in other islands. (This problem is not particular to suppliers to the garment industry; the phenomenon exists in many other fields and is a consequence of the fragmented state of the regional market into isolated micro-markets.)

4. Utilities, ancillary products and services

An early decision on the part of the company will be whether full stand-by power plant is required and whether it will be permitted; sometimes a licence may be required, and the procedure for obtaining this may be long-drawn out. The decision will depend on the frequency and duration of 'outages' in the power supply in the recent past; in certain

of the LDC's this is a serious problem. The company may also require certain ancillary products and services which could either be bought as required, or provided internally if possible from stock; a careful analysis of these ancillary requirements is necessary, since the availability of specific goods or services varies considerably in the Eastern Caribbean.

The company discovers during the implementation stage that there may be a delay of over a year, after production begins, and before adequate telephone facilities are provided. This problem may be overcome with the assistance of IDC staff, as also may the problems associated with an adequate power supply: an essential function of the Development Corporation is to act as an expediter in relations between the new company and government ministries, state corporations, utility companies, etc.

Restricted capacities in public utilities - power, telephones, water, still remain a problem in a number of the LDC's. However, there has been a vigorous attack by CDB in these areas with a considerable commitment of funds already made, and with a number of important projects in the course of preparation. However, given the small overall size of some of these utility systems, it is important that any user, large enough to have a significant impact on a system's capacity, should negotiate at an early stage in the project cycle with the management of these public utilities.

5. Management

Preliminary estimates of the market potential indicate that a production process employing forty direct production workers should be viable. This scale of production is too small to carry the overheads of specialist management in garment design, sales and marketing, production and finance: in a worst event these skills are scarce in the Eastern

Caribbean. Initially, the company will have to rely on the ability of its two promoters, Messrs A and B, supplemented by assistance from the Development Corporation; in the long term, it may be possible that some of these functions could be performed on a 'bought in' part-time basis (e.g. design, accountancy), with the other functions performed by staff who gain experience on the job and through part-time training. Another problem may be the unwillingness of the promoters to employ anyone from outside their family in the more senior positions. In the long run, the latter will change, but while the firm remains a family concern an adequate level of management efficiency may be reached if part-time courses are available for the staff in these senior positions. It should also be noted that CDB has been willing to provide soft finance for technical education and training, including management education.

As indicated earlier, the firm's management will need considerable assistance from Development Corporation staff and possibly CDB staff in presenting the project for financing. This is an exercise that some local entrepreneurs find uncomfortable for a number of reasons, not the least of which is that they may resent prospective lenders prying into financial matters which they may prefer to keep private: such as tax avoidance and tax evasion. However, the Development Corporation, as lenders, are more interested in a set of clear figures, which can be properly explained and supported, and that the project meets certain minimum financial and economic standards. The Corporation will require to be satisfied that the total capital cost is complete and reasonably conservative; that the cost and revenue statements are realistic; that the capital structure described in the financial plan is assured and capital will be in place when required; that there is an adequate surplus on annual operations to cover the repayment of loan capital and interest; and so on.

In working with the entrepreneur, it will be necessary for IDC staff to build up a relationship of confidence and mutual respect, rather than that of a mere watchdog zealously guarding his corporation's funds. Project supervision will entail periodic visits to see at first hand how the project is coming along, to check the accuracy of information in progress reports, and to discuss any actual or impending problems. In general, action should be directed at helping to ensure that the project is carried out so as to contribute to the country the benefits which were foreseen at the time of appraisal. Problems will arise during implementation and during the early years of the project's life, e.g. foundation problems during factory construction, the rise in price of certain types of garment fabrics, unexpected competition from a new producer, etc. Effective supervision should provide a good knowledge of management's affairs, and would serve to alert the Development Corporation and/or the CDB to actual or anticipated problems, in order that agreement can be reached on what action should be taken to minimise or overcome the harmful effects of these problems. It is important in the Eastern Caribbean to build up the type of relationship which can facilitate a degree of mutual confidence, particularly when dealing with the self-made entrepreneur or small family firm.

APPENDIX 2

OUTLINE CASE STUDY : 'SCREW-DRIVER INDUSTRY'

Introduction :

This outline case study begins by examining some of the problems associated with attracting foreign entrepreneurs to set up 'screw-driver' or assembly industry in one of the LDC's, e.g. garments, toys, sports goods, electronic components, etc. A number of less developed countries in other parts of the world, i.e. Taiwan, Singapore, Korea, Haiti, as well as in the Caribbean, i.e. Jamaica, Trinidad and Barbados, have been successful in attracting these industries. Typically, all the raw materials for these industries are imported, and in some cases all management posts are filled by expatriate managers. The companies attracted are sometimes part of large multi-national corporations, and all companies usually have easy access through an efficient sales and marketing organisation to consumers/buyers in the more developed countries of Western Europe and North America. The major reasons for location in the LDC's are the availability of cheap labour and the investment incentives offered by the host country, e.g. subsidised factory space, income tax holidays, etc. However, the economic benefits flowing to the host country may only be marginal; it depends on the difference between the market price of labour and the opportunity cost of labour i.e. the shadow wage rate, as well as the possibility of better opportunities for the investment of resources in the particular country, i.e. the opportunity cost of capital. The study concludes by indicating in outline how the latter factors affect the viability of an industrialisation programme based on this type of investment incentive, i.e. the provision of subsidised factory space to screw-driver export industries.

Promotion

One of the more widespread illusions in the Eastern Caribbean is the view that large numbers of eager foreign investors are impatiently clamouring to be allowed to invest in these territories. In common with highly emotional views of economic situations, this view contains elements of reality, but it is childishly overdrawn when applied to investment in general in the Eastern Caribbean. The problem is not whether foreign investment should be welcomed or banned; it is rather one of ensuring, in any given investment situation, that the economic benefits exceed the economic costs inherent in the particular proposal.

Industrial investment in any country which has little industry has to be attracted; it is unrealistic to expect that an attractive array of incentives, such as exists at present in the LDC's, will by itself attract investors, if only because similar incentives are offered by many other countries wishing to industrialise. The promotion of foreign investment in the screw-driver industries should proceed in two directions - the general and the specific. General promotion involves advertising the LDC's as a profitable and safe place for investment, and demonstrating that the governments are honest, stable and anxious to welcome the investor. The general promotional effort should be based on a set of well prepared brochures, setting out the salient facts that investors wish to know. A major advantage offered by the LDC's is that they are pleasant places in which to live - after all, many tourists spend considerable sums of money in order to have a one or two-week stay on a beautiful island. A branch plant on one of the islands offers the possibility of business visits in those months of the year when the North American or European climate is most severe. The brochures can be supplemented by advertisements in newspapers and business journals read by prospective investors.

Specific Project Promotion

General promotion by itself is not enough, and the LDC's have recently had made available a number of prospectuses for particular industries offering information on specific investment proposals. These prospectuses show that the projects identified are financially viable and cost data are provided showing how operations in the LDC's might compare with operations in North America or Europe. This information should be directed to investment decision makers in key positions in these industries overseas; priority might well be given at the start of the investment programme proposed for the LDC's, to efforts to identify specific potential investors in the screw-driver industries and to persuading these investors to personally examine the project studies as well as the investment climate. Thus, instead of directing the major promotional effort to the rather diffused readership of business journals or expensive brochures handed out at trade exhibitions, it might well be more efficient to aim at a highly selected audience who could be approached on the basis of the specific projects. Whilst it would probably be uneconomic to print massive numbers of expensive brochures, care should be taken that whatever is printed is reasonably well produced and accurate; one or two of the Development Corporations have, in the past, produced printed material which will have done little to inspire investor confidence; these pamphlets have been very amateurishly printed on very poor quality paper, with an apparently random selection of facts, providing a rather shoddy picture.

Potential investors will be found in those industries already manufacturing the screw-driver products, i.e. they have specialised knowledge in producing and marketing the product; they may have already shown a willingness to manufacture outside their home country, in which case they are likely to have the confidence necessary for expanding in a new location overseas. Lists of firms in these categories can be

found in trade directories, foreign Chamber of Commerce directories, publications in the business press, etc. Once a number of potential investors have been identified, they have to be approached by the promotions officer either in person, by phone or by mail; while the personal approach is likely to be the most effective, it is also the most expensive. The aim at this point should be to get the prospective investor sufficiently interested by providing whatever information is requested, so that he may be persuaded to visit the island.

The type of promotional effort outlined here is in somewhat sharp contrast to the rather passive approach to promotion adopted by a number of countries inside and outside the Caribbean; it is required, however, simply because the supply of investors interested in this type of investment is lower than the many countries hoping to attract such investors. Until the investor makes a firm and binding commitment to go ahead with the project, he will be making a critical examination, not only^{of} the incentives to which he would be entitled under the law, but also the determination with which the Development Corporation staff, as well as other government officials he meets, carry out their functions. Additionally, he will require assistance in a number of areas, both before he has made his commitment, and after, i.e. when the project has moved forward towards execution.

A Specific incentive : factory sites and rental buildings

The offer of factory space available for rent is an obvious financial incentive to a prospective investor; it can reduce the amount of capital at risk on a given project. The provision of a serviced factory site i.e. equipped with roads, power, water, drainage, telephones etc., in countries with an underdeveloped infrastructure, is similarly an attractive incentive. A subsidy on land or factory rent would also be valued as an attractive incentive, but an even greater attraction is sometimes the

recognition by an entrepreneur that he does not have to involve himself (or his management staff) in the difficulties and problems associated with building contractors, building material suppliers, architects, telephone companies, water and power authorities, etc., all in an environment with which he is not yet familiar. In some islands these services may not be well developed, and their administration may sometimes be less than efficient.

A further problem is that in the Eastern Caribbean it may be difficult to obtain land suitable for factory buildings at a reasonable cost and within a reasonable period. In common with other markets in the area, the market for land is badly organised; this problem is particularly acute in areas which have experienced a degree of tourism development, since concurrent with tourism, land hoarding and land speculation have grown considerably. Market prices are therefore difficult to discover, and prices quoted often change rapidly when the vendor discovers the identity of a prospective purchaser - particularly where the purchaser is a foreign investor. As a check on land speculation, some island governments have instituted Alien Landholding Laws, but these laws are sometimes clumsily administered and this may lead to delay.

Even where agreement has been reached on purchase price and the necessary official approvals to land purchase obtained, the legal requirements on transfer of land title frequently involve considerable delay. The work of the legal profession is frequently made difficult by unclear land titles and joint ownership of land where one owner may be absent from the island.

The Economics of an Incentive: A Theoretical Example

A screw-driver industry requires 20,000 square feet of factory space on a rental basis, together with an income tax holiday of ten years. The

company will employ a hundred semi-skilled local workers at a wage rate of EC \$ 1250 per annum or \$ 5 a day, with all management coming from abroad. The capital cost of the building, land, and associated works amounts to EC \$600,000 ; the building will be constructed to suit the requirements of the firm, and for this reason its residual value at the end of ten years is estimated to be EC \$ 300,000. The subsidised rental is \$ 1.50 per square foot per annum, or \$ 30,000 per annum.

A number of assumptions are made:

- a. The benefits accruing to the economy consist solely of wages paid to the local employees and of the rent at \$ 30,000 per annum.
- b. It is assumed that all payments made for utilities are equal to the economic costs of these utilities.
- c. The firm departs at the end of the tax holiday period.
- d. Management employees pay small taxes and these are ignored.
- e. Also ignored are the promotion costs of the Development Corporation.
- f. All income multiplier effects and all externalities are ignored. All the products of the firm are exported.

The calculation of social rate of return i.e. internal economic return, makes two alternative assumptions:

- A. that the opportunity cost of labour is half the market wage rate
- OR
- B. that the opportunity cost of labour is 0.75 times the market wage rate.

Thus, in alternative A the benefit from the payment of a market wage of \$ 1250 per annum is \$ 625 per annum per employee, or \$ 62,500 for the whole of the labour force of a hundred employees, whilst with alternative B the economic benefits amount to \$ 31,250 from wages paid.

The schedules of economic costs and benefits are as follows:

EC \$' 000			
Year	Costs	Alternative A Benefits	Alternative B Benefits
0	600	-	-
1	-	62.5 + 30	30 + 31.25
2	-	= 92.5	= 61.25
3	-	92.5	61.25
4	-	92.5	61.25
5	-	92.5	61.25
6	-	92.5	61.25
7	-	92.5	61.25
8	-	92.5	61.25
9	-	92.5	61.25
10	-	92.5	61.25
11	(300)	-	-

In alternative A the social rate of return comes to approximately 11%, while in alternative B the social rate of return comes to approximately 6%. The meaning of this result is that if we assume the opportunity cost of capital is 9%, alternative A is economically viable whilst alternative B is not. These results flow from the assumption of a subsidised rental and from an estimate of the opportunity cost of labour. The subsidised rent of \$ 1.50 per square foot compares with an economic rent of about \$ 2.80 per square foot (for a building cost of \$ 30 per square foot, interest rate 9% and estimated life thirty-five years). In those islands with a serious unemployment problem, the shadow wage rate might well be near the estimated figure of half the market wage, and in these circumstances the project becomes viable - if the opportunity cost of capital is not above 11%. However, if unemployment is not quite so severe, this level of subsidy on the factory rental would not be economically justified, even at an opportunity cost of capital of 9%.

Note that relaxing the other assumptions slightly is unlikely to make a significant difference to these results; whilst the screw-driver industry may well remain after the tax exemption period ends, it may be difficult to accurately estimate its tax liability, since its raw

materials as well as its finished product may be bought and sold to its parent company i.e. there may be the international transfer payment problem. In any event this is the type of approach which should be used before any decisions are made to offer subsidised rental factory space to screw-driver industry. The analysis here is shown in outline only; in practice it will be necessary to obtain real values for the factors mentioned in the list of assumptions, particularly the possibility of the departure of the firm, wholly expatriate management staff paying minimal taxes, promotion costs and external benefits. External economic benefits are difficult to estimate, and in this type of industry may be important - local unskilled labour may become considerably more skilled through work experience, local management may receive much work related training, and lastly the success of the foreign firm in organising production and exporting to the developed world may act as a model and a catalyst to local entrepreneurs in persuading them to export to foreign markets.

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