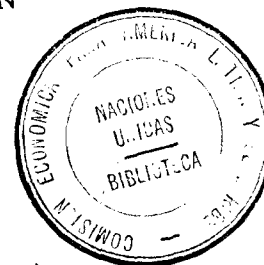


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EXPORT TRENDS AND PERFORMANCE
FOR BARBADOS, GUYANA, JAMAICA
AND TRINIDAD AND TOBAGO

1980-1987



UNITED NATIONS

ECONOMIC COMMISSION FOR LATIN AMERICA AND THE CARIBBEAN
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INTRODUCTION

This study relates to the merchandise export sector of the economies of the four largest members of the Caribbean Community and Common Market (CARICOM) for the period 1980-1987. It focuses particularly on real, as opposed to nominal, exports, their structure, value and main destinations. An attempt is made to identify and evaluate the policies put in place to encourage development of non-traditional exports, so that their effectiveness may be assessed.

The preferential trading arrangements from which the four countries benefit - the General System of Preferences (GSP) of the industrialized countries, the Caribbean Basin Initiative (CBI) of the United States, CARIBCAN of Canada and the Lome Convention of the European Economic Community (EEC) - impinge on the value, composition and direction of their exports. An attempt is therefore made to relate involvement in these schemes to the export performance of the countries over the period.

The multiple regression model is utilized to confirm trends. The impact of variables, such as exchange rates, growth of national income and growth of income in OECD countries is assessed.

Possibilities for the future, including in the area of trade in services, are explored.

Overview

The small size of the four countries, two with a population of less than one million¹, and their limited resource base have resulted in an acute dependence on foreign trade as the engine of growth. With the desire to transform the structure of these economies following independence in the 1960s, import substitution industrialization became the focus of capital accumulation.

Immediately following the "oil crisis" of 1973, the Barbadian economy was faced with a recession, balance-of-payments deficits and spiralling inflation. The recovery achieved between 1977 and 1980 based on manufacturing and tourism was reversed from 1981 due to a combination of factors, such as falling export prices, weak demand and a fall in production. Tight fiscal policy and a shortage of foreign exchange characterized the period. While there was some growth in output, the balance-of-payments disequilibrium persisted as a result of a large trade deficit.

The Guyanese economy was in constant crisis. The fall in reserves consequent upon oil price increases was exacerbated by the collapse of sugar prices in 1976. There have been several devaluations of the local currency since the early 1980s.

Jamaica was, likewise, seriously affected by oil price increases which coincided with a fall in bauxite/alumina production, reversed only from 1985.

The oil price increases of the 1970s brought enormous prosperity to the oil-based economy of Trinidad and Tobago leading to rising wages and prices, uncompetitive production and a spiralling growth in imports. Subsequent weakening of oil prices, combined with falling production, resulted in the depletion of reserves and led to two devaluations of the currency.

¹ The populations are 253,000 in Barbados, 791,000 in Guyana, 1.2 million in Trinidad and Tobago and 2.2 million in Jamaica.

**EXPORT TRENDS AND PERFORMANCE FOR BARBADOS,
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Structure and value of export trade

Barbados, Guyana, Jamaica and Trinidad and Tobago have traditionally exported a generally limited range of primary commodities to metropolitan centres. These exports, with the exception of bauxite, constitute only a small part of the import demand of their main trading partners and an even smaller share of world production and trade;² they are highly vulnerable to cyclical swings and product cycle changes³ (see Tables I and II).

In Trinidad and Tobago, petroleum and its by-products accounted for 94 per cent of domestic exports in 1980. However, by 1987 diversification efforts had reduced this share to 72 per cent. Next in size, petro-chemicals grew steadily in absolute terms and relative importance, from three per cent of domestic imports in 1980 to 14 per cent in 1987 and from 38 per cent of non-traditional domestic exports in 1980 to 75 per cent in 1985, falling to 51 per cent in 1987. The export of manufactures also increased from six per cent of the non-traditional category in 1980 to 25 per cent in 1987. Other exports either stagnated or declined. Food exports, for example, declined from 25 per cent of the total (excluding petroleum) in 1980 to nine per cent in 1985, recovering to 13 per cent in 1987 (see Table III-4).

While Jamaica's domestic exports were concentrated in 1980 on alumina/bauxite which accounted for 78 per cent of the total in 1980, this share fell to 49 per cent by 1987 as a result of declining production coupled with a vigorous export diversification programme. The next biggest sector of domestic exports, food, rose from 11 per cent of the total (excluding alumina/bauxite, 50 per cent) in 1980 to 22 per cent (excluding alumina/bauxite, 43 per cent) in 1987. Sugar and bananas together accounted for 66 per cent of food exports in 1980 and 62 per cent in 1987. Exports of miscellaneous manufactures have increased consistently as a result of a growth in exports of garments which was particularly sharp towards the end of the period under review and by 83 per cent between 1986 and 1987 (see Table III-2).

In Guyana, sugar and bauxite, respectively, accounted for 31 per cent and 51 per cent of domestic exports in 1980. By 1984, the last year for which figures were received, their overall share remained virtually unchanged, with sugar accounting for 33 per cent and bauxite, 48 per cent.

² Bourne, C. and Joefield-Napier, "Export Performance and Prospects for the Commonwealth Caribbean" (Paper presented to the Conference on Latin American Trade and Economic Growth, Florida International University, 7-8 March 1983). Mimeo.

³ Thomas C. Y., "The Economic Crisis and the Commonwealth Caribbean: Impact and Response", (paper presented at Conference on Economic Crisis and Third World Countries: Impact and Response, Kingston, Jamaica, 3-6 April, 1989).

Among the relatively diversified domestic exports of Barbados, sugar accounted for 31 per cent in 1980, miscellaneous manufactures for 28 per cent, electronic components for 18 per cent and garments for 14.6 per cent. In 1983 sugar's contribution decreased to 6.7 per cent, rising to 26.5 per cent in 1987. In 1985 the contribution of electronic components peaked at 61 per cent, but declined to 24.1 per cent in 1987, upon closure of the United States-based electronic assembly plants which had produced most of them. Garment exports increased to 17.6 per cent of the total in 1982, declined to 8.4 per cent in 1986 and rallied to 11 per cent in 1987 (see Table III-1).

Growth of the four countries' exports having slowed appreciably during the period under review, the value of such exports in 1987 was less than in 1980. While Barbados export earnings rose by US\$143 million between 1982 and 1984 due to activities in the garments and electronic components sectors, this trend was reversed when exports from the latter sector fell by US\$112 million between 1986 and 1987. The currency devaluation of Barbados' chief regional trading partners also contributed to the decline in its export earnings.

The value of exports of Guyana and Jamaica fell as a result of a combination of factors, including the overall economic crisis, weak international demand and falling prices for bauxite and alumina which weight heavily in their mix of exports. Reduction in Guyana's annual United States sugar quota and reduced demand for its rice also contributed to the decline by US\$202 million between 1980 and 1983. An increase by US\$22 million was realized when prices for bauxite and alumina rebounded.

Jamaica's domestic exports fell between 1981 and 1983 by US\$293 million, steadied in 1984 and fell again in 1985 by US\$153 million as a result of the closure of an important bauxite mine, the suspension of operations of two companies and the 1984 termination of the arrangement for bauxite sales to the US General Services Administration. Export earnings rose in 1986 as a result of improved market conditions for bauxite/alumina and increased sugar earnings because of the stronger pound. In 1987 total export earnings increased by US\$125 million; net of bauxite/alumina the increase was US\$149 million or 75 per cent.

Total domestic exports of Trinidad and Tobago fell by 66 per cent between 1980 and 1986 and increased by six per cent in 1987. The decline was largely the result of falling production and lower oil prices. Non-oil exports, on the other hand, rose by 47 per cent between 1980 and 1987 as a result of diversification efforts.

The direction of exports

Like others of the English-speaking Caribbean, the four States under review have benefited from preferential access to the markets of their traditional developed country trading partners and this has served to perpetuate established trading patterns. The United States has become their single largest export market, providing access through the Caribbean Basin Economic Recovery Act, known as the Caribbean Basin Initiative (CBI), which became effective in January 1984; the 806/807 Programme; and an informal arrangement with the United States Department of Agriculture, reintroduced in 1984,

whereby a small annual quota of sugar can be sold to the United States at a price based on that of domestically produced US sugar, which is usually higher than the world market price. However, the initial quotas were not large and they have declined steadily.

The CBI provides for the granting of non-reciprocal duty-free access for a twelve-year period for specified imports from designated Caribbean Basin countries⁴. In order to be eligible for duty-free treatment, products must be imported directly into the United States from the beneficiary country; their cost or value must consist of at least 35 per cent direct cost of processing in one or more of the CBI beneficiary States, or 20 per cent value added if the additional 15 per cent is provided by US-made components and a "substantial transformation" is made; and they must represent new or different articles of commerce, as compared to the original materials, if manufactured from components or raw materials from extra-beneficiary sources.⁵

Most exports of garments to the United States by the countries under consideration take place under the 807 Programme. Products qualify for exemption from US customs duty under US tariff schedule line 807.00 where there is "no major transformation of the product." Essentially, pieces/components from the United States are simply assembled/sewn together and returned.

The English-speaking Caribbean has had a special trading relationship with Canada since the nineteenth century⁶. In February 1986 the Canadian Government announced the creation of CARIBCAN, whose main feature is the unilateral extension by Canada of preferential duty-free access to its market for certain regional products which meet a 60 per cent value-added criterion. Textiles, clothing, footwear, luggage, handbags, leather clothing, lubricating oils and methanol are, however, exempted from the arrangement. The programme has not so far proven very satisfactory from the point of view of the exporting States.

The European Economic Community (EEC), and especially the United Kingdom, represent a vitally important export market for the four States, which value the arrangements governing their exports of bananas, rice, rum and sugar to the EEC. Exports to the EEC take place within the ambit of the Lomé Convention and its Protocols. The Convention is a trade, aid and investment package offered by the

⁴ These include Barbados, Jamaica, Trinidad and Tobago and, as of 1989, Guyana.

⁵ Duty-free access, provided the products meet rules of origin requirements, applies to all products with the exception of textiles and apparel articles subject to the Multilateral Fibre Agreement (MFA), footwear, handbags, flat goods, work gloves and leather wearing apparel, canned tuna, petroleum and petroleum products, watches and watch parts which use material originating in a communist country.

⁶ In 1898, Canada unilaterally granted a 25 per cent tariff preference to a number of West Indian products, including sugar. In 1913, it negotiated a trade agreement with the British West Indies that further reduced tariff rates and which were extended in 1921, 1926 and 1966. In 1974, Canada established a GSP from which the Caribbean also benefited. Some of the products face the lower of two thirds of the MFN rate or the British Preferential Tariff Rate. Some of the rates have been reduced to zero and the product coverage has been enlarged.

Community to certain African, Caribbean and Pacific (ACP) States with which it has traditional ties, in most cases based on a former colonial relationship. The first version of the Convention was signed in 1975.

Exports of sugar are governed by the Sugar Protocol, which is independent of the Convention and of indefinite duration. The Protocol awards cumulative annual quotas of 430,000 tonnes per annum to Caribbean ACP countries, for which the Community pays a negotiated guaranteed price.

The Banana Protocol permits Community members to extend market access preference to their traditional suppliers. In practical terms, this has meant that Jamaican bananas have a guaranteed, protected market in the United Kingdom and are sold at above-world-market prices.

Under the Rum Protocol, ACP producers are allocated a total annual quota, subdivided into national quotas and saleable only within a restricted market - the United Kingdom in the case of the four countries under consideration.

The other arrangement which has influenced the direction of exports is, of course, CARICOM, established in 1973 as a successor to and development of the Caribbean Free Trade Association (CARIFTA), with the objective of promoting intra-regional trade and integrating members' economic activities.

While a major portion of the four countries' exports, ranging from 41 per cent in the case of Barbados to 80 per cent in the case of Jamaica, went to the Organization for European Co-operation and Development (OECD) countries during the period under review, there was an increase in exports to other developing countries and States with centrally planned economies.⁷

Barbados' main trading partners are the OECD⁸ and CARICOM countries (see Table IV-1). In 1980 they together absorbed 82 per cent of its exports, while all other countries absorbed 18 per cent. Exports to the OECD countries gradually declined, reaching 26.2 per cent in 1985, while those to all other countries were 51.1 per cent and to CARICOM States 22.7 per cent. By 1987 exports to the OECD countries had rebounded to 45 per cent, while those to all other countries were 31 per cent and to CARICOM States 23.5 per cent.

Guyana's export destinations are more varied than those of Barbados, in that they include Council of Mutual Economic Assistance (COMECON) countries and Latin America; but the OECD countries nevertheless represent their chief market (see Table IV-2). In 1980, 58.6 per cent of Guyanese exports went to the OECD countries, 13.9 per

⁷ The decrease of exports to OECD countries and the corresponding increase in exports to other countries is not a linear one, however. There is a high degree of fluctuation in response to shifts in the international economic environment.

⁸ Within the OECD, the USA is the largest market for Barbados' exports, taking 36 per cent in 1980.

cent to CARICOM countries, 8.7 per cent to Latin America and 1.5 per cent to COMECON countries and 17.3 per cent to the rest of the world. Exports to the OECD countries declined slightly to 45 per cent in 1982, with those to the rest of the world at 30.8 per cent, to CARICOM countries at 16.7 per cent, to Latin America at 6.7 per cent and to COMECON countries at 0.7 per cent, then rose to 63.6 per cent in 1984 (the last year for which figures were received), with 19.1 per cent to the rest of the world, six per cent to CARICOM countries and to COMECON countries respectively and 5.4 per cent to Latin America. The bulk of Guyana's bauxite, its sugar and rum went to the OECD countries and its manufactured goods to CARICOM countries. Some bauxite also went to Latin America and to COMECON countries, in particular to East Germany through a counter-trade arrangement.

The OECD market has consistently been the most important for Jamaica, absorbing, on average, 80 per cent of its exports (see Table IV-3). The share of exports to CARICOM countries was six per cent in 1980, 13 per cent in 1983 and 6.4 per cent in 1987. Exports to other Caribbean countries rose from two per cent between 1980 and 1984 to eight per cent in 1985, holding at seven per cent in 1986 and 1987; in both 1985 and 1987 exports to this group exceeded those to CARICOM countries by 1.4 per cent and 0.4 per cent, respectively. Jamaica's exports to Latin America increased from 1.9 per cent in 1980 to 4.8 per cent in 1982 and 5.9 per cent in 1986. However, it then declined to 1.3 per cent in 1987 as a result of reduced bauxite and alumina output. Through market diversification efforts, the percentage of exports to the Soviet Union stood at 5.2 per cent in 1980 and averaged 3.3 per cent during the period under review. Exports to the rest of the world declined steeply, from 10.5 per cent in 1980 to 0.3 per cent in 1987.

The OECD countries represent the main destination of exports from Trinidad and Tobago, followed by CARICOM and other Caribbean countries. The respective shares of exports to these three groups in 1980 were 72.6 per cent, 7.9 per cent and 12.8 per cent. Exports to the OECD countries rose to 80.8 per cent in 1986 and were at 74.3 per cent in 1987, while those to CARICOM countries rose to 10.7 per cent and to other Caribbean countries to 9.5 per cent. The percentages of exports, mainly petrochemicals, to Latin America and the rest of the world, respectively, were 3.5 per cent and 2.9 per cent in 1980, 7.3 per cent and four per cent in 1982 and 4.2 per cent and 1.3 per cent in 1987.

Despite the special trading arrangements established by OECD States to benefit Caribbean countries, exports (particularly of primary commodities) to their markets generally declined, mainly because of the introduction of a quota system for Caribbean sugar imports by the United States. In 1980, when there was no quota, Barbados exported 60,436 short tons (ST) of sugar valued at US\$35 million to the United States; as a result of the quota, shipments fell to 7,538 ST, valued at US\$3.2 million. Guyana's pre-quota sugar exports of 59,410 ST, valued at US\$34 million, dropped to 11,294 ST, valued at US\$4.7 million. Similarly, Jamaica's exports dropped from 66,422 ST to 10,488 ST. Trinidad and Tobago, on the other hand, had not exported to the United States before the quota and took up its allocation of 7,890, ST valued at US\$3.3 million.

The Lomé Convention's Sugar Protocol does not provide for an increase in the quota of any one country, except through allocation from another country's quota. Given that quotas and prices are fixed, exporting countries can increase returns only by producing sugar at a lower cost. The four countries have not been able to do so because production has been falling while domestic consumption and production costs⁹ have been increasing. They have had, on occasion, to import on the free world market in order to meet their quotas with the EEC. Jamaica and Trinidad and Tobago have both had net exports lower than their EEC quota in every year since 1981.

There has also been a significant decline in the contribution of bauxite to export earnings as a result of the closure of mining firms both in Guyana and Jamaica.¹⁰ In addition, international price reductions for both bauxite and alumina, except in 1984 and 1987, contributed to the reduction of exports in general and of those to OECD markets in particular.

Exports of other commodities have also declined. The volume of bananas exported in 1986 was less than half that of 1980; adverse weather was the main reason. In the case of rum, exports from Jamaica and Trinidad and Tobago have stagnated due to both production and marketing problems.

One of the marketing problems facing rum has been the peculiar nature of regulations affecting its import. Canada, for example, has imported West Indian rum free of duty since the 1960s. However Provincial Liquor Boards have a monopoly on the distribution and sale of all alcoholic beverages. They maintain a differential mark-up which makes an appreciable difference between the price of imported and local products. In addition, the Boards do not issue listings for all products and a product which is not listed cannot be stocked. In order to overcome the differential mark-up problem, West Indian producers elected to bottle their rum in Canada. However the Intoxicating Liquors Act requires that rums bottled in Canada use 20 per cent Canadian rum and be described as a blend of West Indian and Canadian rums. For years, West Indian producers lobbied for an amendment to the Act to permit the bottling of 100 per cent West Indian rum in Canada.¹¹

⁹ Indeed, production costs in the four countries have been higher than those of EEC sugar. For example, in 1985, production cost in Barbados was US \$0.28 per pound while the EC price was US \$0.18 per pound. "Caribbean Exports: Preferential Markets and Performance," World Bank. Report No. 7207-CRG, 27 May 1988.

¹⁰ In the case of Guyana, production declined following nationalization of the bauxite industry and given uncertainty in the world market. Furthermore, managerial and marketing problems were encountered in the operation of the industry. In Jamaica, the imposition of the bauxite levy resulted in a deliberate shift to other production centres by the multinational firms in control of the bauxite industry.

¹¹ Their efforts have only recently borne fruit. In 1989 Canadian legislation was amended to permit West Indian producers to use only 2 per cent Canadian rum in Out of Bond bottling, without referring to a blend on the label, thus preserving the integrity of their product. However, any production losses are Duty Paid. Producers are therefore lobbying the Canadian authorities to permit the In Bond bottling of their product.

The anticipated increase in exports of manufactured goods to the EEC has been realized only in the case of Trinidad and Tobago, which exported methanol, ammonia, urea and steel products, accounting for three-quarters of its manufactured exports to OECD countries. In the cases of Barbados and Jamaica, exports under the United States' 807 programme, particularly of clothing and electronic components, have not compensated for the decline in primary commodity exports.

Expansion in the early 1980s of intraregional domestic exports¹² was not sustained. The collapse of the CMCF and the weakening of the largest market, Trinidad and Tobago, in 1983 led to a decline in trade between the countries of the region.¹³ The Guyanese market was virtually closed to all but petroleum products, while regional exports to Jamaica and later to Trinidad and Tobago became more expensive as a result of devaluations in both these countries. The devaluations did, however, result in a slight improvement in the intraregional exports of these two countries, as their products became much more competitive (see Table IV-1-4).

Development of the non-traditional export sector

The balance-of-payments and foreign exchange crises of the 1970s and 1980s, largely occasioned by the failure or poor price performance of traditional primary commodity exports such as sugar, bauxite and petroleum, forced Barbados, Guyana, Jamaica and Trinidad and Tobago to intensify their efforts to develop and expand non-traditional exports. Such efforts included deliberate policy initiatives to enhance investor interest and counteract the effects of inadequate physical resources, low levels of capital formation and high production costs. Regimes of guidelines and incentives to attract investment in new exports were developed by individual States and the Harmonization of Fiscal Incentives Agreement is intended to minimize competition between CARICOM Member States.

The Fiscal Incentives Acts of the four countries provide for similar incentives: tax holidays, duty-free concessions on plant, equipment and raw materials, accelerated depreciation allowances and export allowances. Concessions are granted to "approved enterprises" grouped into categories according to local value added, simply defined as the amount the entire CARICOM region (and not just the particular country) received in payment from a local or subregional manufacture for local or regional raw materials, labour capital and services.

¹² This was principally in response to the buoyant state of the Trinidad and Tobago economy and the introduction of the CARICOM Multilateral Clearing Facility (CMCF) which was utilized mainly by Guyana and Jamaica.

¹³ This led to unilateral actions outside the framework of CARICOM, such as restrictive foreign exchange regulations, stamp duties and import licensing to correct balance of payments and protect declining foreign reserves.

Group 1 enterprises, defined as those having a local value added of 50 per cent or more, are eligible for a maximum tax holiday of nine years in Guyana, Jamaica and Trinidad and Tobago and 10 years in Barbados. Group 2 enterprises, with 25 per cent or more but less than 50 per cent local value added, may receive a tax holiday of up to seven years in Guyana, Jamaica and Trinidad and Tobago and up to eight years in Barbados. Group 3 enterprises with 10 per cent or more but less than 25 per cent local value added are eligible for a tax holiday of up to five years in Guyana, Jamaica and Trinidad and Tobago and up to six years in Barbados. Enclave industries, defined as those producing exclusively for export to extra-regional markets, and highly capitalized industries are eligible for tax holidays of up to ten years in all four countries.

Duty-free importation of plant, equipment, machinery, spare parts and raw materials for the operation of an approved enterprise may be granted, provided that such items are not available from CARICOM Member States at comparable prices or in adequate quantities and quality. Depreciation allowances are given during and after the tax holiday, while exemption of dividends from any limitations and from income tax may also be given. Export allowances, based on the value of export profits as a percentage of total profits, vary between 25 and 50 per cent and are granted in the form of a rebate on income tax on export profits.

The bulk of export trade is financed through the commercial banking system. Given the high priority attached to exports, the need for governmental institutions to provide credits, guarantees, or insurance was recognized. Thus, in addition to incentive legislation, each country has developed national legislation and institutional support to encourage non-traditional exports.

The Jamaican Export Credit Insurance Corporation (JECIC), which was replaced by the National Export-Import Bank of Jamaica (Ex-Im) in 1986, was established in 1971 as a wholly owned subsidiary of the Bank of Jamaica (Central Bank). The purpose of this facility is to encourage and develop trade by insuring Jamaican exporters against non-payment by foreign buyers, thereby allowing the exporter to secure financing and to offer more competitive credit terms to potential overseas buyers. Similar institutions were set up in Barbados in 1978 and in Trinidad and Tobago in 1984.¹⁴

Post-shipment credit is also available in all four countries. This facility provides working capital at a lower rate of interest through a discounting mechanism of commercial bank advances to exporters. Government-subsidized pre-shipment credit is also available in Barbados and Jamaica.

To assist more directly in the diversification of exports an Export Development Fund (EDF) was established in Barbados in 1979 to facilitate the importation of raw

¹⁴ Whereas in Barbados enclave industries are not covered, in Jamaica, export credit insurance includes a service policy which covers Jamaican consultants or operators under the US 807 programme who in effect export labour services to the USA. J.I. Stone, "A Survey on Trade Finance in the English-Speaking Caribbean Countries," LC/CAR/L.249(Sem.1/2), 7 April 1988.

materials, spare parts, intermediate goods and equipment necessary for the development of non-traditional exports. Foreign exchange loans are limited to the import content of projected export sales for CARICOM exporters and the equivalent of 65 per cent of projected export sales for non-CARICOM exporters.

In 1981, an EDF was also established in Guyana with a similar focus on the non-CARICOM market. As exporters generally obtained their imports from hard-currency areas, it was hoped that exporters utilizing the EDF would find markets in those areas. As a result of their inability to do so, the policy was changed in 1983 to require beneficiaries to secure export markets in hard-currency areas. This led to a significant decline in the amounts disbursed. In any case, the EDF did not have sufficient resources to make a significant impact on the non-traditional sector.¹⁵

The focus on the non-CARICOM market is again evident in the Technical Assistance Fund for Jamaican exporters, established in 1985 to provide technical consulting services on non-traditional goods destined to non-CARICOM markets. Technical assistance is provided in areas such as marketing, sales and distribution, product development, packaging design, productivity improvement and quality control. Such services are also provided by national institutions in the other countries such as the Export Development Corporation in Trinidad and Tobago, the Guyana Export Promotion Council and the Barbados Export Promotion Corporation.

In Guyana, retention accounts were introduced¹⁶ by the Central Bank in 1983, primarily to facilitate non-traditional exports.¹⁷ The arrangement allowed some exporters to retain at their commercial banks, foreign currency accounts credited with a specific percentage of their hard-currency export earnings and to effect payments from such accounts for their imports. Retention quotas ranged from 15 to 50 per cent of export proceeds. The arrangement appears to have had an impact on the non-traditional sector; between 1984 and 1986, there was an increase of 138 per cent in the total hard-currency receipts by non-traditional exporters utilizing retention accounts, with the exception of the goldminers.

¹⁵ Danns Donna, "The Foreign Exchange crisis in Guyana," Bank of Guyana, 1987, p.42.

¹⁶ Trinidad and Tobago and Jamaica introduced similar accounts in 1989.

¹⁷ With the stabilization programme entered into by Guyana with the IMF at the beginning of 1989, retention accounts are to be abolished. It is hoped that the inflow of foreign exchange as a result of the programme will be allocated in such a way as to continue to encourage exports.

BARBADOS

The existence of special trading arrangements, in addition to regional and national incentive legislation and institutions, facilitated the growth of Barbadian non-traditional exports.¹⁸ In its efforts at export diversification so as to decrease its dependence on sugar and tourism, Barbados concentrated mainly on electronic components, garments and chemicals.¹⁹ Over the period 1980-1984, the export of electronic components rose from US\$31.7 million to US\$188 million or from 21 per cent to 58 per cent of domestic exports. Given the predominance of US firms in this sector, the bulk of exports was geared towards the US market. Between 1980 and 1982, all exports went to the OECD market. In 1983, however, 65 per cent went to Puerto Rico and 35 per cent to the OECD market. This latter share grew to 69 per cent in 1984 and 90 per cent in 1985, then fell to 56 per cent in 1986. Of individual components, such as electrical appliances and apparatus, 94 to 100 per cent were absorbed by the OECD countries during the 1980-1987 period.

The garment industry received major attention over the last two decades. Its contribution to the economy grew by 43 per cent from US\$24.6 million in 1980 to US\$35.2 million in 1983. In response to contracting demand both in CARICOM and OECD markets and despite the special 807 Programme, the value of clothing exports began to decline in 1984, when it fell by eight per cent and further decreased by 31 per cent in 1985, 21 per cent in 1986 and 31 per cent in 1987; by 1987 the value of clothing exports was only US\$11.9 million. The OECD countries, principally the United States and CARICOM States, were the subsector's two largest markets. In 1980, 54 per cent of its exports went to the US market and 46 per cent to the CARICOM market. The proportion of exports to the United States rose to 67 per cent in 1981, declined in 1982 and increased to 72 per cent in 1984, 80 per cent in 1985, 89 per cent in 1986 and 94 per cent in 1987.

The other non-traditional exports identified in Table V-1 (furniture, cement, chemicals (insecticides), margarine and lard) did not make as significant an impact as electronic components and garments. The value of furniture exports, entirely absorbed by the CARICOM market,²⁰ has fluctuated from US\$2.7 million in 1980 to US\$6.3 million in 1983, thereafter falling to less than half a million dollars.

¹⁸ See Table V-1.

¹⁹ Ministry of Finance and Planning, Barbados Development Plan 1983-1988, Bridgetown, 1988.

²⁰ A regional programme for garments, furniture and agro-industrial products funded by the IDB is currently being implemented by the CARICOM Secretariat, the Caribbean Association of Industry and Commerce and the Caribbean Development Bank. Each of the three industries will be managed by a Task Force which will determine technical assistance requirements in such areas as management, technology needs, packaging, marketing and quality control. The role of the CARICOM Secretariat is specifically to provide trade information relevant to the needs of these industries.

The export of cement began in 1984. It increased by 360 per cent in 1985 and by a further 29 per cent in 1986 then fell by 29 per cent in 1987. Roughly 75 per cent of cement exports went to the CARICOM market, the remainder being absorbed by other Caribbean countries.

The value of chemicals exports has also fluctuated, increasing by 26 per cent between 1980 and 1983 and falling by 30 per cent in 1986, before rising by 15 per cent in 1987. The export value of the largest category of chemicals, insecticides, was shared between the CARICOM market and other Caribbean countries in the proportion of 65 per cent and 35 per cent, respectively.

Margarine and lard exports declined from a value of US\$3.1 million in 1980 to one million US dollars in 1987. On average, 98 per cent of these exports were absorbed by the CARICOM market and two per cent went to other Caribbean countries.

GUYANA

Guyana's potential to develop its non-traditional sector is tremendous, given its vast untapped resource base which includes precious stones and, possibly, petroleum. Of the main non-traditional products which have been developed, only shrimp and gold exports appear to be growing in value. The former increased from less than one million US dollar in 1980 to US\$4.9 million in 1984. Similarly, the value of gold exports more than doubled between 1984 and 1986.

Timber exports which were valued at US\$6.3 million in 1980 declined to US\$3.3 million by 1984. Exports of medicinal and pharmaceutical products more or less stagnated, while exports of perfumery and cosmetics and refrigerators/ freezers for domestic use fell by 35 per cent and 15 per cent respectively.

Virtually all shrimp exports were absorbed by the OECD market, principally the United States and Japan; minute amounts went to CARICOM and other Caribbean countries. An exception occurred in 1984 when seven per cent went to CARICOM countries, principally Trinidad and Tobago and Barbados. An average of 43 per cent of timber exports went to OECD countries and 46 per cent to CARICOM countries. Sixty-eight per cent of medicinal and pharmaceutical products went to the CARICOM market, 21 per cent to the OECD market and 10 per cent to other Caribbean countries. In addition, an average of 91 per cent of perfumery and cosmetics exports went to the CARICOM market, an average of three per cent to OECD countries and six per cent to other Caribbean countries. All exports of refrigerators/freezers were absorbed by CARICOM.

JAMAICA

Within the context of Jamaica's Economic Recovery Programme of 1981, the fruit and vegetable sector was the focus of a new export thrust. In an effort to capitalize on the apparent high-income, elastic demand for exotic fruit such as mangoes, cut flowers and foliage, the AGRO-21 project sought to expand commercial production in these and other new crops with a view to entry being gained into new markets. Fairly consistent growth in these exports was recorded between 1980 and 1987. For example, the export value of cut flowers/foliage rose from US\$1.4 million in 1980 to US\$3.7 million in 1987 (see Table V-3).

In 1980 nine per cent of fruit and vegetable exports were absorbed by the CARICOM market, two per cent by the other Caribbean countries and 89 per cent by the OECD market. By 1987, 94 per cent were directed to the latter market, four per cent to CARICOM countries and two per cent to the other Caribbean countries. It is reasonable to assume that the need to obtain hard currency prompted the growth in such exports to the OECD markets.

There was an increase in garment exports during the period 1980-1987 and an accompanying shift from the Caribbean to the OECD market. Valued at US\$7 million in 1980; it increased by 145 per cent to US\$17.4 million in 1982. Following a decline by 11 per cent in 1983 as a result of reduced demand in both CARICOM and US markets, they rose further by 157 per cent in 1984, and further by 10 per cent in 1985, 46 per cent in 1986 and 95 per cent in 1987.

With respect to the destination of garment exports, in 1980, 32 per cent were absorbed by the CARICOM market, 11 per cent by other Caribbean countries and 57 per cent by OECD countries. By 1985, only three per cent went to CARICOM member countries and 97 per cent were absorbed by the OECD market. With the establishment by the United States of the guarantee access programme in 1986, whereby the utilization of cloth from the United States was required, the OECD market absorbed 99 per cent, the remainder being divided among CARICOM and other Caribbean countries.

Other non-traditional exports such as cordials/liqueurs, cigars, cut flowers/foliage and other live plants remained directed to the OECD market. Over the period, respective averages of 95 per cent, 98 per cent and 97 per cent of these exports were absorbed by the OECD market, with the remaining shares going to CARICOM and other Caribbean countries.

The export growth rates of manufactures such as galvanized sheets, furniture, electrical machinery and other miscellaneous manufactures were relatively modest. Structural and policy factors led to their being absorbed largely by local and CARICOM

markets.²¹ Intra-CARICOM trade faced several difficulties over the period, including the establishment of non-tariff barriers, particularly licensing and foreign exchange regulations, and a general economic contraction.

TRINIDAD AND TOBAGO

The main non-traditional exports of Trinidad and Tobago are energy-based products which utilize the country's large natural gas reserves as fuel and feedstock. The petrochemical industry²² began to develop in the late 1970s when the country was able to utilize the revenue windfall from oil price increases to commission two plants (in 1977 and 1981, respectively) to produce ammonia and urea. The production of steel products began in 1980 and that of methanol in 1982.

There was a 265 per cent increase in export earnings from ammonia, from US\$49.4 million in 1980 to US\$180.3 million in 1984, due largely to increased production capacity gained with the opening of two new plants. Following a 39 per cent decline in 1985, earnings recovered by 13 per cent in 1986, then declined by 10 per cent in 1987. A consistently large proportion of ammonia exports, ranging from 86 per cent in 1980 to 97 per cent in 1985, or an average of 94 per cent over the period 1980-1987, went to the OECD market. Between 1980 and 1986, between one to two per cent went to Latin America, increasing to three per cent in 1987.

The value of urea exports fluctuated, averaging about US\$6 million between 1980 and 1984. However, the start-up of a new urea plant in 1984 resulted in an increase of US\$26.3 million, or 299 per cent, between 1984 and 1985. In 1986 there was a further increase of 34 per cent, but by 1987 export earnings fell by 12 per cent. The OECD market absorbed 40 per cent of urea exports in 1980, 65 per cent in 1983, 38 per cent in 1984, 34 per cent in 1985, 74 per cent in 1986 and 66 per cent in 1987. From 1980 to 1983, 27 per cent of exports went to the CARICOM market and between 24 and 29 per cent to other Caribbean countries. In 1984 and 1985 there was a change in direction, when the Latin American market absorbed 34 per cent and 20 per cent, respectively.

²¹ The domestic orientation of manufactures, in particular, is a result of the import substitution programmes of the 1960s and 1970s which, as has now been acknowledged by most economists, resulted in inefficiencies in resource allocations, disincentive effects on exports and weak price competitiveness associated with high protection coefficients. Broad indicators of market orientation for Jamaican manufactures, obtained by expressing exports as a percentage of manufacturing value-added, show high domestic sales of at least 75 per cent.

²² The commissioning of Federation Chemicals, a wholly owned subsidiary of W.R. Grace, marked the beginning of the production of ammonia.

Chemicals, another non-traditional export, made a significant contribution to export earnings in the early years of the decade, peaking at a value of US\$30 million in 1983. As a result of the requirements of the methanol plant constructed in 1984, exports were considerably reduced initially. However, the plant reached full capacity in 1987 and the value of exports increased by 108 per cent, from US\$19.8 million in 1984 to US\$41.1 million, in 1987. The majority of international sales (85 per cent) were arranged through long-term contracts with three firms in the United States. As a result, a large proportion of methanol exports were absorbed by the OECD market, particularly the United States (100 per cent in 1984, 87 per cent in 1985, 89 per cent in 1986 and 90 per cent in 1987). The share of exports to Latin America increased from three per cent in 1985 to six per cent in 1986 and nine per cent in 1987, subsequently declining to two per cent in 1988. The other Caribbean countries absorbed one per cent in 1985 and 1987, respectively, and five per cent in 1986; seven per cent went to the rest of the world in 1985.

From 1981, the value of exports in iron and steel products increased steadily,²³ except in 1985, when the TT dollar was devalued. In 1980, all steel exports, then consisting solely of sponge iron, went to Latin America. As product lines diversified, so did markets. In 1982, 44 per cent went to other Caribbean countries, 33 per cent to the OECD market, 18 per cent to Latin America and five per cent to CARICOM countries. In 1985, 31 per cent went to CARICOM, 27 per cent to other Caribbean countries, 24 per cent to the OECD countries and 18 per cent to Latin America.

The export value of cereal preparations and miscellaneous manufactures fluctuated, with both declining from 1984. The export value of soaps and cleaning and polishing preparations peaked at US\$10 million in 1983 and subsequently declined. The value of non-alcoholic beverage exports fluctuated, then rose to US\$3.4 million in 1986 and US\$5.8 million in 1987.

The majority of manufactured items, including those listed in Table V-4, were absorbed by the CARICOM market. Most exports of paper, soaps, cleaning and polishing preparations, cereals and cereal preparations and non-alcoholic beverages were absorbed by the domestic and CARICOM markets, with minute amounts going to other Caribbean countries.²⁴ The exception to this was the category of miscellaneous manufactures, of which 55 per cent went to the OECD market²⁵ between 1980 and 1986, with the other 45 per cent being absorbed by the CARICOM countries.

²³ The Voluntary Restraint Agreement, signed with the USA in 1988 and limiting the export of steel products to 70,000 metric tonnes, has since put a cap on expansion in this market.

²⁴ Broad indicators of market orientation for Trinidad and Tobago show a 50:50 ratio of domestic sales to exports. There may be some under-estimation as processed foods are not included (Bourne, 1988:88).

²⁵ The main category of products responsible for this aberration was that of orthopedic appliances, 99% of which went to this market.

A Caribbean trade model

It is clear that the region's small size, limited resource base and acute dependency on imported inputs to the manufacture of export products are key factors to be considered when a key model is being sought to analyse demand for its merchandise exports. Application of the multiple regression formula²⁶ ($Y = a + X1 + X2 + X3$ where Y = export volume index, $X1$ = P_x or export prices, $X2$ = e/P or real exchange rate and $X3$ = Y_x or OECD GDP) is indicated, since export growth is linked to prices and economic growth in the major market.

In the case of Jamaica, use of this formula (see Table VI) is not conclusive, due to the high dependency of X (export volume index) on $X1$ (export prices). The high value observed for the correlation coefficient is explained by that dependency. As the high standard error coefficients indicate, there is no relationship between $X2$ (real exchange rate), $X3$ (OECD GDP) and $X1$ (export volume).

In the case of Trinidad and Tobago (see Table VII), the correlation coefficient is similarly very high, indicating that there is a close relationship between export volume, export prices, real exchange rates and OECD GDP. Here, too, the standard error of the coefficients is quite large indicating that there are problems when the model is disaggregated.

These problems are derived from special conditions in the Caribbean. As previously mentioned, exports from the Commonwealth Caribbean, given the nature of the preferences provided by major trading partners, are more a function of negotiations and production than any other factors. Indeed, the price of sugar, which is a significant export for all four countries, is negotiated with the EEC and set within a quota by the United States. Furthermore, the price increase of goods exported to non-dollar countries up to 1980 was the result of the appreciation of the US dollar to which the currencies of Barbados, Jamaica and Trinidad and Tobago are tied. (Since 1984, the Guyanese currency has been tied to a basket of currencies, including the Pound Sterling, the Deutsche Mark, the French Franc, the Netherlands Guilder and the Japanese Yen.) Sugar exports accounted for one third of the foreign exchange earnings of Barbados and Guyana over the period. For Jamaica and Trinidad and Tobago, they accounted for only eight per cent.

Furthermore, the major exports of Guyana and Jamaica, bauxite and alumina, are also subject to non-market forces. In the case of Jamaica, a significant portion is exported through intra-company transfers and therefore not immediately affected by changes in exchange rates. Indeed, bauxite and alumina export volumes are more a function of energy prices. Exchange rates do have an impact, but only in the medium term, on decisions to shift production locations in response to favourable exchange rate movements. In addition, large portions of bauxite and alumina are exported by Guyana

²⁶ The model was utilized only for Jamaica and Trinidad and Tobago, since the export volume index was not available for Barbados and records of export prices for Guyana are not the most reliable.

and Jamaica²⁷ through counter trade arrangements, in which they are the weaker partner and therefore not in a position to insist on the most favourable price.

The supply of goods has frequently been of critical importance. Production-related problems due to structural rigidities account for a significant portion of the decline in exports, particularly from Guyana. As Table II shows, except in the case of sugar, the volume of all major domestic export commodities declined over the period 1980-1987.²⁸ At production point, such factors as inadequate technology, managerial deficiencies, lack of foreign exchange for imported inputs, adverse weather conditions and industrial unrest contributed largely to this decline. External factors, such as decreasing demand for primary commodities and the use of substitutes, also contributed to declining production in the countries under study.

Cocoa and coffee exports from Jamaica and Trinidad and Tobago have the brightest growth prospects. Coffee imports especially by OECD countries, have been growing rapidly. The demand for cocoa has not shown the same vibrancy, but given the small share of Caribbean exports and the high quality of both coffee and cocoa beans, substantial growth is still possible without affecting world prices or supplies (Bourne, 1988:84).

Other issues affecting Caribbean exports

It is evident that for exports to grow, the goods exported must be competitive. Factor costs, national economic management or business/investment climate and real exchange rates of major trading partners and competitors all affect such competitiveness.

With respect to factor costs, assuming homogeneous production technology and similar non-labour input prices, the evidence shows that unit labour costs in the economy as a whole, and specifically in agriculture and manufacturing in Jamaica and Trinidad and Tobago, far exceed those in other developing countries.²⁹ It is clear, then, that reduction in unit factor costs, technological improvements and competitive exchange rates are vital to maintaining traditional market shares and entering into new markets with strong growth prospects.

Caribbean economies, including the four under study, are also not internationally price-competitive.³⁰ Currencies were intimately affected by the movement in the

²⁷ In 1984, the Jamaican Government agreed to supply 600,000 long tons of bauxite and one million wet metric tonnes of bauxite per annum for seven years to the USSR through the counter trade mechanism.

²⁸ The volume of bananas exported declined by 54 per cent between 1980 and 1985, before rising between 1985 and 1987.

²⁹ Unit labour costs in Jamaica and Trinidad and Tobago were, for example, several times higher than those prevailing in Venezuela, South Korea, India and Thailand. Bourne (1988:158).

³⁰ Bourne Compton, Caribbean Development to the Year 2000: Challenges, Prospects and Policies. Commonwealth Secretariat/Caribbean Community Secretariat, June 1988, p.78.

exchange rate of the US dollar. While exports to the non-dollar market benefited from appreciation of the dollar, it became more difficult to compete with other countries whose real exchange rates did not appreciate.

Through devaluation, Guyana, Jamaica and Trinidad and Tobago sought to correct balance-of-payments disequilibria by altering the relative prices of domestic and foreign goods in order to reduce domestic demand for higher-priced foreign goods and stimulate greater international demand for domestic production. As indicated by Codrington (1986:29), for this to occur, the demand for both imports and exports must be responsive to price changes (Marshall-Lerner Conditions). However, this did not occur in the case of CARICOM countries.

The import substitution model was not modified sufficiently to encourage changes in the attitude of domestic manufacturers towards exports, particularly to non-CARICOM countries. This model created a system of protection for the local manufacturing industry which made it unnecessary to expand production for the export market. Bourne (1988:89) notes that the effective protection coefficients are quite high for the region; for example, in the case of Jamaican manufactures, it is 1.67 on domestic sales, 1.19 on CARICOM sales and 0.90 on extra-regional sales.

Another study utilized by Bourne shows that effective protection coefficients are 4.6 for durable goods from CARICOM countries, 1.6 for non-durables, 0.7 for processed foods and 0.05 for producer goods. In the case of Barbados, there was growth in both nominal and effective protection over the period 1960-1980. The weighted average effective protection coefficients were 1.33 in 1974 and 2.26 in 1980. The average bias towards exports was estimated to be 1.16 in 1974 and 1.30 in 1980 and the effective protection to import-substitution was 1.57 and 1.68, respectively. Given that Barbadian manufacturing has generally been more externally oriented, there seems to be substantial import-substitution and anti-export bias (Bourne:1988, 87).

Import coefficients reflect the high level of dependency on imported raw materials and capital goods in Caribbean domestic exports: between 0.289 and 0.408 for Jamaica in 1974 (Daniel: 1986) and 0.50 for Trinidad and Tobago (Clarke: 1987). Domestic production costs are often beyond the control of domestic manufacturers, linked as they are to foreign prices and foreign exchange rates.

These factors combine to make regional exports uncompetitive in relation to those of other developing countries. Indeed, it may well be for this reason that the US subsidiary firms involved in the production of electronics left Barbados, causing a 78 per cent decline in export earnings between 1986 and 1987.

Some recent developments indicate new possibilities of production and trade expansion. CARICOM Member States have recently signed an agreement to establish a CARICOM Enterprise Regime (CER). The CER provides a concessionary framework within which businessmen from two or more CARICOM States can establish joint ventures, combining raw materials, financial resources and skills for the production of

goods and services. Such joint investment can lead to economies of large-scale production, thus facilitating competitive penetration of extra-regional markets.³¹

Access to financing is a vital prerequisite to export development. Most exporters rely heavily on the commercial banks, whose prime lending rates were high: 10.2 per cent in Barbados, 15 per cent in Guyana, 21 per cent in Jamaica and 11.5 per cent in Trinidad and Tobago, as at 1987. Furthermore, there are collateral requirements. Trinidad and Tobago did not appear to be affected by the unavailability of specific forms of trade finance, but it was seriously affected by a large decline in its foreign exchange reserves. In Guyana, a critical and long-term foreign exchange shortage had a negative impact on the availability of trade support in general.

Countries with acute foreign exchange shortages have introduced an elaborate system of exchange controls.³² Businessmen in both Guyana and Trinidad and Tobago have complained of the delays and bureaucracy involved in the exchange control licensing system. In the case of Trinidad and Tobago, it is claimed that export transactions can potentially involve completion of 55 forms and that manufacturers are stymied in their efforts to take advantage of one of the most dynamic export programmes in the region, the 807 programme, as a result of lack of access to back-to-back Letters of Credit which would enable producers to purchase raw materials and accessories for garments.

The high cost of maritime transport was an important deterrent to expansion of Caribbean trade. While shipping rates and port charges have declined in the recent past, particularly in Jamaica, the overall regional rates are still twice as high as in mainland countries because of the small and fluctuating volume of goods traded and other contextual factors such as containerization favouring larger ships, mechanized ships and limited ports of call.³³ In addition, national and regional shipping lines are generally inefficiently run and very expensive as a result of the unavailability of capital and appropriate manpower. There is generally regular transportation for major export items but less so for the shipment of non-traditional exports.

Countertrade³⁴

Countertrade has developed in the region within the last decade, in response to an acute lack of foreign exchange and a need to expand exports and pay for imports.

³¹ The legal framework allows for preferential treatment for a CARICOM enterprise, as compared with a non-regional company, in the granting of incentives under the regional scheme for the harmonization of fiscal incentives to industry.

³² Jamaica uses an auction system to ration its foreign exchange.

³³ IBRD, "Caribbean Region: Current Situation, Issues and Prospects," 21 April 1988.

³⁴ ECLAC "Countertrade Policies and Practices with Special Reference to Selected Caribbean Countries," LC/CAR/G.267, 16 February 1989.

Unlike the other three countries under review, Barbados did not suffer from foreign exchange shortages during the survey period. In addition, its export-financing institutions are well established, so that there was little need to focus on this aspect of trade policy. While Barbados did not initiate any countertrade deals, it has participated in two private sector arrangements with Guyana, the profits from which were used to repay part of Guyana's debt to Barbados under the CMCF.³⁵

Guyana's use of countertrade was necessitated by its foreign exchange shortage, its inability to gain access to external credit, its need to reduce debt and its desire to acquire relevant technology for local manufacturers. Products exported under countertrade arrangements include shrimps, fish, timber, garments, bauxite and rice, in exchange for motor vehicles and spares, other spare parts, electrical accessories, pharmaceutical products and steel products from COMECON countries, other Caribbean countries and Latin America. By December 1986, the value of exports under this scheme was G\$22.3 million.

Jamaica has made use of countertrade as a mechanism to expand exports, through both government-to-government and private sector deals. The principal products utilized for countertrade include bauxite, alumina, tobacco, gypsum and soya beans. One of the largest such deals occurred in 1982 for supply by the Jamaican Government, represented by the Bauxite Trading Company (BATCO), to supply the US Government, represented by the Commodity Credit Corporation (CCC), of 400,000 long dry tons of metal grade bauxite in exchange for 7,238 metric tonnes of non-fat dry milk and 1,905 metric tonnes of anhydrous milk fat.³⁶

Prospects for the future

Given the fact that Caribbean exports are concentrated on primary commodities and that there are limited possibilities for expansion, it is useful to consider other economic activities which may become engines of growth. With the inclusion of trade in services in the Uruguay Round of GATT negotiations, much attention has been paid to the role that services may play in national development.

Tourism is the major contributor to the export of services. However, of the four countries under study, only Barbados and Jamaica have a developed tourism sector, which contributed 40 per cent to their respective total exports of goods and services in 1987. It contributed 11 per cent to Barbados' GDP in 1987; indeed, while the merchandise export trade declined by 29 per cent over the period 1980 to 1987, earnings from tourism

³⁵ In 1985, a Barbadian company arranged with a company in Guyana to supply the raw materials needed for the manufacture of cardboard boxes in return for a franchise from the Guyanese company to supply the Caribbean market. In 1986, another Barbadian company made funds available to the Guyana Pharmaceutical Company for the purchase of pharmaceutical products in exchange for fish and shrimps. These products were then sold on the open market.

³⁶ Other deals involved the exchange of bauxite for Soviet machinery, equipment and Lada cars in 1982 and a 1983 exchange of Guyanese rice for Jamaican soya-bean mill rollers.

increased by 60 per cent.³⁷ In the case of Jamaica, gross receipts from this sector amounted to US\$594.9 million in 1987 - an increase of 15 per cent over the previous year.

Unlike primary commodity exports, Caribbean tourism benefits from a high income elasticity of demand. It has been estimated by Bond and Ladman (1972) and French (1972) that income elasticities range from 1.1 to 1.5. Thus, on the premise of continued economic growth in OECD countries, the potential for the services sector, particularly tourism, as a generator of foreign exchange is great.

At present, the geographical source of tourist arrivals is highly concentrated in the OECD countries, particularly North America, the United Kingdom and Western Europe. With the emergence of the newly industrializing countries, opportunities for expansion through appropriate marketing should make even greater utilization of the region's comparative advantage in this sector possible.

Little attention has been paid to the export of other services. Although the data on information services are not disaggregated, it is evident that data entry and data processing represent one of the fastest growing sectors. Barbados, Jamaica and Trinidad and Tobago have the prerequisites, such as a trainable labour force, suitable telecommunications systems³⁸ and support business services to encourage investment in information services. In Barbados, this subsector recorded an annual average employment growth rate of over 10 per cent during the period 1984-1987.

The vastly improved telecommunications system in the region also allows for the development of offshore banks, insurance companies, shipping companies and foreign sales corporations. Incentive legislation has already been developed in Barbados and Jamaica for such activities.

The study contracted by the CARICOM Heads of Government for consideration at their 1989 Meeting, "Caribbean Development to the Year 2000: Challenges, Prospects and Policies", suggests that the most useful subsectors for development within the service industry would be legal and other professional services, engineering design and construction and education. Some of these are already being exported and the study suggests that greater formalization of consultancy arrangements, official support for private export activities, human resource pooling to ensure critical mass and the development of a highly skilled and educated labour force are needed to create the conditions for the development of such exports as an engine of growth.

³⁷ Caribbean Tourism Research and Development Centre, "Caribbean Tourism Statistical Report, 1987".

³⁸ The development of the heliport on Jamaica's north coast also establishes the basic infrastructure for providing these services.

Summary and conclusions

The four countries under study experienced economic crisis during the period 1980 to 1987 and a significant decline in their domestic exports³⁹ over this period. Traditional, primary commodity exports are still the principal foreign exchange earners although there was some development of non-traditional exports, in particular manufacturing.

The majority of domestic exports were absorbed by the OECD and CARICOM markets, as a direct result of special trading arrangements. It is, however, noteworthy that despite the special trade preferences for CARICOM exports, there was an overall decline in trade in general and to the OECD countries in particular. Both external and internal factors were responsible for this phenomenon. The structural decline in demand for primary commodities, in general, and the reduction in the US quota for sugar, in particular, were among the external factors. Internal factors included the decline in production due to structural rigidities, managerial and marketing problems, lack of adequate financing, uncompetitive prices and overprotected markets.

The multiple regression formula utilizing the variables of export prices, real exchange rates and foreign income became less than useful as a model to explain export performance. While the correlation coefficients indicate a close relationship between the variables, high standard errors of the coefficient cast doubts on the validity of the results. The results are questionable because of the high incidence of special trading arrangements for the Caribbean countries, including negotiated prices, production quotas, intra-company transfers, countertrade arrangements and duty-free access to the markets of their major trading partners.

Given the context of limited resources, the available advantages of skilled labour, adequate telecommunications infrastructure and proximity to the major markets could contribute to the development of trade in services as a promising engine of growth for the region. At the same time, it would be useful to upgrade the technology and productivity of primary export industries, particularly those subject to the special protocols under the Lomé Convention. This has become critical in the light of the coming integration of the European Community market in 1992, which presages the possible loss of market shares for such products as bananas, sugar, cocoa, bauxite and alumina, fisheries and timber.

With respect to manufacturing, it is clear that a strategy must be developed to reduce the cost of production and increase competitiveness in regional and extra-regional markets. To this end, it will be necessary to amend the tariff and fiscal incentives regimes to reduce the existing bias in favour of processors of imported inputs and to reduce the cost of production through greater efficiency.

³⁹ Domestic exports of Trinidad and Tobago declined by 65 per cent. However, excluding petroleum and petroleum products, there was a 42 per cent increase over the period 1980-1987.

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TABLE 1
DOMESTIC EXPORTS (FOB)
US\$Million

| | BARBADOS | GUYANA | JAMAICA | TRINIDAD AND TOBAGO | |
|------|----------|--------|---------|---------------------|----------------------|
| | | | | with petroleum | without petroleum |
| 1980 | 150.1 | 383.0 | 935.5 | 4,055.0 | 283.0 |
| 1981 | 149.4 | 337.0 | 966.2 | 3,633.0 | 280.4 |
| 1982 | 187.1 | 234.3 | 746.7 | 2,944.0 | 317.0 |
| 1983 | 290.8 | 180.6 | 673.1 | 2,263.0 | 316.7 |
| 1984 | 291.9 | 202.7 | 687.9 | 2,101.0 | 374.4 |
| 1985 | 248.3 | n.a. | 535.1 | 1,407.0 | 253.1 |
| 1986 | 210.3 | n.a. | 567.2 | 1,355.0 | 380.5 |
| 1987 | 107.3 | n.a. | 691.5 | 1,438.0 | 400.5 |

n.a. = Not available.

Sources: Barbados Economic Reports, 1980-1987;
CARICOM Secretariat, Guyana;
External Trade, 1980-1987, The Statistical Institute
of Jamaica; and
Overseas Trade, 1980-1987, Central Statistical Office,
Trinidad and Tobago.

TABLE II
VOLUME AND VALUE OF MAJOR DOMESTIC EXPORT COMMODITIES
1980-1987

| | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 |
|---------------------|--------|--------|--------|--------|--------|--------|--------|--------|
| BARBADOS | | | | | | | | |
| SUGAR | | | | | | | | |
| VOL ('000 LT) | 119.6 | 63.0 | 89.0 | 73.5 | 85.9 | 83.4 | 98.6 | 70.2 |
| VAL (US\$) | 57.8 | 31.7 | 35.5 | 26.8 | 32.1 | 31.5 | 31.0 | 35.6 |
| GUYANA | | | | | | | | |
| SUGAR | | | | | | | | |
| VOL | 248.1 | 264.6 | 250.2 | 212.2 | 205.9 | 213.5 | 214.3 | 205.0 |
| VAL | 120.6 | 108.8 | 87.7 | 71.5 | 70.9 | 66.4 | 83.4 | 79.8 |
| BAUXITE/ALUMINA | | | | | | | | |
| VOL | 1817.7 | 1632.9 | 1120.7 | 1168.1 | 1271.0 | 1572.1 | 1401.9 | 1410.0 |
| VAL | 188.0 | 152.8 | 104.4 | 74.3 | 91.6 | 99.2 | 82.2 | 82.8 |
| JAMAICA | | | | | | | | |
| SUGAR | | | | | | | | |
| VOL | 131.8 | 121.3 | 138.3 | 136.7 | 157.1 | 152.0 | 143.3 | 142.0 |
| VAL | 54.7 | 46.5 | 49.3 | 57.3 | 66.0 | 49.8 | 62.2 | 62.6 |
| BAUXITE/ALUMINA | | | | | | | | |
| VOL | 8455.0 | 7843.0 | 5834.0 | 4916.0 | 6272.0 | 3947.0 | 4500.0 | 5400.0 |
| VAL | 732.1 | 760.2 | 513.8 | 423.8 | 443.5 | 289.7 | 302.1 | 380.0 |
| BANANAS | | | | | | | | |
| VOL | 33.1 | 18.1 | 21.2 | 23.0 | 11.0 | 13.0 | 14.0 | 30.0 |
| VAL | 9.2 | 4.3 | 4.7 | 6.8 | 1.5 | 4.2 | 9.2 | 23.0 |
| TRINIDAD AND TOBAGO | | | | | | | | |
| SUGAR | | | | | | | | |
| VOL | 64.0 | 66.8 | 50.2 | 62.5 | 73.3 | 68.2 | 57.5 | 49.6 |
| VAL | 28.0 | 27.1 | 21.9 | 25.8 | 28.7 | 22.0 | 23.3 | 21.0 |

Source: Caribbean Region: Current Situation, Issues and Prospects,
World Bank, 21 April 1988.

TABLE III - 1
 BARBADOS
 VALUE OF DOMESTIC EXPORTS BY SITC SECTION
 US\$ MILLION

| | 0 | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|------|--------------------------|--------------------------|-----------------------------------|-------------------------|--|-----------|--|---|-------------------------------|---------------|
| | Food and Live Animals | Beverages and Tobacco | Raw Materials other than Fuels | Fuels and Lubricants | Animal and Vegetable Oils and Fats | Chemicals | Manufactures classified by Materials | Machinery and Transport equipment | Miscellaneous Manufactures | Miscellaneous |
| 1980 | 67.5 | 3.3 | 0.4 | 0.3 | 0.2 | 10.6 | 9.7 | 23.2 | 35.3 | 0.1 |
| 1981 | 48.8 | 4.0 | 0.3 | 0.2 | 0.2 | 12.1 | 11.4 | 41.1 | 38.7 | 0.1 |
| 1982 | 36.7 | 5.2 | 0.2 | 0.5 | ... | 13.1 | 13.3 | 65.6 | 45.5 | 0.2 |
| 1983 | 30.9 | 4.8 | 0.3 | 1.0 | ... | 13.6 | 14.8 | 177.0 | 48.1 | 0.2 |
| 1984 | 40.5 | 6.1 | 0.6 | 1.0 | ... | 13.0 | 13.1 | 173.8 | 43.5 | 0.3 |
| 1985 | 35.5 | 6.0 | 1.9 | ... | ... | 10.6 | 13.3 | 153.1 | 27.4 | 0.4 |
| 1986 | 33.9 | 5.9 | 1.2 | ... | ... | 9.4 | 12.1 | 124.4 | 20.9 | 0.5 |
| 1987 | 36.4 | 4.3 | 1.6 | ... | ... | 10.9 | 10.6 | 26.8 | 14.9 | 0.3 |

Source: Barbados Economic Report, 1980-1987.

TABLE III - 2
 GUYANA
 VALUE OF DOMESTIC EXPORTS BY SITC SECTION
 US\$ MILLION

| | 0 Food and Live Animals | 1 Beverages and Tobacco | 2 Raw Materials other than Fuels | 3 Fuels and Lubricants | 4 Animal and Vegetable Oils and Fats | 5 Chemicals | 6 Manufactures classified by Materials | 7 Machinery and Transport equipment | 8 Miscellaneous Manufactures | 9 Miscellaneous |
|------|-------------------------------|-------------------------------|--|------------------------------|---|----------------|---|--|------------------------------------|--------------------|
| 1980 | 168.0 | 7.6 | 194.4 | ... | - | 4.0 | 1.6 | 3.2 | 3.1 | 0.9 |
| 1981 | 3.8 | 8.9 | 162.0 | ... | - | 4.0 | 3.0 | 4.6 | 2.5 | 1.1 |
| 1982 | 115.6 | 3.3 | 99.3 | ... | ... | 5.5 | 2.4 | 5.2 | 2.1 | 1.0 |
| 1983 | 93.0 | 3.0 | 72.3 | ... | ... | 5.1 | 2.4 | 2.2 | 1.5 | 1.2 |
| 1984 | 91.0 | 4.2 | 94.2 | - | ... | 5.0 | 2.5 | 2.4 | 0.8 | 1.4 |

Source: CARICOM Secretariat, Guyana.

TABLE III - 3
 JAMAICA
 VALUE OF DOMESTIC EXPORTS BY SITC SECTION
 US\$ MILLION

| | 0 Food and Live Animals | 1 Beverages and Tobacco | 2 Crude Materials except Fuels | 3 Fuels and Lubricants | 4 Animal and Vegetable Oils and Fats | 5 Chemicals | 6 Manufactures classified by Materials | 7 Machinery and Transport equipment | 8 Miscellaneous Manufactures | 9 Miscellaneous |
|------|-------------------------------|-------------------------------|--------------------------------------|------------------------------|---|----------------|---|--|------------------------------------|--------------------|
| 1980 | 99.0 | 29.4 | 736.3 | 17.9 | ... | 14.9 | 14.0 | 6.0 | 19.6 | ... |
| 1981 | 92.2 | 32.9 | 766.1 | 16.1 | ... | 15.9 | 14.3 | 6.8 | 21.9 | ... |
| 1982 | 97.8 | 32.6 | 519.4 | 21.9 | ... | 22.1 | 12.6 | 7.2 | 33.0 | ... |
| 1983 | 114.9 | 32.5 | 428.9 | 24.1 | ... | 21.6 | 14.8 | 5.4 | 30.9 | ... |
| 1984 | 116.7 | 27.6 | 490.4 | 18.6 | ... | 17.9 | 11.1 | 2.8 | 45.8 | ... |
| 1985 | 110.7 | 28.4 | 294.5 | 27.9 | ... | 16.9 | 7.7 | 2.8 | 46.2 | ... |
| 1986 | 129.4 | 29.3 | 300.9 | 17.7 | ... | 15.9 | 7.2 | 2.4 | 64.3 | ... |
| 1987 | 150.1 | 33.5 | 343.3 | 13.6 | ... | 20.8 | 9.2 | 3.0 | 117.7 | ... |

Source: External Trade 1980-1987; The Statistical Institute of Jamaica.

TABLE III - 4
 TRINIDAD AND TOBAGO
 VALUE OF DOMESTIC EXPORTS BY SITC SECTION
 US\$ MILLION

| | 0 Food and Live Animals | 1 Beverages and Tobacco | 2 Raw Materials other than Fuels | 3 Fuels and Lubricants | 4 Animal and Vegetable Oils and Fats | 5 Chemicals | 6 Manufactures classified by Materials | 7 Machinery and Transport equipment | 8 Miscellaneous Manufactures | 9 Miscellaneous |
|------|-------------------------------|-------------------------------|--|------------------------------|---|----------------|---|--|------------------------------------|--------------------|
| 1980 | 71.7 | 9.6 | 2.2 | 3828.0 | 0.50 | 108.2 | 17.3 | 4.4 | 13.4 | 0.8 |
| 1981 | 65.4 | 8.9 | 1.2 | 3396.0 | 0.20 | 115.6 | 28.6 | 4.3 | 13.1 | 0.7 |
| 1982 | 51.0 | 12.1 | 3.2 | 2709.0 | 0.10 | 158.1 | 44.4 | 7.0 | 8.9 | 0.5 |
| 1983 | 42.9 | 9.5 | 3.3 | 1955.0 | 0.10 | 186.6 | 50.9 | 3.9 | 10.1 | 0.4 |
| 1984 | 40.4 | 9.2 | 5.1 | 1737.0 | 0.02 | 234.1 | 65.7 | 2.1 | 7.3 | 0.9 |
| 1985 | 23.9 | 6.4 | 4.8 | 1160.0 | 0.02 | 177.0 | 28.8 | 1.3 | 4.4 | 0.8 |
| 1986 | 43.3 | 13.5 | 6.4 | 980.0 | 0.03 | 212.3 | 86.7 | 3.5 | 9.3 | 0.5 |
| 1987 | 52.2 | 12.9 | 8.3 | 1041.0 | 0.20 | 205.5 | 100.5 | 6.3 | 10.8 | 0.7 |

Source: Overseas Trade 1980-1987, Central Statistical Office, Ministry of Finance,
 Trinidad and Tobago.

TABLE IV - 1
 BARBADOS
 DIRECTION OF TOTAL EXPORTS
 US\$Million

| Country | 1980 | % | 1981 | % | 1982 | % | 1983 | % | 1984 | % | 1985 | % | 1986 | % | 1987 | % |
|---------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| CARICOM | 63.4 | 27.8 | 61.5 | 26.5 | 70.6 | 27.2 | 69.5 | 19.4 | 87.9 | 22.3 | 80.3 | 22.7 | 48.0 | 17.4 | 37.4 | 23.5 |
| Venezuela | 0.4 | 0.2 | 0.1 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.1 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| OECD | 123.1 | 54.0 | 102.8 | 44.3 | 99.7 | 38.5 | 140.7 | 39.2 | 142.6 | 36.2 | 92.7 | 26.2 | 116.6 | 42.2 | 72.2 | 45.5 |
| All Other Countries | 40.9 | 18.0 | 67.5 | 29.1 | 88.7 | 34.2 | 148.5 | 41.4 | 163.1 | 41.4 | 181.0 | 51.1 | 111.5 | 40.4 | 49.2 | 31.0 |
| Total | 227.8 | 100.0 | 231.9 | 100.0 | 259.1 | 100.0 | 358.7 | 100.0 | 393.7 | 100.0 | 354.0 | 100.0 | 276.1 | 100.0 | 158.9 | 100.0 |

* Includes only the United States of America, Canada, the United Kingdom West Germany and Japan.

Source: Barbados Economic Report, 1980-1987.

TABLE IV - 2
 GUYANA
 DIRECTION OF TOTAL EXPORTS
 US\$ MILLION

| | 1980 | % | 1981 | % | 1982 | % | 1983 | % | 1984 | % |
|-------------------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| CARICOM | 53.2 | 13.9 | 59.0 | 17.3 | 39.1 | 16.7 | 31.0 | 17.2 | 11.2 | 6.0 |
| Latin America | 33.3 | 8.7 | 40.2 | 11.8 | 15.8 | 6.7 | 13.7 | 7.6 | 10.1 | 5.4 |
| COMECON | 5.8 | 1.5 | 3.1 | 0.9 | 1.7 | 0.7 | 7.6 | 4.2 | 11.2 | 6.0 |
| OECD | 224.3 | 58.6 | 188.3 | 55.3 | 105.5 | 45.0 | 106.8 | 59.2 | 119.7 | 63.6 |
| Rest of the World | 66.4 | 17.3 | 50.0 | 14.7 | 72.1 | 30.8 | 21.4 | 11.9 | 36.0 | 19.1 |
| Total | 383.0 | 100.0 | 340.6 | 100.0 | 234.2 | 100.0 | 180.5 | 100.0 | 188.2 | 100.0 |

Source: CARICOM Secretariat, Guyana.

TABLE IV - 3
JAMAICA
DIRECTION OF TOTAL EXPORTS
US\$Million

| Country | % of 1980 Total | | % of 1981 Total | | % of 1982 Total | | % of 1983 Total | | % of 1984 Total | | % of 1985 Total | | % of 1986 Total | | % of 1987 Total | |
|------------------------------|--------------------|-------|--------------------|-------|--------------------|-------|--------------------|-------|--------------------|-------|--------------------|-------|--------------------|-------|--------------------|-------|
| CARICOM | 56.6 | 5.9 | 68.6 | 7.0 | 78.5 | 10.2 | 84.8 | 12.4 | 52.3 | 7.0 | 40.1 | 6.9 | 42.3 | 7.0 | 45.6 | 6.2 |
| Other Caribbean Countries | 17.4 | 1.8 | 13.1 | 1.3 | 12.6 | 1.6 | 13.5 | 2.0 | 14.1 | 1.9 | 48.2 | 8.3 | 44.2 | 7.3 | 48.2 | 6.6 |
| Jamaica Free Zone | ... | 0.0 | ... | 0.0 | ... | 0.0 | 0.1 | 0.0 | 3.2 | 0.4 | 7.1 | 1.2 | 4.3 | 0.7 | 3.9 | 0.5 |
| Latin America | 18.5 | 1.9 | 41.7 | 4.3 | 37.1 | 4.8 | 22.5 | 3.3 | 23.9 | 3.2 | 7.1 | 1.2 | 5.9 | 1.0 | 9.3 | 1.3 |
| OECD | 715.4 | 74.6 | 756.8 | 77.7 | 597.6 | 77.8 | 540.0 | 79.0 | 607.7 | 81.6 | 412.8 | 71.2 | 470.6 | 77.5 | 596.8 | 81.2 |
| USSR | 49.6 | 5.2 | 14.4 | 1.5 | 9.8 | 1.3 | 11.6 | 1.7 | 37.0 | 5.0 | 28.2 | 4.9 | 25.1 | 4.1 | 29.1 | 4.0 |
| Rest of the World | 101.1 | 10.5 | 79.3 | 8.1 | 32.4 | 4.2 | 11.4 | 1.7 | 6.5 | 0.9 | 36.3 | 6.3 | 14.8 | 2.4 | 2.1 | 0.3 |
| Total | 958.6 | 100.0 | 973.9 | 100.0 | 768.0 | 100.0 | 683.9 | 100.0 | 744.7 | 100.0 | 579.8 | 100.0 | 607.2 | 100.0 | 735.0 | 100.0 |

Source: External Trade 1980-1987; The Statistical Institute of Jamaica.

TABLE IV - 4
TRINIDAD AND TOBAGO
DIRECTION OF EXPORTS
US\$ MILLION

| | 1980 | % | 1981 | % | 1982 | % | 1983 | % | 1984 | % | 1985 | % | 1986 | % | 1987 | % |
|------------------------------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|--------|-------|
| CARICOM | 306.9 | 7.9 | 302.3 | 8.1 | 278.2 | 9.3 | 223.5 | 9.8 | 204.0 | 9.7 | 165.5 | 11.5 | 127.7 | 9.4 | 155.1 | 10.7 |
| Other Caribbean Countries | 493.9 | 12.8 | 483.0 | 12.9 | 375.1 | 12.5 | 255.8 | 11.2 | 200.0 | 9.5 | 100.0 | 7.0 | 103.0 | 7.6 | 136.6 | 9.5 |
| Latin America | 144.1 | 3.7 | 158.0 | 4.2 | 217.6 | 7.3 | 34.7 | 1.5 | 59.0 | 2.8 | 31.9 | 2.2 | 17.9 | 1.3 | 60.8 | 4.2 |
| OECD | 2810.0 | 72.6 | 2614.0 | 70.0 | 2004.0 | 66.9 | 1664.0 | 73.1 | 1586.0 | 75.1 | 1114.0 | 77.6 | 1099.0 | 80.9 | 1073.0 | 74.3 |
| Rest of the World | 113.0 | 2.9 | 175.8 | 4.7 | 121.3 | 4.0 | 97.1 | 4.3 | 61.8 | 2.9 | 23.6 | 1.6 | 10.1 | 0.7 | 19.1 | 1.3 |
| Total | 3867.9 | 100.0 | 3733.1 | 100.0 | 2996.2 | 100.0 | 2275.1 | 100.0 | 2110.8 | 100.0 | 1435.0 | 100.0 | 1357.7 | 100.0 | 1444.6 | 100.0 |

Source: Overseas Trade 1980-1987, Central Statistical Office, Ministry of Finance.

TABLE V - 1
 BARBADOS
 NON-TRADITIONAL DOMESTIC EXPORTS
 US\$ MILLION

| | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 |
|--------------------------|------|------|------|-------|-------|-------|-------|------|
| 1. Electronic Components | 31.7 | 38.6 | 60.9 | 133.2 | 168.0 | 152.0 | 120.9 | 26.2 |
| 2. Wearing Apparel | 24.6 | 26.1 | 32.8 | 35.2 | 32.4 | 22.5 | 17.8 | 11.9 |
| 3. Furniture | 2.7 | n.a. | 5.6 | 6.3 | 2.2 | 0.6 | 0.5 | 0.4 |
| 4. Cement | - | - | - | - | 1.1 | 5.1 | 6.6 | 4.7 |
| 5. Chemicals | 10.8 | 12.1 | 13.1 | 13.6 | 12.9 | 10.6 | 9.5 | 10.9 |
| 6. Margarine/Lard | 3.1 | 2.3 | 1.9 | 2.0 | 2.3 | 1.4 | 1.1 | 1.0 |

- = Not in existence
 n.a = Not available

Source: Economic and Financial Statistics, Central Bank of Barbados, January 1988.

TABLE V - 2
GUYANA
NON-TRADITIONAL DOMESTIC EXPORTS
US\$ MILLION

| | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 |
|---|------|------|------|------|------|------|------|
| 1. Timber | 6.3 | 5.5 | 5.0 | 3.6 | 3.3 | n.a. | n.a. |
| 2. Shrimps | 0.6 | 3.0 | 3.3 | 4.7 | 4.9 | n.a. | n.a. |
| 3. Medicinal and Pharmaceutical Products | 1.6 | 1.6 | 1.8 | 1.6 | 1.3 | n.a. | n.a. |
| 4. Perfumery and Cosmetics | 2.0 | 1.6 | 1.3 | 0.8 | 1.3 | n.a. | n.a. |
| 5. Refrigerators/Freezers for Domestic Use | 2.7 | 3.9 | 5.2 | 2.1 | 2.3 | n.a. | n.a. |
| 6. Gold* | - | - | - | - | 4.4 | 4.0 | 14.6 |

- = Not in existence

n.a = Not available

* Statistical Bulletin, Bank of Guyana, June 1987.

Source: CARICOM Secretariat, Georgetown, Guyana.

TABLE V - 3
JAMAICA
NON-TRADITIONAL DOMESTIC EXPORTS
US\$ Million

| | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 |
|---|------|------|------|------|------|------|------|-------|
| 1. Wearing Apparel | 7.1 | 7.2 | 17.4 | 12.7 | 32.6 | 36.0 | 52.5 | 102.6 |
| 2. Fruits and Vegetables | 23.1 | 19.8 | 21.8 | 28.4 | 21.1 | 29.5 | 32.7 | 41.8 |
| 3. Cigars | 8.7 | 9.2 | 8.5 | 13.5 | 9.8 | 9.5 | 8.3 | 9.7 |
| 4. Cordials/Liqueurs | 5.3 | 7.1 | 7.4 | 9.1 | 4.1 | 3.5 | 3.4 | 4.3 |
| 5. Beer/Stout | 0.7 | 0.8 | 1.4 | 3.0 | 2.3 | 2.9 | 3.5 | 4.6 |
| 6. Cut Flowers/foilage and other live plants | 1.4 | 1.6 | 1.5 | 1.9 | 1.1 | 1.8 | 2.7 | 3.7 |
| 7. Toilet Preparations | 4.2 | 4.7 | 7.8 | 7.1 | 4.5 | 4.1 | 4.1 | 4.2 |
| 8. Electrical Machinery nes | 4.4 | 4.6 | 5.2 | 4.9 | 2.2 | 2.2 | 1.8 | 2.3 |
| 9. Furniture | 3.1 | 3.0 | 5.3 | 6.3 | 3.0 | 1.8 | 2.2 | 3.6 |
| 10. Miscellaneous Manufactures nes | 7.8 | 12.2 | 8.8 | 11.5 | 7.2 | 6.6 | 7.7 | 9.3 |

Source: External Trade 1980-1987; The Statistical Institute of Jamaica.

TABLE V - 4
 TRINIDAD AND TOBAGO
 NON-TRADITIONAL DOMESTIC EXPORTS
 US\$ MILLION

| | 1980 | 1981 | 1982 | 1983 | 1984 | 1985 | 1986 | 1987 | 1988 |
|---|------|------|------|-------|-------|-------|-------|-------|-------|
| 1. Ammonia | 49.4 | 50.4 | 96.8 | 151.6 | 180.3 | 110.8 | 125.4 | 112.6 | 135.7 |
| 2. Urea | 7.1 | 3.9 | 6.6 | 5.9 | 8.8 | 35.1 | 47.0 | 41.4 | 62.9 |
| 3. Methanol | - | - | ... | ... | 19.8 | 23.3 | 31.3 | 41.1 | 54.4 |
| 4. Iron and Steel Products | ... | 8.4 | 28.1 | 39.0 | 45.1 | 18.1 | 66.1 | 72.6 | 91.8 |
| 5. Cereal preparations | 5.9 | 5.9 | 5.7 | 4.1 | 2.5 | 2.1 | 4.0 | 5.2 | 6.8 |
| 6. Organic Chemicals | 23.4 | 22.7 | 30.0 | 10.5 | 11.6 | 2.0 | ... | 0.8 | 2.1 |
| 7. Articles of Paper | 5.6 | 6.6 | 4.8 | 2.5 | 1.9 | 1.4 | 1.8 | 3.2 | 4.8 |
| 8. Soaps, Cleaning and Polishing Preparations | 6.3 | 8.9 | 7.3 | 10.0 | 3.4 | 2.4 | 2.9 | 4.4 | 5.2 |
| 9. Miscellaneous Manufactures | 6.2 | n.a. | 6 | 7.6 | 5.8 | 3.6 | 6.8 | 6.9 | n.a. |
| 10. Non-alcoholic Beverages | 0.2 | n.a. | 3.2 | 2.5 | 1.0 | 0.6 | 3.4 | 5.8 | 7.9 |

- Not in existence
 ... Less than 0.1US\$Million
 n.a. Not available.

Source: Overseas Trade, 1980-1987, Central Statistical Office, Ministry of Finance.

TABLE VI
THE JAMAICA CASE

| | Px=X1 | e/P=X2 | Y*=X3 | X |
|------|-------|--------|-------|-------|
| 1980 | 935.5 | 1.8 | 100.0 | 100.0 |
| 1981 | 966.2 | 1.6 | 101.5 | 101.6 |
| 1982 | 746.7 | 1.5 | 101.2 | 72.2 |
| 1983 | 673.1 | 1.4 | 103.9 | 74.6 |
| 1984 | 681.9 | 2.3 | 109.1 | 72.2 |
| 1985 | 535.1 | 2.6 | 112.5 | 62.2 |
| 1986 | 567.2 | 2.2 | 115.5 | 62.9 |
| 1987 | 692.0 | 2.0 | 118.3 | 64.0 |

Regression Output:

| | | | | |
|---------------------|----------|----------|----------|--|
| Constant | | 67.69832 | | |
| Std Err of Y Est | | 4.925867 | | |
| R Squared | | 0.945100 | | |
| No. of Observations | | 8 | | |
| Degrees of Freedom | | 4 | | |
| | X1 | X2 | X3 | |
| X Coefficient(s) | 0.089089 | 8.644060 | -0.67372 | |
| Std Err of Coef. | 0.017931 | 6.481126 | 0.427391 | |

TABLE VII
THE TRINIDAD AND TOBAGO CASE

| | Px=X1 | e/P=X2 | Y*=X3 | X |
|------|-------|--------|--------|-------|
| 1980 | 283.0 | 2.42 | 100.00 | 100.0 |
| 1981 | 280.4 | 2.12 | 101.50 | 89.3 |
| 1982 | 317.0 | 1.90 | 101.20 | 91.3 |
| 1983 | 316.7 | 1.65 | 103.93 | 89.4 |
| 1984 | 374.4 | 1.45 | 109.12 | 102.5 |
| 1985 | 253.1 | 2.01 | 112.51 | 94.2 |
| 1986 | 380.5 | 1.86 | 115.54 | 129.5 |
| 1987 | 400.5 | 1.69 | 118.32 | n.a. |

Regression Output:

| | | | | |
|---------------------|----------|----------|----------|----------|
| Constant | | | | -207.872 |
| Std Err of Y Est | | | | 1.682088 |
| R Squared | | | | 0.992988 |
| No. of Observations | | | | 7 |
| Degrees of Freedom | | | | 3 |
| | X1 | X2 | X3 | |
| X Coefficient(s) | 0.278356 | 35.34315 | 1.429887 | |
| Std Err of Coef. | 0.019687 | 2.982812 | 0.125248 | |