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Long-Term Economic Prospects
of the OECS Countries

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CURRENCY EQUIVALENTS

Currency Unit = Eastern Caribbean Dollar (EC$)

Upon its creation in 1965, the Eastern Caribbean dollar was tied to sterling at the rate of L = EC$4.8. In July 1976, the link with sterling was broken and the Eastern Caribbean dollar was aligned with the US dollar at the rate US$1 = EC$2.70.

Exchange Rate as of July 1976

US$1 = EC$2.70
EC$1 = US$0.3704

OECS COUNTRIES' FISCAL YEAR

April 1 - March 31

This report is based on the findings of a World Bank economic mission which visited the Organization of Eastern Caribbean States' (OECS) countries which are members of the World Bank--Antigua and Barbuda, Dominica, Grenada, St. Kitts and Nevis, St. Lucia, and St. Vincent and the Grenadines--during January-February 1989. The mission was comprised of Messrs. Alasdair Sinclair (Chief of Mission), Alberto Herrou-Aragon (Macroeconomist and Agricultural Economist), David Davie (Tourism Consultant), Constantine Soumelis (Education Consultant) and Ms. Carla Kruytbosch (Research Assistant). Other Bank staff members who contributed to the report include: Jose B. Sokol (Lead Economist), Alexander Yeats (Transport Economist), Richard L. Ground (General Economist), Ms. Ginger Reich (Research Assistant) and Herman von Gersdorff (Economist). CIDA supported Mr. Sinclair's work during the report's preparation. The Caribbean Development Bank contributed with a section on Montserrat, a member of the OECS but not of the World Bank.

GLOSSARY OF ABBREVIATIONS

ACP	African/Caribbean/Pacific
BDD	ODA British Development Division in the Caribbean
CARDATS	Caribbean Rural Development Advisory and Training Service
CARDI	Caribbean Agricultural Research and Development Institute
CARIBCAN	Canada's Preferential Trade Scheme for the Commonwealth Caribbean
CARICOM	Caribbean Community
CATCO	Caribbean Trading Corporation
CBI	Caribbean Basin Initiative
CDB	Caribbean Development Bank
CET	Common External Tariff
CIDA	Canadian International Development Agency
CPI	Consumer Price Index
CREP	Coconut Rehabilitation and Expansion Project
CTRC	Caribbean Tourism Research and Development Centre
DEVCO	Development Corporation
EAS	Economic Affairs Secretariat
EC	Eastern Caribbean
ECCB	Eastern Caribbean Central Bank
ECLAC	Economic Commission for Latin American and the Caribbean
EDF	European Development Fund
EEC	European Economic Community
EIB	European Investment Bank
GDP	Gross Domestic Product
GNP	Gross National Product
GSP	General System of Preferences
IBRD	International Bank for Reconstruction and Development
IICA	International Institute for Cooperation in Agriculture
IMF	International Monetary Fund
ITC	International Trade Commission
LDCs	Less Developed Countries
MFA	Multi-Fiber Agreement
MFN	Most Favored Nation
NDC	National Development Corporation
ODA	Overseas Development Administration
OECS	Organization of Eastern Caribbean States
OPEC	Organization of Petroleum Exporting Countries
QR	Quantitative Restriction
SITC	Standard International Trade Classification
SMEs	Small and Medium Enterprises
UN	United Nations
UNESCO	United Nations Educational, Scientific and Cultural Organization
USAID	United States Agency for International Development
WI	West Indies
WISCO	West Indies Shipping Corporation

LONG-TERM ECONOMIC PROSPECTS OF THE OECS COUNTRIES

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EXECUTIVE SUMMARY

1.   This report examines factors and policies that have contributed to past economic performance in the OECS countries. It also sets out recent developments in better perspective and assists in framing the relevant issues and questions for policy formulation. Thus, it focuses on a number of key areas which are critical for the countries' longer-term development: the macroeconomic framework; trade matters; sectoral issues relating to tourism, manufacturing and transportation; and demographic and educational issues.

2.   The report's medium to longer term scenario envisages attainment and maintenance of viable financial balances and reasonably good economic growth, averaging about 4% per year for the OECS countries as a whole in the absence of external shocks. To attain this scenario, the OECS countries should undertake the economic and social policies elaborated in Chapters I through IX. These policies are needed to strengthen the economic base of the countries and to sustain development over the medium to longer term. The respective governments would need to strengthen their long-term strategies, including the underpinning of policies necessary and sufficient for the continued economic growth of their countries. Donor support in the implementation of these strategies would be required. If external shocks were to take place, compensatory policy measures would be needed to achieve the countries' longer-term growth objectives.

3.   The main macroeconomic measures suggested include:

   (a) Maintenance of the current exchange rate and monetary regime, particularly those key elements that provide the current system with stability: (i) strict limitations on the ability of governments to monetize public debt by borrowing from the Eastern Caribbean Central Bank (ECCB); and (ii) the backing of at least 60% of the demand liabilities of the ECCB by hard currency assets.

   (b) Encouragement of flexibility in resource use to assist the process of diversification. Money wages, in particular, would have to be sufficiently flexible so as to promote employment. It would be critical that increases in the level of public sector wages not set the pace for wage developments in the economy as a whole. In addition, land use restrictions would require revision.

   (c) Promotion of greater freedom of movement of capital among OECS countries. In particular, restrictions of movement of OECS labor should be eliminated and biases and regulations against foreign investment terminated.

   (d) Increasing the efficiency of the credit system through increased competition to reduce spreads between lending and borrowing rates and to reduce transaction costs.

   (e) Introducing tax reforms to make tax systems simpler and more uniform through coordinated regional action.

(f) Avoid accessing by the public sector of commercial and
.ppliers' credit sources of finance so that debt burdens do
not increase disproportionately.

(g) Assess the role of the construction industry and its effects
on wages, prices and resource shifts.

4. For the main sectors, the following policies are proposed:

(a) In agriculture:

- Improve banana productivity in the short-term while
developing alternative crops to increase agricultural
exports. Utilize marginal lands under banana cultivation for
profitable crops.

(b) In tourism and other services:

- Focus policies on increasing the supply of accommodations and
the suitability of infrastructure, and on developing a
regional facility to finance locally owned projects.

- Review the most appropriate competitive structure to improve
air transportation among the OECS countries and also improve
airport, water, sewerage and electricity facilities and
roads.

- Improve government planning resources to ensure that the
social aspects of development, such as environmental
pollution, are adequately considered.

- Undertake joint marketing efforts tc promote multi-
destination packages.

- Develop the support services that are needed to complement
the expansion of agriculture, manufacturing and tourism.

(c) In manufacturing:

- Concentrate expansion of export sales to the U.S. market.

- Encourage adaptability of resources through a well trained
labor force and the adoption of simple rules and regulations,
improve the regulatory climate for new businesses, and
examine restrictions on foreign entrepreneurs.

- Encourage enclave industries and agro-processing industries
and avoid high-cost, small-scale import substitution firms.

- Harmonize existing intra-OECS trade regulations.

- Eliminate all restrictions on trade among OECS countries, promote within CARICOM lower external tariffs, and lower import tariffs on final goods and eliminate restrictions on imports.

- Promote foreign investment.

(d)   In transportation:

- Encourage high-yield value, low-weight production of manufactured products to take advantage of generally favorable air transport rates.

- Improve local port facilities and procedures to reduce transport costs, particularly on sea shipments, and also improve existing intra-Caribbean services in response to increasing demand.

5.   Demographic and educational issues are of critical importance. The main suggested policy measures include:

(a) Make the primary level curriculum more accessible, increase the proportion of students who attend secondary school, integrate separate colleges at the tertiary level, formalize and expand apprenticeship opportunities, upgrade teacher quality at the primary and secondary levels, and provide a substantially higher priority to expenditures in supplies and equipment in educational budgets. At the same time family planning programs will need to be intensified in the OECS countries.

SUMMARY AND CONCLUSIONS

i.   Over the last decade, the Organization of Eastern Caribbean States
(OECS) countries--Antigua and Barbuda, Dominica, Grenada, St. Kitts and
Nevis, St. Lucia, and St. Vincent and the Grenadines--have achieved
significant gains in the standard of living of their people despite being
exceptionally vulnerable to unfavorable external circumstances. Overall,
the economies performed well despite declines in their terms of trade,
fluctuations in the growth performance of the world economy and inclement
weather, thanks to substantial inflows of concessionary financing.
However, a variety of favorable external factors which fueled past growth
are less likely to be at hand in the future. The guaranteed market for
bananas, of great significance to many of these countries, might be
affected adversely by developments in the European Economic Community which
are leading to the creation of a fully integrated market by 1992.
Additionally, the high levels of multilateral grant aid and concessionary
finance upon which the countries have been dependent have been declining,
and are likely to continue to over time. Nevertheless, a significant
potential for expansion exists if the countries pursue their comparative
advantage. Economic policies which will contribute to sustained
development over the medium to longer term are needed at a time when many
long-standing problems remain and new constraints are emerging.

Structure of Report

ii.   This report analyzes the OECS countries' development experiences
and their principal features. Chapter I summarizes the report's most
salient findings. Chapter II discusses the countries' long term economic
growth in comparison with that of other, larger, economies. Key
macroeconomic issues that have influenced past developments are examined in
Chapter III. The ensuing four chapters analyze issues and prospects in
trade, tourism, manufacturing and transportation, underscoring factors that
have shaped past and recent developments and that are important for future
policy consideration. Demographic and educational issues, common to all
countries, are discussed in Chapter VIII. The final chapter considers the
current outlook and attempts to reach some conclusions about future
strategic issues for the countries' development policies.

Economic Developments in Historical Perspective

iii.   The overall experience of the OECS countries since the 1960s has
approximated that of similarly situated developing countries, when measured
in terms of real growth of GNP and real GNP per capita. The pattern of
growth over this period, however, has differed sharply, with the OECS
countries experiencing relative stagnation up to 1980 and substantial
growth thereafter. The OECS countries did not borrow heavily in the 1970s
following the oil shocks, and hence they were less vulnerable to the
recession of the early 1980s. This beneficial experience suggests that
governments should refrain from accumulating debt on commercial terms to
finance future development needs, given the small size of their economies
and vulnerability to outside forces.

iv.   Resource flexibility in the OECS countries since 1961 has been broadly consistent with that displayed by similar developing countries, as measured by the changing sectoral composition of GDP. In particular, agriculture has become much less important as a share of GDP. Resource movements have responded to price incentives in bananas and in tourism as well as to tax and preferential market incentives in manufacturing.

v.   Substantial changes in international trade patterns have occurred since the early 1960s, particularly in the growth of various classes of manufactured goods which were virtually non-existent in the 1960s but which increased to about 20% of domestic exports by the mid-1980s. Suggestions that the economies are too small to develop manufacturing therefore are unfounded.

vi.   Ratios of investment to GDP in the OECS countries historically have been very high. The large size of many private projects relative to their economies have been partly responsible for this. The financing of this investment has been largely from private sources. Private sources have been used to finance a considerable proportion of public investment. Public sources of finance have involved mainly grant assistance or concessionary loans which have financed a large but decreasing proportion of public sector investment. However, the OECS countries are vulnerable to changes in the level of financing, since it is largely foreign in origin. Both foreign grants and loans are falling as a proportion of public sector investment. Also, an increase in the cost of foreign finance would tend to result in a reduction in the investment to GDP ratio.

vii.   The OECS countries are supported heavily by foreign flows. Foreign official grants, concessionary loans, net private transfers from abroad and the subsidy contained in the protected prices received for bananas and sugar together amount to about 25% of their total GDP. Overall, they have utilized these flows effectively. Any abrupt reduction in foreign flows would exert a dramatic impact on their economies.

The Macroeconomic Framework

viii.   The real exchange rate[1] in each of the OECS countries changes in response to changes in the U.S. dollar against other major currencies in real terms, in the resource gap and in the relative price of bananas.

ix.   The OECS countries share a common currency managed by the Eastern Caribbean Central Bank (ECCB) which is linked to the U.S. dollar. The exchange rate can be altered only by unanimous agreement. Two key elements provide the current system with stability and should not be relaxed: (i) strict limitations on the ability of governments to monetize public debt by borrowing from the ECCB; and (ii) the backing of at least 60% of the demand liabilities of the ECCB by hard currency assets. The robustness displayed by the exchange rate system in the past is important in assessing likely future developments, such as the possibility that the key U.K. market for bananas may be disrupted by the full integration of the European Economic Community in 1992.

1/   The exchange rate is defined, following the standard convention utilized in the Latin America and Caribbean Region, as units of domestic currency per units of foreign currency.

x.   All of the OECS countries have sustained large resource gaps.
Increases in the resource gap result in a decrease of the real exchange
rate (i.e. an appreciation of the currency). In the case of agricultural
production, since most of it is internationally traded, a drop in the
relative price of traded goods vis-a-vis the price of non-traded goods will
reduce agricultural production. The countries need to strengthen their
outward orientation over time to gradually move away from excessive
dependence on foreign assistance flows to increasing exports of goods and
services. Tourism eventually could generate adequate external receipts to
achieve gradually self-sustaining growth, supported by increasing export-
oriented manufacturing activities. Additional expenditures on education
would be critical for the labor force to gradually acquire the skills
required by the growth industries.

xi.   Four of the OECS countries (Dominica, Grenada, St. Lucia, and St.
Vincent and the Grenadines) receive a substantial subsidy in the form of
sales of bananas in the U.K. at prices above world levels. The recent LOME
IV Agreement has the same Protocol in bananas as LOME III, and its
application has been limited to traditional ACP producers. However, until
the actual mechanism by which this protection will be given has been agreed
upon, the long-term prospects for banana production are uncertain. If the
negotiations surrounding the creaticn of a single market in the European
Economic Community by 1992 were to lead to a reduction in the subsidy
received on bananas, the impact on the OECS countries would be severe.
Banana growing countries would experience sharp falls in income and severe
deflationary pressures, offset only marginally by increases in non-banana
agricultural production in the short-term. All OECS countries together
could experience a large shock to the exchange rate system.

xii.   Diversification into tourism, manufacturing, other agriculture and
services could be enhanced by policies which promote greater freedom of
movemer.t of labor and capital among the OECS countries, and sufficient
flexibility in wage rates. Emphasis should be given to the development of
the support services that are needed to complement the expansion of
agriculture, manufacturing and tourism. At the same time, the countries
should assess the role of the construction industry and its effects on
wages, prices and resource shifts.

xiii.   It is desirable that the price subsidy for bananas be only
gradually phased-out over the longer-term to prevent an abrupt shock to the
economies and to allow for the development of alternative activities. The
phasing-out of the price subsidy inevitably involves diversification into
tourism, manufacturing, other agriculture, and services. These
possibilities should not, however, be overstated. Tourism, which has the
strongest growth prospects, is projected to generate additional gross
receipts of only about US$9 million each year to 1994 in the four Windward
Islands (Dominica, St. Lucia, St. Vincent and the Grenadines, and Grenada).
Since these are gross receipts, and the price subsidy on bananas (an
estimated US$38 million in 1986) is a net gain, it would take a long period
for tourism to generate an equivalent increase in net income for the
Windward Islands.

xiv.   For all six OECS countries, gross receipts from tourism are
projected to rise sharply, by about US$26 million per year. This suggests
that the region as a whole might not experience an unsustainable balance of
payments problem, but that strong balance of payments strains are likely to

emerge within individual economies. One way of reducing these would be to promote greater freedom of movement of capital and labor among the OECS countries. Another way of reducing these pressures and maintaining the stability of the exchange rate system is to pursue policies that encourage flexibility in resource use. Money wages, in particular, would have to be sufficiently flexible so as to promote employment, and land use restrictions would require revision.

xv.   The institutional credit system has become more diversified and open in recent years, but weaknesses remain. Spreads between lending and borrowing rates are high, there is an absence of institutional traders in bonds and equities, and regulations are unnecessarily diverse and complex. Increasing the efficiency of the credit system is an important objective.

xvi.   Reforms are necessary to make tax systems simpler and more uniform, through coordinated regional action. Grenada's experience with the introductio·. of a value added tax suggests that tax reform is a complex operation that requires careful attention at political and administrative levels. Economies of scale may well exist if these problems were tackled on a regional level.

Agriculture

xvii.   As a group, the banana producing countries have become more dependent upon bananas in the 1930s than in the 1970s despite the long-term decline in agriculture's share in GDP. The profitable use of resources in bananas, operating through substitution and real exchange rate effects, has been a factor in limiting the development of a more diversified, although less profitable agriculture. Empirical results show that the supply of bananas is very responsive to their relative price, and that most other crops are substitutes for bananas. In addition, an increase in the relative price of bananas results in a decline in the price of non-banana crops relative to the price of non-traded goods, putting further downward pressure on non-banana agricultural output. Moreover, increases in the resource gap have adversely affected the production of non-banana crops, since such increases reduce the relative price of traded goods through the real exchange rate effect.

Tourism

xviii.   Tourism, broadly defined, is the largest industry in the world, and has excellent growth prospects, with an overall income elasticity of demand well above unity. An expanding market clearly exists for the OECS countries, and their overall share of world or regional tourism is so slight that major expansion is possible without causing disruptive competitive pressures. The industry has the potential to generate more employment opportunities and higher real wages than other sectors. The major external determinants of the expansion of tourism in the OECS countries are the growth of income in North America and Europe, and the evolution of the U.S. dollar. Internally, the supply of accommodations and the suitability of infrastructure, especially air transport links, are the key determinants.

vx.   Movements in the U.S. dollar were favorable to OECS tourism growth until recently. A depreciating U.S. dollar encourages both U.S. and European tourists to travel in dollar areas, and the growth of European

tourism has been especially strong. An appreciation of the U.S. dollar will dampen some of this growth, but growth will continue unless there is a major disruption such as a world recession or an oil shock.

xx.   Government incentives for tourism are adequate in all OECS countries. Commercial accommodations are expected to expand in all OECS countries, substantially in some. Large projects usually are foreign financed, often with government involvement. It would be beneficial that this type of development be complemented by local finance of smaller locally owned projects. Consideration of a regional facility to support such development should be undertaken by the ECCB as part of its broader capital markets study.

xxi.   Transport links have developed substantially in recent years in response to market demand. The role of LIAT, the regional air-carrier, in providing internal flights has been examined to determine whether a more competitive environment would facilitate the further development of transport links. A joint venture operation with a majority of shares held by Caribbean shareholders has been proposed. Some airport facilities will need to be improved to accommodate anticipated traffic, particularly those in Antigua and Barbuda, Dominica, St. Kitts and Nevis, St. Lucia, and St. Vincent and the Grenadines. Other major tourism-related infrastructure requirements include water, sewerage, electricity and road maintenance and rehabilitation, together with improved health facilities and human capital development. The possibility of joint-tourism promotion efforts should also be considered.

xxii.   Tourism development is likely to generate costs, e.g., environmental contamination. Their small size makes the OECS countries particularly vulnerable, and some environmental degradation already has occurred. The solution is not to forego tourism but to ensure that planned development is followed. Government planning resources, however, are not at present capable of handling these problems and need to be reinforced to ensure that the environmental costs of tourism development are minimized.

Manufacturing and Trade

xxiii.   In the OECS economies as a whole, the key influences on the pattern of growth of the manufacturing sector have been developments in agriculture and in tourism. On the one hand, booms in tourism and bananas have resulted in a decrease of the real exchange rate and raised the level of real wages. Both developments have impinged negatively on the growth of the sector. The banana boom in the Windward Islands and the tourist boom throughout the OECS have attracted resources away from other sectors, including manufacturing, and, to the extent that the latter depends on external markets, they have reduced its competitiveness. On the other hand, these booms have stimulated the development of manufacturing through various linkage effects. Firms that have forward links to tourism have experienced a positive stimulus, but there are few such firms and those that do exist tend to be very small in scale (batik fabric, handicrafts, furniture, table mats). Firms with backward linkages to tourism, such as food and beverage firms and firms producing construction materials, also have experienced a positive stimulus. Firms linked to the banana industry as suppliers of inputs have received a positive stimulus from the banana

boom, the most significant example being the cardboard box industry. In addition, the income effect of these booms has generated increased demand for locally produced products such as beverages, construction materials, food products, furniture and locally assembled appliances. Given data deficiencies on the value of manufacturing output by industry, it is difficult to estimate the significance of these linkages in the overall manufacturing sector, but such evidence as exists suggests they are important.

xxiv. The Fiscal Incentives Acts have been utilized to encourage manufacturing and to offset some of the costs imposed on manufacturing exports by the Common External Tariff (CET). However, the Acts are deficient in several respects, especially in that they take no account of the additional costs borne by exporters when they use domestic inputs protected by CARICOM tariff schedules and other restrictions. The best solution to this deficiency is to lower import tariffs on final goods and eliminate import restrictions on inputs. Consideration also should be given to incentives that encourage exports of manufactured products through reduced tax rates on profits earned on exports, a program already in place in some of the countries.

xxv. Manufactured goods are exported to the U.S., Canada and Europe. The latter two markets, however, purchase little at the present time, and since the U.S. market is open and more easily accessible, resources should be devoted to expanding sales there.

xxvi. Manufacturing prospects will be affected by the outcome of current negotiations concerning the Uruguay Round, Lome, the Caribbean Basin Initiative and the Multi-Fibre Agreement. In general, the OECS countries stand to lose some of their preferential trading relationships if there are general reductions in tariff and non-tariff barriers, but they stand to gain from a more liberalized world trading regime.

xxvii. The OECS countries will never be diversified sufficiently to prevent external shocks from impacting on them. In these circumstances, a sound strategy is to forge a flexible and adaptable economy which can respond quickly to changing circumstances. Flexibility comes from a number of sources: a well trained labor force, simple rules and regulations, and adaptable entrepreneurs. The OECS countries contain three types of manufacturing firms: enclave, agro-processing, and import substitution. The latter receive high levels of effective protection, are small in scale and unsuited for adapting to changing economic circumstances. Enclave industries, and to a lesser extent agro-processing industries, are more likely to impart the skills to labor and management that will provide for flexibility in response to changing circumstances.

xxviii. There is no magic formula for trade policies that will maximize the growth of a sector that over time will generate productivity gains through adaption and innovation. Experience suggests it is important that firms operate in an environment where competitive pressures are present. In principle, that is the current policy stance of the OECS countries. In practice, trade continues to be restricted among OECS countries, intra-CARICOM trade is subject to changes in countries' policies (devaluations, licensing, foreign exchange controls), and the CET is neither harmonized among countries nor consistently implemented. Among OECS countries, there

is an absence of tax harmonization and no consistency in the administration of incentives or of regulations relating to manufacturing, let alone freedom in the movement of capital and labor. The CET generates very high rates of effective protection, and there is no clear rationale for the levels of tariffs that exist. Two reforms are desirable: (i) the harmonization of existing intra-OECS trade regulations by the establishment of a common controller of customs and excise, charged with ensuring fair treatment for all intra-OECS trade and for a common administration of the CET pertaining to the OECS (with such adjustment for Montserrat as may be needed). Until such a time as it is possible to establish over the medium to longer term a common controller of customs and excise, a committee of customs controllers should be set up to report to the OECS on progress made in achieving increased harmonization; and (ii) the OECS should promote, within CARICOM, a reversal of the 1984 Nassau Accord, and seek to lower tariffs to a more moderate level. A more far-reaching trade reform would be to adopt a common and uniform tariff level for all products, thus eliminating the effects on production caused by high and variable levels of effective protection. Lower tariff levels (or a uniform tariff for all products) would reduce the incentives to import substitution industries, particularly those which rely heavily on imported inputs. A low uniform tariff for all products also would reduce smuggling.

xxix.   In Antigua and Barbuda manufacturing has experienced a period of growth and then decline. High real wages generated by tourism have squeezed out manufacturing firms, and the downward trend is not likely to be reversed. The country should be careful, therefore, in resource use and not attempt to attract inappropriate, small scale import substitution firms through expensive tax and other incentives and high cost import restrictions.

xxx.   In Dominica manufacturing is confined almost entirely to agro-processing. Enclave industry development is restricted by inadequate airport facilities, but other factors also have had a negative effect: the banana boom, the regulatory framework and the incentive structure. There is a virtual absence of firms selling to the U.S. under 806/807 regulations. The country needs to continue to improve the regulatory climate for new business and to provide incentives to counter the impact of the CET in raising the cost of domestic inputs to firms which have to compete in export markets.

xxxi.   Grenada has good manufacturing prospects deriving from its transportation infrastructure and wages rates, but investment policies require further improvement. A simpler tax and regulatory environment is needed to consolidate and improve upon recent changes.

xxxii.   In St. Kitts and Nevis manufacturing is dominated by sugar and enclave industries, particularly clothing and electronic components. Over the longer term the sugar industry would decline as production costs increase faster than prices in Europe. Clothing is sensitive to labor costs and could decline in the face of strong competition for labor from tourism and construction. Electronic firms may share the same fate, although in the short to medium term they will experience less difficulty in recruiting labor. The country retains some protectionist policies against other OECS countries that were supposed to have been eliminated on January 1, 1988, and which should be eliminated.

xxxiii. In St. Lucia manufacturing is highly diversified and in the midst of an export boom generated by sales to the U.S. market. Prospects over the medium term are good, but over the longer term competition for labor may force a slowing down or contraction of exports, particularly in garments. The country should review its policies relating to the inflow of labor from other OECS countries, with a view to making it more open.

xxxiv. In St. Vincent and the Grenadines manufacturing prospects are based on increasing exports to the U.S. market. Agro-processing is an important component of the economy but has limited growth prospects. Exports to the U.S. under 806/807 regulations face fewer restrictions than those to CARICOM or other markets. However, improvements in bureaucratic efficiency and in the regulatory framework are required. In particular, the process of starting up or expanding a business and the incentive scheme for exports should be simplified.

Selected Transportation Issues

xxxv. The freight rate structure is complex. A marginally higher rate for the OECS countries than competitors face on a product subject to intense competition may be far more important than lower rates on a wide variety of less competitive products in determining the direction and profitability of trade. In addition, factors such as frequency and reliability of service may be extremely important in determining competitiveness of exports.

xxxvi. Freight rates on air shipments from the OECS countries to the U.S. are lower than competitors' rates, and a high proportion of shipments go by air. Freight rates on water shipments, however, experience less favorable treatment on average, but there is no evidence of systematic discrimination against OECS goods. The cost difference as between shipping by air or by water is a small one for products which can be shipped by either mode. The OECS countries should exploit the air freight differential to the U.S. and encourage production of high value, low weight manufactured products such as electronics. Port improvements, bulking of cargoes and intensification of container transport would assist in reducing transport costs on water shipments, particularly of agricultural products.

xxxvii. Rates and levels of service on intra-Caribbean trade are matters of concern to regional shippers. However, the total volumes shipped are not large, and therefore a high-cost, inter-Caribbean shipping service could not be supported by the available traffic. Improvement of existing services in response to increasing demand is more feasible.

xxxviii. Air freight shipments will not justify heavy expenditures on new airport facilities: such justification can come only from tourism development on a scale to warrant such developments. Any major infrastructure proposals will therefore need to depend upon sufficient growth of tourism for their economic justification.

Demographic and Educational Issues

xxxix. Out-migration in the OECS countries has been a common feature for over 100 years, the timing and level of which has been dependent upon economic opportunities abroad and the prosperity of local agriculture.

However, The Bahamas has developed an economy based on tourism which does not experience out-migration on a net basis, and it could be possible for the OECS countries to follow this pattern. Labor force projections suggest that the labor force in the OECS countries will grow at 2%-3% per year to the year 2000--relatively high rates which will require rapid and sustained economic growth if unemployment is to be lowered. At the same time family planning programs will need to be intensified in the OECS countries.

xl.   Education is the key to the provision of a flexible and adaptable labor force that can respond to the changing international economic environment and develop competitive tourism, manufacturing and agricultural industries. The current educational system is strongly rooted in the U.K. model inherited from the pre-independence period. Enrollment trends are stable or declining at the primary level, but expanding or stable at the secondary level. Many more females than males are enrolled in the secondary school system in all countries but St. Kitts and Nevis, which has abolished the 11-plus examination, an examination taken on or after a student's eleventh birthday to test for ability to proceed to secondary level education. However, because of the 11-plus system and a shortage of places, secondary level enrollments are low everywhere except in St. Kitts and Nevis. Tertiary education enrollments are also low. More resources need to be devoted to the secondary and tertiary school systems to increase the number of places, and technical and vocational education must be given equal priority with the academic stream in order to meet the labor requirements of the economy.

xli.   Current expenditures on education have not increased in proportion to GDP or total government current expenditures. Differences across the OECS countries in current expenditures on education are attributable to different age structures and different levels of GDP per capita: countries with young populations and relatively low GDP per capita such as St. Vincent and the Grenadines tend to spend a high proportion of GDP on education. Expenditures per pupil as a percent of GDP per capita are, however, fairly similar. Expenditures on supplies and equipment are very low in all countries. In order to prevent a continuation of this problem, governments should give a substantially higher priority to expenditures in supplies and equipment in education budgets.

xlii.   The quality of education is low: failure rates in the 11-plus exam are 50% or more; success rates in secondary school examinations are generally poor; most primary teachers are untrained; no more than 40% of secondary school teachers have degrees in their subject; teacher attrition is high; and equipment and buildings are inadequate. Teacher quality should be upgraded by improving conditions in the profession and by allowing technically skilled personnel to be drawn upon in technical and vocational training.

xliii.   In short, the educational system should instill general knowledge and communication skills in order to ensure that the graduates will be able to adapt to a changing environment. There is no single response that will accomplish this: change is required in a number of areas, many of which could be pursued at the regional level. In particular, the primary curriculum should be made more accessible; more places are needed at the secondary level; separate colleges should be integrated at the tertiary

level; apprenticeship opportunities need to be formalized; teacher quality requires up-grading; and labor market information systems need to be improved.

Long Term Prospects and Foreign Indebtedness

xliv.   The development challenge facing the OECS countries is to surmount potential problems in the form of a loss of preferential markets in bananas and sugar and a reduction in the level of grants and concessionary loans through efficient exploitation of their comparative advantage, especially in tourism and manufacturing and in the development of services the growth of these activities are likely to generate. Key ingredients to successful development are policies that foster private investment in these areas, that provide suitable public infrastructure, and that increase domestic savings rates.   Increasing public sector external debt ratios, on the other hand, will pose a severe drain on real resources and reduce government flexibility, and ultimately lead to falling standards of living.

xlv.   Employment generation is an important consideration of all OECS countries, especially so in those with high rates of unemployment. Although the statistical evidence is scattered and not fully reliable, current levels of unemployment and underemployment appear to be high in Dominica, St. Lucia, St. Vincent and the Grenadines, and Grenada. In addition, St. Lucia, and St. Vincent and the Grenadines are experiencing rapid population growth, implying rapid increases in labor force growth in the future. Sound domestic policies which encourage economic growth are the only solution to the employment problem.

xlvi.   Growth prospects for the OECS countries are highly dependent on growth prospects in their major export markets, and on domestic policies that will promote growth in tourism and in manufacturing. Present projections for real growth in the major export markets are favorable. However, timely policy action from governments will be required if the projected growth outcomes for the OECS countries are to be achieved. Key ingredients include the generation of increased public sector current surpluses through restraint on public expenditure. A critical component of the overall policy strategy is to ensure that the public sector current accounts generate the level of surpluses that will contribute to the financing of gross investment required for growth and that will allow for the honoring of existing and new loan commitments. Policies are also needed to attract private foreign investment by reducing and simplifying rules and regulations, and by providing the supporting infrastructure. Governments need to eliminate price controls and subsidies, simplify CARICOM tariff schedules, reduce restrictions on land ownership, and abandon government monopoly rights on imports and exports. Government divestment of hotels and other tourist accommodations should take place in a planned and timely manner. The respective governments would need to strengthen their long-term strategies, including the underpinning of policies necessary for the continued growth of their countries. Donor support in the implementation of these strategies would be required.

xlvii.   The impact of a possible banana shock in 1993 is projected to be most severe in Dominica and St. Lucia. The impact in St. Vincent and the Grenadines is projected to be less severe but still a matter of concern, whereas the impact in Grenada is projected to be marginal. Assuming no

banana shock, growth prospects in all OECS countries are projected to be favorable. Achievement of high growth in all cases will require the adoption of favorable domestic policies, including regional initiatives where appropriate.

xlviii. The policy agenda for the OECS countries in many areas could best be carried out through common regulations and services. The most promising areas for joint efforts lie in the provision of common services (legal, economic, scientific); the development of common policies (foreign investment, financial institutions, migration, education curricula); and the undertaking of concerted actions in certain key economic areas (agricultural marketing, transportation, tourism). However, it is necessary to ensure that regional bodies do not proliferate unduly.

xilx. In most countries, growth will require the utilization of foreign sources of finance, both public and private. Overall, the OECS countries had low debt service ratios in 1988. Projected scenarios to the year 2000 indicate that debt service ratios can remain manageable provided a blend of concessional hard and soft loans and grants is available and provided private foreign direct investment is forthcoming. However, caution will be required to ensure that the public sectors avoid accessing commercial and suppliers' credit sources of finance and that debt burdens do not increase disproportionately. Therefore, concessional financing from bilateral and multilateral sources as well as grants would be highly desirable to close the external financing gaps of the respective countries.

l. Antigua and Barbuda has a strong economic base in tourism and has considerable opportunity for expansion in this area. Manufacturing and agriculture are not projected to be strong growth sectors. The key problem facing the country is to resolve the burden of the existing high level of public sector external debt, and to avoid undertaking new public sector external debt commitments on non-concessionary terms. Internal sources should be mobilized to finance the infrastructure improvements needed to support tourism, and the private sector should finance the expansion of accommodation facilities and related tourism requirements.

li. St. Kitts and Nevis in on the verge of becoming much more heavily oriented towards tourism. In the short to medium term, agriculture and manufacturing will provide some impetus to growth, but in the longer term tourism is projected to dominate as in Antigua and Barbuda. The sugar industry is projected to be phased-out over time owing to competitive pressures from other producers, and the garment sector of the clothing industry will probably be sharply reduced in size. The electronics sector is more favorably positioned to survive in the medium-term but long-term prospects are not strong, owing to anticipated competition from tourism for labor. The Government should ensure that public sector involvement in tourism development is limited to the provision of infrastructure in concessionary loan terms

lii. Dominica's future growth hinges on the prospects for export expansion: tourism is not projected to be as strong a growth industry as in the other OECS countries, owing to the lack of white sand beaches, and bananas and agro-processing face uncertain futures. Agricultural exports to the other OECS countries, particularly to supply the increasing tourism, have a potential that needs to be pursued. Key public issues relate to the

elimination of the anti-export bias imposed on agro-processing firms by the CARICOM trade regime, and to the encouragement of enclave industries by the continuing elimination of regulations which inhibit their development. A small tourism sector, catering to special segments of the market has some potential and should be fostered. Existing initiatives to improve the public sector's performance need to be continued and enhanced.

liii. St. Lucia has the most balanced economy among the OECS countries, with considerable strength in agriculture, manufacturing and tourism. Agriculture is highly dependent on bananas. Manufacturing, however, is well diversified and geographically dispersed, and has displayed considerable strength in recent years on the export side. Tourist accommodation has been stagnant in terms of numbers of rooms, but projections are for considerable expansion in this area. Government support is required in the provision of infrastructure, especially road improvements and water supply, but the main responsibility on Government is to develop and maintain policies which encourage private sector initiatives, especially in manufacturing and tourism. The Government should continue to avoid public sector debt on non-concessionary terms.

liv. St. Vincent and the Grenadines lags behind the other OECS countries in terms of GDP per capita, but the country has considerable prospects for growth in the longer-term. Agricultural diversification programs appear to have had some success and manufacturing has shown some strength in selected areas. Expansion of agro-processing industry is a possibility, but expansion of enclave industries would appear to offer more long term growth prospects. In tourism, growth possibilities are very strong in the Grenadines, which have a broad appeal to a large section of the market. Prospects for developments on the mainland are not nearly as strong, but some expansion is probable.

lv. Grenada has bright prospects in tourism and manufacturing, but the country needs to surmount its administrative difficulties and develop sound, effective policies that will be attractive to domestic and foreign entrepreneurs. Some reform has been undertaken along these lines, but more is required. Grenada has a highly diversified agricultural base, focussed on bananas, nutmeg and cocoa, but the country has not been able to produce a regulatory environment conducive to sustained development in the agricultural sector. Central to public policy in Grenada is the attainment of a sound fiscal policy, based on containment of expenditures and the administration of an efficient tax system.

CHAPTER I

OVERVIEW

1.01   Over the last decade, the Organization of Eastern Caribbean States (OECS) countries--Antigua and Barbuda, Dominica, Grenada, St. Kitts and Nevis, St. Lucia, and St. Vincent and the Grenadines--have achieved signif:cant gains in the standard of living of their people despite being exceptionally vulnerable to unfavorable external circumstances. Overall, the economies performed well despite declines in their terms of trade, fluctuations in the growth performance of the world economy and inclement weather, thanks to substantial inflows of concessionary financing. However, a variety of favorable external factors which fueled past growth are less likely to be at hand in the future. The guaranteed market for bananas, of great significance to many of these countries, might be affected adversely by developments in the European Economic Community which are leading to the creation of a fully integrated market by 1992. Additionally, the high levels of multilateral grant aid and concessionary finance upon which the countries have been dependent have been declining, and are likely to continue to decline over time. Nevertheless, a significant potential for expansion exists if the countries pursue their comparative advantage.

Table I.1: OECS - GNP PER CAPITA, 1978 and 1987

	1978 GNP per Capita (US$)	1988 GNP per Capita (US$)
Antigua and Barbuda	1000	2800
St. Kitts and Nevis	700	2770
Dominica	470	1650
St. Lucia	730	1540
St. Vincent and the Grenadines	450	1100
Grenada	570	1370

Source: IBRD, Atlas Methodology.

1.02   The purpose of this report is to identify and analyze factors and policies that have contributed to past performance, to set recent developments in better perspective and to assist in framing the relevant issues and questions for policy formulation. Thus, the report focuses on a number of key areas which are critical for the countries' longer-term development: the macroeconomic framework; trade matters; sectoral issues relating to tourism; manufacturing and transportation; and demographic and educational issues. Montserrat, a member of the OECS but not of the IBRD, is discussed in Annex I.

1.03   The OECS countries differ considerably in terms of current economic structure and future growth prospects. Dominica and Antigua and Barbuda illustrate the point, but almost any two countries would. Dominica

is heavily dependent on agriculture and agro-industry, has very little
light manufacturing serving North American markets and few of the standard
tourist attractions, especially sand beaches. Antigua and Barbuda has
virtually no agriculture or manufacturing industry. Its present and future
prospects are linked to the exploitation of its traditional tourist
attractions, particularly large numbers of sand beaches. However, common
themes recur in the analysis of individual countries, in particular:
(i) rising real wages; (ii) the banana boom; (iii) the growth of tourism;
and (iv) the role of education.

1.04   Real wages are rising in the OECS countries, but at different
rates. Rising real wages are related to the current banana boom, to aid
flows to the region, and to the expansion of tourism. They reflect a
mixture of real productivity gains, exploitation of the economic rent
inherent in the possession of "sea, sand and sun", and transfers and other
flows from abroad.

1.05   Bananas are an extremely important export crop for three countries
(Dominica, St. Lucia, and St. Vincent and the Grenadines), an important
crop in one country (Grenada), and have no direct significance as an export
crop in two countries (St. Kitts and Nevis, and Antigua and Barbuda).
Nevertheless, bananas have great significance for all OECS countries, owing
to the possible impact of a permanent sharp fall in the real price of
bananas on the stability of the exchange rate system. Such a fall would
reduce export earnings and put pressure on foreign exchange reserves,
making it more difficult to maintain the exchange rate link with the U.S.
dollar at its current rate. Often such real price adjustments require an
adjustment in the real exchange rate. In the case of the OECS countries,
unanimous agreement is required to alter the nominal exchange rate, and in
the event of a fall in the price of bananas only three (or at most four)
countries would require the adjustment in output patterns that a real
devaluation would facilitate. The means whereby a real devaluation could
be achieved without altering the nominal exchange rate despite a permanent
deterioration in the real price of bananas is discussed in Chapter III.

1.06   The banana boom has had a mixed impact on agriculture. On the one
hand, cash income from bananas provides resources to finance diversifica-
tion into other crops. On the other, high cash incomes from bananas divert
resources away from other crops. The net effect is an empirical question
which is analyzed in Chapter IV, where it is shown that the second effect
predominates. Despite considerable effort devoted to agricultural
diversification, value added in agriculture is likely to make a declining
contribution to GDP over time, following, in this, past trends in other
countries and in the OECS countries themselves.

1.07   The OECS countries have been increasing their share of tourism in
both Caribbean and world markets. The distribution of tourist arrivals is
uneven among the OECS countries and reflects the differences in tourism
assets of the individual countries and the general economic context of each
country. All the OECS countries plan to develop their tourism sectors
further. Chapter V analyses projected tourism volumes to the year 2000 and
their possible impact on employment and foreign exchange earnings. Based
on current trends in world travel, it is likely that all countries will
experience strong growth in tourism, provided they follow sound economic
policies. St. Kitts and Nevis, and Grenada appear to have especially
strong prospects for tourism growth.

1.08   The tourist boom and, in the absence of labor mobility, the associated rise in real wages, squeezes profitability in both agriculture and manufacturing. Agriculture and manufacturing are therefore under strong pressure that prevents their expansion. There is a potential positive impact or linkage between tourism on the one hand and agriculture and manufacturing on the other, but there is also a negative impact in terms of competition for scarce resources, especially labor. From a sectoral perspective, possibilities for expansion of agriculture often look more promising than they really are, because that perspective does not take into account the even more profitable opportunities available in other sectors of the economy. Similarly, rising real wages and competition for labor impact negatively on growth prospects in manufacturing. Firms producing garments for sale in the U.S. under 807 regulations appear to be the most sensitive to real wage pressures, but all manufacturing is potentially sensitive. Chapter VI analyses prospects for manufacturing, and Chapter VII discusses the cost and adequacy of transportation linkages for manufactured and other products.

1.09   Some OECS countries currently are experiencing labor shortages not only in skilled but in unskilled occupations. In others, measured unemployment rates almost certainly overestimate the available labor supply. Labor force growth to the year 2000 is projected to be high. However, it should be noted that these conclusions are not likely to change even though labor force and labor force data for the OECS countries are deficient.

1.10   The education system, in all countries, is structured according to the British model, which is oriented towards secondary and tertiary education. This model is inappropriate for current and future manpower needs, and results in a high proportion of students who are considered failures in the system. Proposed solutions, including revised curricula and increased resources, are discussed in Chapter VIII.

1.11   The OECS countries receive assistance in various forms -- conventional grant aid, concessionary loans, and sales of bananas and sugar in protected markets at prices above world levels. Levels and trends in these forms of assistance are discussed in Chapter II. The long-term economic viability of the countries depends upon their ability to generate self-sustaining export-led growth and a rate of domestic saving to service a portion of their external borrowing requirements at market rates of interest. These are analyzed in Chapter IX.

1.12   The major findings of the study are: (i) maintenance of the fixed exchange rate system will require flexibility in domestic labor markets and mobility of labor and capital among the OECS countries, should a sharp drop occur in the price of bananas; (ii) rising real wages are leading to a restructuring of economic activities, in which agriculture (and agricultural diversification) can compete successfully only with strong price incentives to the producer; (iii) tourism is emerging as the key ingredient in economic growth, but supporting infrastructure problems need to be addressed; and (iv) the educational system exhibits deficiencies both in curriculum design and in the level of resources devoted to it.

CHAPTER II

ECONOMIC DEVELOPMENTS IN THE OECS COUNTRIES: A HISTORICAL PERSPECTIVE

A. Overview

2.01   This chapter analyzes economic growth in the OECS countries since 1961, and the level and financ'ng of investment since 1977. Growth of output and of output per capita is analyzed using yearly averages for five periods from 1966, and compared to growth patterns in other countries. Sectoral shares of GDP are analyzed from the early 1960s, and the substantial shifts in resource allocation that are observed are compared to shifts in other countries. The pattern of domestic exports also shows substantial changes since the 1960s. Ratios of investment to GDP have been high since the late 1970s, and the sources of financing of these high levels are discussed. It is not the intent of this historical analysis to draw conclusions concerning long term economic prospects, but simply to place the economic development of the countries within a conventional framework. The extremely small size and vulnerability of their economies sometimes gives the wrong impression that they are in some fundamental sense unique and not subject to normal economic processes. The chapter also examines their patterns of domestic price movements, and, given the fact that the OECS countries share a common currency, it considers the circumstances surrounding the change from a link to the pound sterling to the link to the U.S. dollar in 1976.

B. Growth of Output and Output Per Capita

Output

2.02   Five periods are analyzed for measuring output in the OECS countries (see Table II.1 below): 1966-69, 1970-74, 1975-79, 1980-84 and 1985-86. Annual output grew by 66% from 1966-69 to 1985-86 for all five OECS countries combined. Output increased in each period after 1966-69. However, individual country performance differed markedly from the average. Growth in output from 1966-69 to 1985-86 ranged from 25% in Dominica to 114% in St. Lucia, with two countries attaining growth of about 100% (St. Lucia 114%, and St. Vincent and the Grenadines 86%) and three countries achieving much lower growth (Dominica 25%, Antigua and Barbuda 49%, and St. Kitts and Nevis 51%). Both Dominica and Antigua and Barbuda experienced sharp declines in annual output in 1975-79 as compared to 1970-74--of 13% in Dominica and 8% in Antigua and Barbuda--whereas output expanded in every period for the other three countries, except that output in St. Vincent and the Grenadines fell very slightly in 1975-79. The similar experience of Antigua and Barbuda, and Dominica is unusual in that the economic base of these two countries differs greatly -- at least at the present time in terms of reliance on agriculture and the role of tourism. St. Lucia, and St. Vincent and the Grenadines, which registered the largest increase in output over the period, also experienced increases in the ratio of domestic exports to GDP over the period as a whole. The ratio of domestic exports to GDP tended to fall in Dominica, while that for Antigua showed variability but was at a very low level throughout (see Table 2.21

Statistical Appendix). The variability in growth experience reflects these differences in the growth of domestic exports, but other factors played a role, especially tourism, foreign assistance and private capital inflows.

2.03   The timing of major yearly cyclical peaks and troughs in output is roughly similar among the five countries. Economic activity tended to reach a trough in 1968 or 1969, a peak around 1973 and a trough in 1976. Apart from a trough in Dominica in 1979 (hurricane related), output has shown expansion in every country since 1976. It is remarkable that output increased in the OECS countries during the world recession of the the early 1980's. Fiscal prudence in the 1970's meant that the countries did not experience the debt-induced recession of so many other countries.

TABLE II.1: ANTIGUA AND BARBUDA, DOMINICA, ST. KITTS AND NEVIS,
ST. LUCIA, ST. VINCENT AND THE GRENADINES -
YEARLY AVERAGES OF GROWTH IN GNP, 1966-86
(GNP in 1980 EC$ million)

		1966-69	1970-74	1975-79	1980-84	1985-86
Antigua and Barbuda						
	Real GNP	242	242	223	299	360
	1966-69 = 100	100	100	92	124	149
	1975=79 = 100			100	134	161
Dominica						
	Real GNP	157	182	158	180	197
	1966-69 = 100	100	116	101	115	125
	1975-79 = 100			100	114	125
St. Kitts and Nevis						
	Real GNP	88	95	111	135	142
	1966-69 = 100	100	108	126	153	161
	1975-79 = 100			100	122	128
St. Lucia						
	Real GNP	173	216	262	313	371
	1966-69 = 100	100	125	151	181	214
	1975-79 = 100			100	119	142
St. Vincent and the Grenadines						
	Real GNP	115	140	139	175	214
	1966-69 = 100	100	122	121	152	186
	1975-79 = 100			100	126	154
Total	Real GNP	775	875	893	1102	1284
	1966-69 = 100	100	113	115	142	166
	1975-79 = 100			100	123	144

Source: World Tables 1987. Comparable data for Grenada are not available.

2.04   Growth performance since the trough in economic activity in 1976 has differed sharply from that since 1966. Using yearly average figures for 1975-79 and 1985-86, Antigua and Barbuda has led the OECS countries with 60% growth, St. Lucia and St. Vincent and the Grenadines have been in the 40% to 55% range, and St. Kitts and Nevis and Dominica have been around 30%. Roughly speaking, St. Kitts and Nevis, St. Lucia, and St. Vincent and the Grenadines were stable or grew steadily over the 20 year period, Dominica experienced sharp cyclical movements and a low overall growth

trend, and Antigua and Barbuda stagnated or declined for 10 years and then expanded sharply. Dominica's economy remains heavily linked to agriculture and associated manufacturing industries, which would tend to generate cyclical movements in the economy as a whole and relatively low growth. Antigua and Barbuda's stagnation is related to the collapse of sugar in the 1960s, when domestic exports virtually disappeared, and the long time lag before tourism was able to provide an alternative flow of income.

2.05 Cyclical growth behavior in the five OECS countries differed sharply from the general experience of industrial countries, and represented long periods of frustrated expectations. In industrial countries a drop in real output is usually overtaken within a year or two, but three of the OECS countries experienced very long periods during which real output failed to attain a previously achieved level. It took 12 years for Dominica to reattain the level of real output achieved in 1973, 9 years for St. Vincent and the Grenadines to reattain its 1973 level, and 8 years for Antigua and Barbuda to reattain its 1972 level.

Output Per Capita

2.06 Population increases have not been uniform across the five OECS countries, and therefore the pattern displayed by yearly averages of per capita output differs from that displayed by total output (see Table II.2 below). However, population changes have been such that they tend to accentuate rather than dampen the differences among the five countries. Roughly speaking, population grew by 30% to 40% in Antigua and Barbuda, St. Lucia, and St. Vincent and the Grenadines from 1966-69 to 1985-86, and by 5% to 10% in Dominica, and St. Kitts and Nevis (all of these rates imply substantial net out-migration, given existing birth and death rates). Comparing 1966-69 and 1985-86 yearly averages, per capita output in St. Kitts and Nevis increased by over 50%, that in St. Lucia, and St. Vincent and the Grenadines increased by about 40% to 50%, and that in Antigua and Barbuda and Dominica increased by about 15%. Antigua and Barbuda's position relative to other countries is much less favorable in per capita terms than in total terms, especially relative to Dominica. In per capita terms Antigua and Barbuda's output shows a very pronounced long term cyclical effect, contrasted to Dominica's relatively modest fluctuations. In 1975-79, yearly average per capita output in Antigua and Barbuda was only 80% of that in 1966-69, compared to 99% in Dominica (and 102% in St. Vincent and the Grenadines, 132% in St. Lucia and 155% in St. Kitts and Nevis). Despite its relative decline, output per capita in Antigua and Barbuda remains substantially above that in the other four countries. However, St. Kitts and Nevis has been able to close the per capita real output gap between it and Antigua and Barbuda significantly over the 20 year period, from 45% in 1966-69 to 26% in 1985-86. St. Lucia (from 56% to 40%) and St. Vincent and the Grenadines (from 66% to 60%) also closed the gap somewhat, but the gap for Dominica remained constant (43% and 44%).

2.07 The recent years have been good ones for all five countries. The key question is whether this relative prosperity is based on ephemeral events (banana prices, concessional external flows), or whether it is solidly based on economic infrastructure that took some time to develop after independence but, barring severe natural disasters, is now able to sustain long term growth in total and per capita income. Movements in

TABLE II.2: ANTIGUA AND BARBUDA, DOMINICA, ST. KITTS AND NEVIS, ST. LUCIA, ST. VINCENT AND THE GRENADINES - YEARLY AVERAGES IN REAL GNP PER CAPITA AND GROWTH IN REAL GNP PER CAPITA AND POPULATION
(real GNP per capita in 1980 EC$, 1966-69=100; population 1966-69=100)

	1966-69	1970-74	1975-79	1980-84	1984-86
Antigua and Barbuda					
Real GNP/capita	3860	3560	3090	3880	4470
Real GNP/capita	100	92	80	101	116
Population	100	108	115	123	128
Dominica					
Real GNP/capita	2210	2560	2180	2400	2510
Real GNP/capita	100	116	99	109	114
Population	100	100	102	106	111
St. Kitts and Nevis					
Real GNP/capita	2130	2240	2550	3040	3300
Real GNP/capita	100	105	120	143	155
Population	100	103	106	108	104
St. Lucia					
Real GNP/capita	1710	2060	2250	2430	2680
Real GNP/capita	100	120	132	143	157
Population	100	104	115	128	137
St. Vincent and the Grenadines					
Real GNP/capita	1320	1530	1350	1570	1810
Real GNP/capita	100	116	102	119	137
Population	100	105	118	128	135
Total					
Real GNP/capita	2135	2310	2190	2520	2800
Real GNP/capita	100	108	103	118	131

Source: World Tables 1987.

output per capita on a yearly average basis show no significant upward trend for three countries from 1966-69 up to 1980-84, i.e., Antigua and Barbuda, Dominica, and St. Vincent and the Grenadines. St. Kitts and Nevis and St. Lucia, however, display strong upward trends over this period. All countries display growth in 1985-86 compared to 1980-84. The question of whether these more recent changes are likely to continue will be addressed in subsequent chapters.

Output Growth and Output Per Capita Comparisons

2.08   In order to place the growth performance of the OECS countries in a comparative perspective, two groups of countries have been identified, one with (i) similar levels of GNP per capita, and the other with (ii) small populations. Per capita GNP in 1985 in the OECS countries ranged from US$850 to US$2,020. Ten of about 20 countries with per capita income levels within this range were selected as a comparison group for similar levels of GNP per capita. The selection was more or less at random but excluded any country with a population of over 20 million, and Hungary because of its very different economic organization. The ten consist of Paraguay, Jamaica, Peru, Congo People's Republic, Ecuador, Tunisia, Costa Rica, Chile, Uruguay and Malaysia. The unweighted average of their GNP per capita for 1985 is $1,265, compared to $1,300 for the six OECS countries.

2.09   Ten countries with populations between 1.0 million and 2.2 million were selected for small population size. The list includes all such countries except Yemen, Oman, Kuwait and UAE. The ten small countries are Bhutan, Mauritania, Lesotho, Liberia, Botswana, Jamaica, Mauritius, Congo People's Republic, Panama and Trinidad and Tobago. While these ten countries are small in some sense, they are still large relative to the OECS countries. Jamaica's population of 2.2 million is 51 times as large as the population of St. Kitts and Nevis, the smallest of the OECS countries in terms of population, and 16 times as large as the population of St. Lucia, the largest one. In relative size of population, Bangladesh relates to Jamaica as Jamaica relates to St. Kitts and Nevis.[1]

2.10   In general, the OECS countries did not grow as fast in terms of output as either comparison group over the period 1966-69 to 1985-86. Since population growth in the OECS was substantially lower than in the comparison groups, output per capita for the OECS performed relatively better than output, but growth was still below that in the comparison groups. Measured on the basis of unweighted averages for the comparison groups, output grew by 118% between 1966-69 and 1985-86 in the countries with similar levels of GNP per capita, and by 152% in the small countries group, compared to 70% in the OECS. In per capita terms, output grew by 42% in countries with similar income levels, and by 57% in small countries, compared to 35% in the OECS countries.

2.11   Perusing the pattern of growth over time, the experience of the OECS countries differs sharply from the other countries' experience. In per capita income terms the OECS countries were virtually stagnant from 1966-69 to 1975-79, and grew substantially in the next decade. Neither comparison group displays this pattern of output per capita growth. Some countries performed poorly from 1966-69 to 1975-79, and continued to perform poorly in the following decade (Mauritania, Liberia, Jamaica, Peru, and Chile). Others grew strongly in the first decade but slumped in the second (Mauritius, Panama, Trinidad and Tobago, Barbados, Paraguay, Ecuador, Costa Rica, Uruguay). A few grew strongly in both decades (Botswana, Congo People's Republic, Tunisia and Malaysia). None stagnated

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1/   The two groups outlined have two advantages--they were chosen ahead of knowing how they would work out, and they have some economic rationale behind them (i.e., they are roughly similar in size and/or in income per capita). However, other equally plausible groupings might show different growth patterns. While an attempt is made to use both groups systematically, data problems on occasion result in the omission of some countries, and their replacement by other countries for which data are available. In the analysis of output for small countries, the World Tables for 1987 from which the data were obtained have no information on Bhutan and limited information on Lesotho. These two countries were dropped from the analysis and Barbados added. Barbados has a population below 1 million and therefore is not included in the main statistical tables in the 1987 World Development Report.

in the first decade and grew sharply in the second, as did the OECS countries as a group. While over the period as a whole the OECS did not match the performance of the two comparison groups in terms of output per capita, and while the pattern of growth differed, their economies generated significant increases in total output and in output per capita for their populations.

C. Relative Price Performance

2.12   On October 6, 1965, the Eastern Caribbean (EC) dollar was introduced equal to one (old) West Indian (WI) dollar, and was tied to the U.K. pound sterling at a rate of 1 pound to EC$4.80. At the existing $US/pound rate, US$0.5833 equaled EC$1. When the pound devalued versus the US dollar in 1967, the EC dollar devalued by a like amount to US$0.50=EC$1. With the float of the pound/US dollar rate in 1971, the EC dollar held constant against the pound and fluctuated against the US dollar. However, in 1976, the EC dollar was linked to the US dollar at the then current rate of US$0.3704 to EC$1, an effective devaluation of about 26% versus the dollar compared to the rate set in 1967. This rate has been maintained. An important point is that the EC dollar (and before that the WI dollar), has been able to maintain parity with the key currency chosen as a benchmark for a lengthy period of time in spite of major external and internal shocks.

2.13   Considering the fact that the OECS countries have shared a common currency over the period, their inflation experience has differed dramatically since 1966. From 1966-69 to 1984-86, measuring by yearly averages, the GDP deflator for Dominica showed a 576% increase, while St. Kitts and Nevis experienced only a 308% increase. Intermediate increase were shown by St. Vincent and the Grenadines (426%), St. Lucia (346%) and Antigua and Barbuda (329%). These differential rates of inflation represent differential rates of movement in the real exchange rate, given the common nominal exchange rate of the OECS countries.

2.14   Over the period 1966-69 to 1970-74, rates of inflation in the OECS countries were very close to the rate of inflation in the UK as measured by the GDP deflator, with the real exchange rate for St. Kitts and Nevis appreciating by about 1% per year against the pound and the rate for the other four countries depreciating by up to 2% per year. These changes were slight compared to later divergencies in inflation rates. For the period 1970-74 to 1975-76, a period in which the impact of the first oil price shock was felt, the UK deflator increased by 20% yearly on average, whereas inflation rates in all five OECS countries were less than this, and hence the real exchange rate for all five depreciated against the pound, ranging from about 7% per year for Antigua and Barbuda to 1% for Dominica. The period 1975-76 to 1977-79 witnessed very different price behavior in the five OECS countries, just at the period when the currency link was changed from the pound to the dollar. St. Kitts and Nevis in this period experienced inflation of about 6% per year, compared to Dominica's 27%, a very large difference for countries following a common currency regime.

After 1976, rates of inflation in the OECS countries have increased faster than rates of inflation in the US, implying a real appreciation of exchange rates since 1976 vis-a-vis the US dollar. In summary, the OECS countries in 1976 switched their currency link from the UK, where in comparison their inflation rates were relatively low, to the US, where in comparison they have tended to be high.

2.15   The background to the switch from the pound link to the US$ link appears to have been the volatility of the exchange rate between the dollar and the pound in the mid to late 1970s. Immediately after the oil price shock the exchange rate between the pound and US$ was relatively stable, and remained so through 1974 and early 1975. However, by June 30, 1975, the pound had fallen to 92% of its value, using March 31, 1974 as the base, and it continued this decline throughout 1975 and most of 1976, reaching a trough of about 70% of its March 31, 1974 value in late 1976 before rebounding back up to 100% by the end of 1980. In 1975 and 1976 it was, of course, not known that the pound would rebound, and many countries jumped off the roller-coaster of linking their currencies to the pound, some as early as mid 1975 (i.e. Barbados).

2.16   If all prices were perfectly flexible, if purchasing power parity held, and if the real exchange rates for the OECS countries were in equilibrium in 1973 prior to the OPEC oil shock, then gyrations in the pound - US$ exchange rate -- with the EC dollar linked to the pound -- would tend to have no effect on the real exchange rates between the OECS and both the U.K. and the U.S. The OECS price level would rise exactly in step with the U.K. price level, with a constant nominal exchange rate resulting in a constant real exchange rate. Vis-a-vis the U.S., the devaluation of the nominal exchange rate between the EC$ and the US$ would offset exactly the faster rate of price increase in the OECS countries (and the U.K.) as compared to the U.S. It would appear that those responsible for exchange rate policy did not agree with this model, nor is it supported by the experience of the OECS countries. Real exchange rates changed sharply for the CECS countries from 1973 to 1975, but there is little common pattern. Comparing 1973 and 1975, the real exchange rate with the US$ was constant for Antigua and Barbuda, decreased by 10% to 15% for Dominica, St. Kitts and Nevis and St. Vincent and the Grenadines, but increased by about 5% for St. Lucia. To the extent that exchange rate rigidities and expectational factors are present, the inflation in the OECS caused by the link with the falling pound might be expected to tend to cause a real appreciation vis-a-vis the US$, as price increases outpaced depreciation of the pound. This seems clearly to have occurred in the U.K., at least up to 1975, where the GDP deflator between 1973 and 1974 increased by 5.7 percentage points more than in the U.S. (the exchange rate decreasing about 5% also on an annual basis), and by 17.4 percentage points more between 1974 and 1975 (when the exchange rate again decreased by only

about 5%).[2] Fears of imported inflation causing a real appreciation with the U.S. were well-founded for at least Dominica, St. Kitts and Nevis, and St. Vincent and the Grenadines, given the evidence cited above.

2.17   When the EC$ was linked to the US$ in mid-1976, the rate chosen, EC$2.70 to the US$, represented a substantial nominal devaluation of 25% from the average rate of EC$2.16 per US$ in 1975. The real exchange rate against the US$ was higher in both 1976 and 1977 as compared to 1975 for all OECS countries but Dominica and St. Lucia. St. Lucia's real exchange rate was higher in 1977 but not in 1976, but Dominica's real exchange rate against the US$ behaved unusually in 1976 and in subsequent years, showing a sharp real appreciation. The real exchange rate between the OECS countries and the pound in 1976 and 1977 increased in some countries (Antigua and Barbuda, St. Kitts and Nevis), and decreased in others [Dominica, St. Lucia (in 1976), and St. Vincent and the Grenadines]. From 1977 to 1980 the real exchange rate for the OECS countries tended to fall against the US$. St. Kitts and Nevis, and Antigua and Barbuda were exceptions, but the real appreciation by 1980 compared to 1977 was 25% in Dominica, 13% in St. Lucia and 11% in St. Vincent and the Grenadines.

2.18   As events turned out, the EC$-pound link would have become unsustainable as the U.K. in 1978 and for two subsequent years experienced an annual nominal appreciation of its currency of 10% against the U.S. dollar at the same time as inflation in the U.K. outpaced that in the U.S. by from 4% to 11% per year. The paradox is not real, of course, since North Sea Oil provides the explanation for the appreciation in the pound. For the OECS countries, however, a continued link to the pound would in the event probably have led to an even sharper real appreciation against the US$, given the nominal appreciation that would have occurred as a result of the link with the appreciating pound.

2.19   One lesson that can be drawn from the exchange rate episode of the mid-1970's is that a nominal depreciation can result in a real depreciation, at least in the short run and perhaps for a medium-term period. Second, the real exchange rate pattern varied sharply as between OECS countries, before and after a change in the link. Third, the link currency matters, but it is difficult to forecast which link currency or currencies is preferred to others. The switch to the US$ link appears to have been a good one, but presumably it was taken because the pound was depreciating, not because it was expected to appreciate in the face of high internal U.K. inflation.

D. Sectoral Shares of GDP at Factor Cost

2.20   Because of data problems and classification differences, care must be used in interpreting the data. In this analysis, yearly averages over periods of up to five years are used, and only a limited attempt is made to

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2/ However, between 1975 and 1976 the GDP deflator gap was only 8.6% and the exchange rate fell 19%.

directly link the different estimates.[3] The broad pattern of change in resource utilization over five year intervals can be inferred from the data, but changes from year to year may not be signi :ant and are not shown.

Sectoral Analysis

2.21   The analysis of sectoral shares has a respectable history within economics, but it is not without strong critics. Critics focus upon data and classification problems, discussed above, but also upon whether or not economies follow any pattern of development, as sometimes implied by those who use the technique. Furthermore, the service or tertiary sector is often a mixture of formal and informal activities, with the mix and total size changing in an unknown way as development proceeds. Again, many analysts predict that the share of agriculture will fall with growth, but the link is not a necessary one. In particular, poor economic policy can, and has, reduced agriculture's share of GDP, independent of any growth effect which attracts resources away from agriculture into industry and services.

2.22   Bearing these problems in mind, the analysis of sectoral shares presented here makes three broad points: (i) there is, over time, flexibility in resource use--in response to price incentives and foreign market opportunities, the OECS countries have significantly altered their pattern of resource use from 1961 to 1987; (ii) agriculture has become much less important as a share of GDP over time, and a service sector, geared potentially at least to tourism, has developed in several but not all of the OECS countries; and (iii) the degree of resource flexibility displayed by the OECS countries since 1961 is broadly consistent with the flexibility displayed by countries at similar income levels, and by small countries.

3/   S.E. Chernick, The Commonwealth Caribbean (1978) contains estimates of GDP in current EC dollars at factor cost by various sectors for each OECS country for each year from 1961 (1960 in two cases) to 1973, with some gaps and some change in the level of detail provided over time. There is no discussion of sources or of accuracy. Data for 1977-88 are available for all OECS countries except Grenada, for which estimates begin in 1980. The estimates used are the latest available for GDP at factor prices in constant dollars. Their origin is the Economic Affairs Secretariat (EAS) of the OECS (St. Lucia's 1988 estimates were not available in early 1989). There is no way to know from the literature how consistent the data sources are over time or across the different countries. The same terms, more or less, are used consistently from country to country, and it is probable that reasonable consistency within countries is provided by the Chernick data and by the OECS data. There are obvious classification problems in moving from the Chernick data, which end in 1973, to the OECS data, which begin in 1977. For example, Chernick gives "export agriculture" and "other agriculture", but the OECS provides estimates for agriculture subdivided into crops and livestock.

2.23   Flexibility in Resource Use. So-called shift-share analysis gives
an approximate measure of resource flexibility. Resource flexibility as
measured in this way over time can come from new resources (i.e. labor
force entrants, new construction and machinery) being used in different
proportions than old resources, and therefore need not imply that a given
resource changes use. This is critical in assessing long term flexibility
-- parents may be reluctant to change occupations but their children do not
have to follow in their footsteps. Shift-share analysis, briefly, compares
the change in the percent that a given sector contributes to GDP over time,
and over all sectors the sum of such changes necessarily adds to zero. The
sum of positive or negative shifts between two time periods is thus an
approximate measure of the change in resource use that has occurred.[4]

2.24   Shift-share analysis reveals adjustments of about 10% or more for
all OECS countries from 1960-64 to 1970-74, mainly as a result of a sharp
shift out of agriculture. The average adjustment is about 17% (see Table
II.3 below). Adjustments were smaller in the 1977-79 to 1985-88 period,
averaging only 9%, partly because the period is shorter, partly because for
Grenada data availability is not complete for this period, but largely
because of a much reduced shift out of "agriculture, forestry, fishing and
mining" in the latter decade than out of "agriculture" in the former (see
Table II.4 below). However, the overall impression is one of a consider-
able shift in resource utilization in all countries in both sub-periods.

TABLE II.3: OECS COUNTRIES - CHANGE IN SHARE OF GDP BY SECTOR, EARLY 1960s TO EARLY 1970s

	ANTIGUA AND BARBUDA	ST. KITTS AND NEVIS	DOMINICA	ST. LUCIA	ST. VINCENT AND THE GRENADINES	GRENADA
Agriculture	-15.2	-17.7	-7.6	-18.7	-11.4	-12.5
Construction	-5.8	8.4	3.1	6.3	3.9	0.1
Manufacturing	4.4	1.0	0.6	-1.5	0.8	1.3
Government	-4.2	3.7	5.5	1.8	1.1	3.8
Transportation	3.0	1.9	0.7	0.6	0.4	2.1
Hotels	4.2	(1)	(1)	(1)	2.3	2.5
Dist. & Finance	8.8	2.0	-0.2	3.4	2.7	5.1
Dwellings	0.7	-1.4	-0.7	-2.1	-1.3	0.8
Other	4.1	2.1	-1.4	5.2	1.5	-3.2
Total	25.2	19.1	9.9	17.3	12.7	15.7

(1) Included in "other".

Source: Table is calculated from Chernick data summarized in country tables in Statistical
Appendix (see Tables 2.1 to 2.7). Data for Montserrat are not comparable.

4/   It is approximate for many reasons, chiefly because the measure is
     dependent upon the fineness of the classification scheme used. In
     general, the more detailed the classification scheme, the greater the
     sum of the positive or negative shifts to be expected.

Summing the shifts in both periods gives, in order, a total shift of 36% for Antigua and Barbuda, and St. Kitts and Nevis, 23% for St. Lucia, 21% for Grenada, 19% for St. Vincent and the Grenadines and 18% for Dominica -- again, these are very approximate measures, and the time frames are not strictly comparable (especially for Grenada in the last period).

2.25   Agriculture and Tourism. The share of agriculture in GDP drops sharply in all countries over the period as a whole.[5] The drop is particularly sharp in the first period, averaging 13% across all 6 countries, as compared to 3% in the second period. At least two factors are relevant. In the case of Antigua and Barbuda, the shift out of agriculture by 1970-74 was so complete that further substantial reduction was impossible. In St. Lucia, and St. Vincent and the Grenadines, however, agriculture appears to have achieved substantial growth in the second period, partly as a result of a banana boom, and partly, at least in the case of St. Vincent and the Grenadines, as a result of diversification within agriculture towards root crops and other less traditional export crops. Another way of looking at shifts in agriculture is to note that agriculture accounted for 76% of the total negative shifts in the first period, but only 38% in the second period, averaged over all 6 countries (Montserrat is excluded from all comparisons across periods).

TABLE II.4: OECS COUNTRIES - CHANGE IN SHARE OF GDP BY SECTOR, 1977-79 TO 1985-88

	ANTIGUA AND BARBUDA	ST. KITTS AND NEVIS	DOMINICA	ST. LUCIA[a]	ST. VINCENT AND THE GRENADINES	GRENADA[b]	MONTSERRAT[a]
Agriculture[c]	-2.3	-8.7	-6.4	0.1	0.1	-2.5	-0.6
Forestry, Fishing, Mining	-2.0	0.2	1.0	-0.2	-0.2	-0.2	0.0
Manufacturing	0.7	-6.1	2.1	0.1	0.7	0.2	0.7
Construction	2.5	2.8	1.5	-1.8	-0.4	0.4	1.7
Trade	-1.5	3.0	1.1	-2.6	-0.8	-0.5	0.9
Hotels and Restaurants	4.1	3.0	-0.2	-0.3	0.3	1.5	-0.2
Transportation and Communication	3.5	3.8	2.5	0.4	4.9	0.2	0.9
Government Services	-1.8	3.3	-1.4	3.8	-3.7	2.5	0.3
Real Estate and Housing	-2.5	-1.7	-0.3	-0.6	-1.3	-0.9	-3.7
Other	-0.7	0.7	0.3	0.9	3.5	-0.7	0.2
Total	10.8	16.6	8.5	5.3	6.5	4.8	4.7

a/   1977-79 to 1985-87.
b/   1980-84 to 1985-88.
c/   Agriculture is the sum of crops and livestock.

Source: The calculations originate from OECS/EAS data summarized in country tables in Statistical Appendix (see Tables 2.1 to 2.7).

5/   Agriculture's share in the labor force might not have changed to the same degree, and certainly the share of agriculture in the total labor force exceeds the share of agriculture in GDP because of lower productivity in agriculture. Dominica may be an exception to this.

2.26   In general, the sectors that gained in terms of share of GDP are much less concentrated than the sectors that lost in terms of GDP share. Averaging over six countries, the percent of the total positive shifts of 99.9 in the first period, in order, were gained in construction (22%), distribution and finance (22%), government (16%), hotels (9%), transportation (9%), manufacturing (8%) and all others (14%). (This means, for example, that construction accounted for 22% of the total positive shifts across all countries in the first period.) In the second period, the percent of the total positive shifts, in order, were gained in transportation (29%), government (18%), hotels (17%), construction (13%), trade (8%), manufacturing (7%), and all others (7%). The gaining sectors are widely dispersed in both periods, but there are three patterns: (i) government as a share of GDP grew rapidly in both periods; (ii) manufacturing as a share of GDP saw a relatively small increase in both periods; and (iii) tourism related sectors (construction, transportation and hotels are most directly related) grew strongly in both periods, accounting for 40% and 59% of the positive shifts in the respective periods. However, not all construction and transportation are tourist related, and in some countries there appears to have been little or no shift in the direction of tourist related sectors, especially in the second period (see St. Lucia in particular).

2.27   Cross Country Comparisons. The shift out of agriculture has been larger for the OECS countries (12% of GDP) than for selected countries of "similar income levels" (7% of GDP) and for selected "small countries" (6% of GDP -- see Table II.5 below). The 1985 proportion of GDP accounted for by agriculture (including forestry and fishing) is, however, very similar for all three groups of countries. In both comparison groups, activity shifted into industry but not into services, whereas in the OECS countries there was a much more limited shift into industry. As a result, the service sector in the OECS countries, which was roughly similar to the comparison groups in 1965, was a much larger proportion of GDP in 1985 than in the comparison groups. Manufacturing appears to have increased relatively more in the OECS countries than in either comparison group, but its proportion of GDP was still low in 1985 compared to the other two groups.[6] With due caution reflecting the validity of the data, it appears that the OECS countries experienced at least as much shift out of agriculture, and probably more, over the last two decades, than countries in the two comparison groups.

6/   For manufacturing, there are relatively few countries in the comparison groups: Paraguay, Jamaica, Peru, Ecuador and Tunisia for countries with similar per capita income levels, and Liberia, Botswana, Jamaica, Mauritius, Panama, and Trinidad and Tobago for small countries. Botswana, and Trinidad and Tobago experienced sharp drops in manufacturing as a share of GDP, almost certainly the result of the diamond boom and petroleum developments respectively.

TABLE II.5: CROSS COUNTRY COMPARISON OF SHARES IN GDP AT FACTOR COST,
AGRICULTURE, INDUSTRY, SERVICES AND MANUFACTURING,
1965, 1965-69 AVERAGE AND 1985

	OECS[a]		Similar Income[b]		Small Countries[c]	
	1965-69 Average	1985	1965	1985	1965	1985
Agriculture	28	16	22	15	20	14
Industry[d]	16	19	25	36	29	35
Services	56	65	53	49	51	51
Manufacturing	5	8	15	1f,	13	12

a/ Figures are unweighted averages of Chernick estimates for 1965-69 and
of OECS/EAS estimates of GDP at constant prices for 1985. Montserrat
is excluded.

b/ Estimates for both years for only 8 of 10 of the comparison group
countries for agriculture, industry and services, and for only 5 of 10
countries for manufacturing. These groups of 8 and 5 countries are
used. Figures are unweighted averages. Manufacturing is a component
of industry.

c/ Estimates for both years for only 8 of the 10 comparison group
countries for agriculture, industry and services, and for only 6 of 10
countries for manufacturing. These groups of 8 and 6 countries are
used. Figures are unweighted averages. Manufacturing is a component
of industry.

d/ Industry includes mining, manufacturing, construction and utilities.
For OECS, industry includes only manufacturing and construction in
1965-69.

Source: Bank staff estimates.

Shifts in the Composition of GDP and Economic Growth

2.28   Economic growth has tended to involve a reallocation of factors of
production from lower productivity to higher productivity uses.
Historically, this has meant in most countries a shift from (sometimes
subsistence) agriculture into industry: the pattern is well known.
Economic growth requires the flexibility for resources to flow out of low
profitability areas into new, emerging, profitable areas. The OECS
countries experienced considerable flexibility in resource use, over the
last two decades at least.

2.29   Intuition and conventional wisdom both suggest that resource
flexibility will be greater in periods of strong economic growth, both
because growth opens up job opportunities to attract resources away from
lower profitability uses, and because resource reallocation in turn
increases real output. However, this scenario, on the surface, appears not
to have been at work in the OECS countries. For the OECS countries as a
group, resource flexibility was higher in the first period than in the
second period, but economic growth was stronger in the second period than
in the first period.

2.30   Two hypothesis suggest themselves, somewhat related. One, the OECS countries are clearly not a closed system with respect to resource flows, and the resource flexibility exhibited in the first period may have resulted from factors of production leaving agriculture and going abroad or remaining idle. Resource flexibility is measured by changing percentage distributions of GDP--an absolute or relative decline of agriculture will imply a resource shift measured on this basis whether factors of production leave the country, remain idle, or find alternative employment. Second, some resource shifts, especially out of sugar in Antigua and Barbuda, were caused clearly by push factors (the unprofitability of sugar production) and not by the pull of economic opportunity elsewhere in the system. In addition, of course, real growth can occur for reasons independent of internal resource shifts (productivity gains in existing industries, terms of trade gains, aid and foreign investment flows, etc.), plus shifts within the broad classifications used in the analysis.

2.31   In the first period, Antigua and Barbuda's position is anomalous--sharp changes in resource flexibility occurred with no economic growth, measured as the change in total real GNP (see Table II.6 below). For the other countries, changes in resource flexibility a d changes in economic growth are closely related, economic growth incre∙ing as resource flexibility is increased. For the second period, however, for all countries except St. Kitts and Nevis, real growth is greater and resource flexibility is less than in the first period, and there is no systematic relationship between changes in resource flexibility and changes in growth (for St. Kitts and Nevis, growth decreased along with resource flexibility). Resource shifts are associated with economic growth in both periods for all countries (except Antigua and Barbuda in the first period), but that is a fairly weak conclusion. The stronger conclusion that economic growth increases with increased resource flexibility seems valid for the first period, except for Antigua and Barbuda, but is either invalid, or swamped by other factors, in the second. These broad conclusions hold if changes in output per capita are used in place of changes in total real output.

TABLE II.6:   OECS COUNTRIES - SECTORAL SHIFTS AND ECONOMIC GROWTH, 1960-88
(in percent)

	ANTIGUA AND BARBUDA	ST. KITTS AND NEVIS	DOMINICA	ST. LUCIA	ST. VINCENT AND THE GRENADINES	GRENADA
1960-64 to 1970-74						
Change in real GNP[a]/	0	40	16	26	22	n.a.
Change in real GNP/Capita[a]/	-8	36	16	20	16	n.a.
Sum of Change in GDP Shares	26	19	10	17	18	16
Change in Agriculture Share of GDP	-16	-18	-8	-14	-11	-18
1977-79 to 1985-88						
Change in real GNP	61	28	25	42	64	n.a.
Change in real GNP/Capita	46	29	16	19	84	n.a.
Sum of Change in GDP Shares	11	16	9	6	7	6
Change in Agriculture Share of GDP	-2	-9	-6	0	0	-8

a/ Change is measured from 1966-69 to 1970-74.
n.a.: Not available.

Source: Tables II.1 to II.4.

E. Changes in the Pattern of Trade

2.32   Estimates of domestic exports (exclusive of re-exports) of the
OECS countries by SITC categories indicate a significant change in trade
patterns has occurred since the early 1960s (see Table 2.8 in Statistical
Appendix). Category O--Food and Live Animals--has declined from about 90%
of domestic exports in the 1960s to about 70% by the mid-1980s. Categories
6 to 8, which measure various classes of manufactured articles, increased
from less than 1% to almost 20% over this period, while all other domestic
exports remained relatively stable at about 10%. This "all other" category
includes some manufactured products, especially beverages and vegetable
oils and fats including soap products. The food category also includes
some manufactured products, such as sugar, sauces, jams and jellies.
Antigua and Barbuda, St. Kitts and Nevis, and St. Lucia experienced a sharp
increase in category 6-8 exports in 1970-74, unlike the other three OECS
countries. In 1985, these countries continued to have relatively more
category 6-8 exports than the other countries, but by that date Dominica,
Grenada, and St. Vincent and the Grenadines had category 6-8 exports which
were almost 10% of their domestic exports. The analysis of domestic
exports by SITC category shows clearly that significant change has occurred
since 1960, and that exports of manufactured products in categories 6-8 are
no longer virtually zero, as they were throughout all of the 1960s.

F. The Financing of Private and Public Gross Investment

2.33   The level of domestic investment, its split into private and
public components, and its sources of financing, are important questions
which bear upon how the OECS countries perform economically, and how they
may be expected to perform. In broad terms, the investment to GDP (I/GDP)
ratio is very high (or at least high) for all countries and has been so
since 1977. However, countries differ greatly in the sources from which
investment is financed, and in particular they differ greatly in their
reliance on foreign aid, and in their use of concessional foreign
borrowing. This has implications for their long term economic prospects.

2.34   Grenada's experience is so different from that of the other five
countries that it is useful to treat it separately. In broad terms, the
five countries other than Grenada have averaged I/GDP ratios of
approximately 33% in each period[7] since 1977-79, one-third of which in turn
has been public investment and two-thirds private investment (see
Table II.7 below). This total gross investment has been largely financed
from private sources (78% in the 1977-79 period, 77% from 1980-84 and over
100% from 1985-87). For 1985-87 only St. Lucia, and St. Vincent and the

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[7]   Three periods are considered, to the extent data for each country
allow: 1977-79, 1980-84, and 1985-87. Coverage for the last period is
particularly incomplete. Annex II discusses the methodology of the
measurements.

Grenadines are included, owing to data availability.[8] Grenada, on the
other hand, experienced a very low ratio of gross investment to GDP in
1977-79 of 12%, and in all three periods the country has relied much more
heavily on public borrowing than the other five countries combined (42% in
1977-79, 61% in 1980-84, and 80% in 1985).[9] Also, the split in Grenada
between public and private investment, owing to a different political
philosophy, has been much more towards public investment than in the other
five countries--over 80% public investment since 1980 compared to about 33%
in the other five countries.

2.35   Sources of Private Sector Finance. For all OECS countries
combined, the foreign private sector contributed 73% of total private
sector finance in 1977-79, 86% in 1980-84, and 49% in 1985-87 (see
Table 2.15 in Statistical Appendix). For individual OECS countries, the
foreign private sector contribution to total private sector finance was
more important than the domestic private sector contribution in 1977-79 and
1980-84 except for Antigua and Barbuda in 1977-79. However, for the three
countries for which some data are available for 1985-87, in each case the
significance of domestic sources increased sharply over 1980-84, and in St.
Lucia and St. Vincent and the Grenadines the domestic sources were slightly
more important than foreign sources. Within the private finance sector,
net private transfers for all countries averaged about 73% of the total in
1977-79 and about 60% in the other two periods, with net private investment
making up the difference. However, countries differed sharply in this
area, with net private investment being larger than net private transfers
in Antigua and Barbuda, and St. Lucia, but a small fraction of net private
transfers in the other four countries (except St. Kitts and Nevis in
1980-84 and probably 1985-87). In summary, domestic private sector finance
appears to be growing in significance, as does net private foreign
investment, but net private transfers have been the most important source
of private sector finance up to 1980-84, and remain important even with
enhanced roles for other sources.

8/   Data on financing of the resource gap only, for Antigua and Barbuda and
     St. Kitts, indicate that St. Kitts and Nevis is similar to St. Lucia,
     and St. Vincent and the Grenadines, but that Antigua and Barbuda is
     relying heavily on public financing in the 1985-87 period.

9/   Of the other five countries, Dominica has relied most heavily on public
     borrowing, to the extent of 29% of total financing in 1977-79 and 53%
     in 1980-84.

TABLE II.7: OECS COUNTRIES - GROSS DOMESTIC INVESTMENT AND ITS FINANCING, 1977-87
(yearly averages as a percent of GDP)

	Gross Investment			Sources of Financing		
	Total	Public	Private	Total	Public	Private
1977-79						
Antigua and Barbuda (1978-79)	36.8	16.9	19.9	36.8	5.6	31.2
St. Kitts and Nevis	31.4	{31.4}		31.3	7.4	23.9
Dominica	26.3	12.5	13.8	26.3	7.6	18.7
St. Lucia	58.3	9.1	49.2	58.3	6.8	51.5
St. Vincent and the Grenadines	31.1	10.6	20.5	31.1	10.9	20.2
Grenada (1978-79)	12.4	8.2	4.2	12.4	5.3	7.1
Average excluding Grenada	36.8	12.3 a/	25.9 a/	36.8	7.7	29.1
Average including Grenada	32.7	11.5 a/	21.5 a/	32.7	7.3	25.4
1980-84						
Antigua and Barbuda	26.5	8.2	18.3	26.6	2.7	23.9
St. Kitts and Nevis	17.1	11.7	5.4	17.1	5.1	12.0
Dominica	33.4	16.0	17.4	33.4	17.6	15.8
St. Lucia	45.0	9.4	35.6	44.9	4.4	40.5
St. Vincent and the Grenadines	30.3	11.1	19.2	30.2	7.2	23.0
Grenada	41.3	34.6	6.7	41.3	25.1	16.2
Average excluding Grenada	30.5	11.3	19.2	30.4	7.4	23.0
Average including Grenada	32.3	15.2	17.1	32.3	10.4	21.9
1985-87						
Antigua and Barbuda	n.a.	n.a	n.a.	n.a.	25.9 b/	14.3 b/
St. Kitts and Nevis (1987 only for I)	25.2	5.2	20.0	n.a.	-1.5 b/	32.3 b/
Dominica	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
St. Lucia	39.3	13.0	26.3	39.3	-0.4	39.7
St. Vincent and the Grenadines (1985-86)	31.5	10.0	21.5	31.5	-1.4	32.9
Grenada (1985 only)	34.9	29.5	5.4	34.9	27.7	7.2
Average excluding Grenada c/	35.4	11.5	23.9	35.4	-0.9	36.3
Average including Grenada c/	35.2	17.5	17.7	35.2	8.6	26.6

a/ Excludes St. Kitts and Nevis.
b/ Financing of Resource Gap only.
c/ Averages do not include Antigua and Barbuda and St. Kitts and Nevis.
n.a.: Not available.

Source: Tables 2.9-2.14 Statistical Appendix.

2.36 **Uses of Private Sector Finance.** Given the existence of financial intermediation, there is no one-to-one correspondence between private sector saving and private sector investment. However, gross sources of finance as between public and private sectors give some indication, when combined with investment figures, of the use to which private sector finance is put. For example, in Antigua and Barbuda in 1978-79, private sector investment was 20% of GDP, and private sector sources of finance were 31% of GDP, implying that the equivalent of the difference of private sector finance was used to finance public sector investment. This difference amounted to 11% of GDP, or 36% of total private sector finance (see Table II.8 below). For all countries for almost all periods private sector finance has been used to finance public sector investment, often to a large percentage of GDP. (The exceptions--St. Vincent and the Grenadines

in 1977-79 and Dominica in 1980-84--shown a very small "reverse" flow in each case.) However, because private sector finance has tended to constitute such a large percentage of GDP, the proportion of private sector finance that has financed public sector investment has tended to be well below 50%, except in 1980-84 in St. Kitts and Nevis and Grenada. Whether or not public sector investment is crowding out private sector investment cannot be ascertained from these numbers, but they raise at least a question against possible crowding out, since private sector investment constitutes about 20% of GDP, and since much of private sector finance is available to finance private sector investment.[10] In the OECS countries, private sector finance, contrary to some perceptions, is sufficiently large to finance relatively high levels of private sector investment and to finance part of relatively high levels of public sector investment.[11]

2.37   Cost of Public Sector Finance.   This section is concerned with only a narrow, measurable aspect of the cost of public sector saving or finance. It does not consider the opportunity cost of government surpluses on current account, nor does it consider the cost of internal government borrowing. It is confined to a consideration of the foreign exchange cost of foreign public sector financing, and in particular of "foreign grants to government" and "government borrowing abroad." Other foreign sources as measured by "other non-current account transactions" -- a residual item -- are important but tend to be negative.

2.38   For all OECS countries together, foreign grants are an important and increasing source of public sector saving, rising from about 8% of GDP in 1977-79 to 10% in 1985-87, and constituting 106% of total public sector saving in 1977-79 and 161% in 1985-87 (Table 2.16 in Statistical Appendix. Foreign grants do not include the implicit subsidies to sugar and bananas discussed below). Roughly speaking, the excess of foreign grants and Government borrowing abroad over total public sector finance allowed the OECS countries to run fiscal current account deficits in the two early

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10/ M. I. Blejer and M. S. Khan, "Public Investment and Crowding out in the Caribbean Basin Countries", in The Economics of the Caribbean Basin, eds. M. Connally and J. McDermott, show for a set of nine Caribbean countries that does not include the OECS countries that "infrastructural investment [is] complementary to private investment, while other types of public investment would tend to be substitutes." This is both a useful reminder that crowding out is not a simple phenomenon, and an interesting hypothesis about the complementarity of private and public investment.

11/ Private sector investment has averaged about 18% of GDP, and public sector investment about 15% of GDP. Unweighted averages for the nine Caribbean countries in the Blejer and Khan study for these two ratios are 14% and 7% respectively, for 1971-79.

TABLE II.8:   SHARE OF GDP FLOWING FROM THE PRIVATE SECTOR TO FINANCE
PUBLIC INVESTMENT 1/ OR FROM THE PUBLIC SECTOR
TO FINANCE PRIVATE INVESTMENT 2/

	Pre-1980	1980-84	Post 1984
Antigua and Barbuda	11.3	5.5	n.a.
St. Kitts and Nevis	n.a.	6.6	n.a.
Dominica	4.9	-1.6	n.a.
St. Lucia	2.3	5.0	13.4
St. Vincent and the Grenadines	-0.3	3.9	10.6
Grenada	2.9	9.5	1.8

1/   Positive sign.
2/   Negative sign.
n.a: Not available.

Source: Calculated from Table 2.9.

periods, and allowed them to accumulate reserves and to lend abroad on a
short term basis through the commercial banks in the later period. The
main purpose of the foreign grants and government borrowing abroad was to
finance part of the public sector investment program. Another way of
interpreting the excess of foreign grants and government borrowing abroad
over the total public sector sources of finance is to say that the
availability of private sector finance allowed the Government to run a
fiscal current account deficit and to accumulate reserves, and the
commercial banks to lend abroad on a net basis. Given the interrelated
nature of the flows and the fact they are being measured ex-post, either
interpretation is possible.

2.39   If public sector investment is compared with the sum of foreign
grants plus government borrowing abroad, an interesting picture emerges
(Table 2.17 in Statistical Appendix). For most countries in most periods,
grants plus foreign borrowing by governments are less than public sector
investment, roughly of the order of 50%. However, Dominica and Grenada are
clear exceptions. In Dominica, grants plus government borrowing exceeded
public sector investment in both periods by sizeable amounts, and it is
reasonable to infer that this excess financed Dominica's central government
fiscal deficit on current account of 13% of GDP in 1977-79 and about 3% in
1980-84, in addition to financing some increase in reserves in both periods
and commercial bank lending abroad in the first period. In Grenada, grants
plus foreign borrowing by government exceeded public sector investment in
1985, offset in the balance of payments by net factor service payments and
a small reserve build-up.

2.40   Two conclusions follow. First, foreign grants plus Government
borrowing abroad finance a significant but decreasing proportion of public
sector investment, except in Grenada. Second, again excluding Grenada,
both foreign grants and government borrowing abroad individually are
falling as a proportion of public sector investment.[12]

2.41   The foreign exchange cost of foreign grants can be assumed to be
zero. Foreign grants have financed over half of public sector investment
for all OECS countries combined in each of the three periods (66% in
1977-79, 53% in 1980-84, 73% in 1985-87, for three countries for which data
are available in the latter case). The foreign exchange cost of government
borrowing abroad depends upon the degree of concessionality involved, i.e.
the interest rate charged relative to commercial rates, the maturity of the
loan and the grace period, if any, involved in the payment of interest and
principal. A detailed examination of the degree of concessionality
involved in borrowing by OECS countries has not been undertaken. A rough
but probably reasonably accurate assumption is made that the grant element
in government borrowing abroad is equivalent to one-third or 33% of the
amount borrowed.[13] The estimates show that substantial proportions of
public sector investment are funded by grants and the grant element in
government borrowing in every OECS country, and in every period (Table 2.18
in Statistical Appendix). In addition, the subsidy involved in grants and
the grant element in concessional lending are significant proportions of
GDP (Table 2.19 in Statistical Appendix). Even the 2.9% of GDP represented
by grants and grant elements in borrowing for Antigua and Barbuda in
1980-84, the lowest figure for any country for any period, is sizeable, and
the ratios for Dominica and Grenada are considerably higher. Moreover, in
addition to receiving grants and grant elements in borrowing, all of the
OECS countries except Antigua and Barbuda receive implicit subsidies
through high protected prices for sugar and bananas.

2.42   Despite the high ratio of private saving to GDP that is found in
the OECS countries, it would be invalid to assume the high ratio will
continue. As indicated in Table II.7 above, net private transfers from
abroad are an important component of private sector saving, averaging 53%
from 1977 to 1984, and 30% thereafter. Net private transfers are a form of
private aid, and as a form of private saving they have the characteristic
that they do not directly reflect the economic behavior of residents of the
country. They are therefore in some sense less certain or predictable than
domestically generated saving, and they do not reflect saving out of
domestically generated income.

12/ However, heavy public sector borrowing abroad by Antigua and Barbuda,
    when data are fully available, will probably alter this conclusion.

13/ World Debt Tables 1987-88 Vol. II contains data on St. Vincent and the
    Grenadines and Grenada only. The "grant element" in new commitments
    averaged, on an unweighted basis, 36.4% for St. Vincent and the
    Grenadines and 42.3% for Grenada over the period 1980-86. These grant
    elements are high, but not among the highest--some higher averages for
    1980-86 are Bangladesh (70.5%), Comoros (61.7%), Chad (56.9%--1983-86
    only), Cape Verde (54.3%), Burkina Faso (53.3%), Ethiopia (49.8%). In
    the mid 30s to mid 40s range are Lesotho (44.8%), Liberia (43.5%) and
    India (33.8%).

2.43   Putting all forms of aid or subsidy together, it is clear that the OECS countries are heavily supported by external flows most of which originate from foreign sources. Foreign grants to government, the subsidy implicit in government borrowing abroad, net private transfers from abroad and the subsidy contained in the protected prices received for bananas and sugar together amount to about 25% of the total GDP of the OECS countries. From Tables II.8 and II.13, the first three items average over 20% for each of the three periods from 1977 to 1987 used in the analysis. The value of the subsidy implicit in the guaranteed U.K. market for bananas was worth approximately US$149 million to the Windward Islands from 1980 to 1986.[14] Prorating on the basis of annual output figures of bananas suggests that the implicit price subsidy in 1986 amounted to approximately 12% of St. Lucia's GDP, 10% of Dominica's, 7% of St. Vincent and the Grenadines' and 2% of Grenada's. Similarly, the value of St. Kitts and Nevis' implicit price subsidy on sugar exports to the EEC is estimated at US$23 million from 1980 to 1986, or about $3 million per year on a simple average basis.[15] As a percent of St. Kitts and Nevis' GDP, the subsidy on sugar sales to the EEC was worth about 4% in 1986. On a weighted basis across all 6 countries, these banana and sugar subsidies represented 5.5% of OECS GDP in 1986.[16]

2.44   These levels of foreign assistance to the OECS countries are very high, individually by type and collectively as a group. Any sudden reduction would react sharply and adversely on the economies of the OECS countries. Their economies are very small, and this smallness and lack of physical infrastructure, combined with short-run inflexibility in resource allocation, would accentuate the impact of any reduction in foreign assistance. The required strategy is to build up the domestic economic structure so that over time the economies can be moved away from external support. Subsequent chapters discuss this question in detail.

14/ See IBRD Caribbean Exports: Preferential Markets and Performance, 1988.

15/ A finer calculation is precluded by the fact sugar is sold in two markets -- the U.S. and Europe -- in varying proportions each year. The US$3 million estimate does not include the implicit subsidy on sugar sales to the U.S.

16/ Antigua and Barbuda receives no banana or sugar implicit subsidies but is included in the weighted average of 5.5%. Excluding Antigua and Barbuda the weighted average for the 5 recipients of support in the form of implicit price subsidies is 7.6% of GDP.

G. Conclusions

2.45   The overall experience of the OECS countries since the 1960s has approximated that of similarly situated developing countries, when measured in terms of growth of real GNP and real GNP per capita. The pattern of growth over this period, however, has differed sharply, with the OECS countries experiencing relative stagnation up to 1980 and substantial growth thereafter. The OECS countries did not borrow heavily in the 1970s following the oil shocks, and hence they were less vulnerable to the recession of the early 1980s. This beneficial experience suggests that their governments should refrain from accumulating debt in commercial terms to finance future development needs, given the small size of their economies and vulnerability to outside forces.

2.46   The OECS countries have shared successfully a common currency which has been linked firmly and without apparent stress to a major key currency, first the pound and then the U.S. dollar. The robustness displayed by the exchange rate system in the past is important in assessing likely future developments, such as the possibility that the key U.K. market for bananas may be disrupted by developments which integrate the European Community markets in 1992.

2.47   Resource flexibility in the OECS countries since 1961 has been broadly consistent with that displayed by similar developing countries, as measured by the changing sectoral composition of GDP. In particular, agriculture has become much less important as a share of GDP. Resource movements have responded to price incentives in bananas and in tourism as well as tax and preferential market incentives in manufacturing.

2.48   Substantial changes in international trade patterns have occurred since the early 1960s, particularly in the growth of various classes of manufactured goods which were virtually non-existent in the 1960s but which increased to about 20% of domestic exports by the mid-1980s. Suggestions that the economies are too small to develop manufacturing therefore are unfounded.

2.49   Ratios of investment to GDP in the OECS countries historically have been very high. The large size of many private projects relative to their economies have been partly responsible for this. The financing of this investment has been largely from private sources. Private sources have been used to finance a considerable proportion of public investment. Public sources of finance have involved mainly grant assistance or concessionary loans. Foreign grants plus government borrowing abroad have financed a large but decreasing proportion of public sector investment. However, the OECS countries are vulnerable to changes in the level of financing, since it is largely foreign in origin. Both foreign grants and loans are falling as a proportion of public sector investment. Also, an increase in the cost of foreign finance would tend to result in a reduction in the investment to GDP ratio.

2.50   The OECS countries are supported heavily by foreign flows. Foreign official grants, net private transfers from abroad and the subsidy contained in the protected prices received for bananas and sugar together amount to about 25% of their total GDP. Overall, they have utilized these flows effectively. Any abrupt reduction in foreign flows would exert a dramatic impact on their economies.

CHAPTER III

THE MACROECONOMIC FRAMEWORK

A. Overview

3.01   Since the OECS countries share a common currency, and since it may be possible that developments in the European Economic Community related to the creation of a single market in 1992 might adversely affect banana exports from the OECS countries, the analysis focuses on ways in which the current exchange rate system could remain viable in the likelihood of such shocks. It also focuses on the ability of the financial sector to mobilize domestic savings to finance additions to the capital stock. In this connection, the Government's revenue generating capacity also is reviewed.

3.02   The OECS economies are very small. The pool of native born trained personnel is also small. Governments in small countries have the same range of problems to handle as those in larger ones. Key policy makers are therefore overwhelmed on a day-to-day basis with policy issues. The best solution to economic policy making is to "keep it simple." Faced with a dearth of trained talent, the countries should organize their governments so as to use the available talent as frugally as possible. Policies should take the form of simple, robust rules easy to apply and implement.[17] The fixed link with the U.S. dollars is one such policy.

B. Monetary and Exchange Rate Policy

The Current Structure

3.03   The OECS countries share a common currency managed by the Eastern Caribbean Central Bank (ECCB).[18] The exchange rate can be altered only by unanimous agreement.   Two key elements provide the current system with stability: (i) strict limitations on the ability of governments to monetize debt by borrowing from the ECCB. Holdings of Treasury Bills are restricted to 10% of a Governments's revenue in the previous year, and holdings of debentures of member governments are restricted to 15% of the demand liabilities of the Central Bank. Purchases of debentures are allocated on the basis of government revenue in the previous year; and (ii) the backing of at least 60% of the demand liabilities of the ECCB by hard currency assets. These two elements prevent rapid increases in the

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17/ See Arnold C. Harberger, "Policy Making and Economic Policy in Developing Countries", in R. Dornbusch and F. Helmers, (eds), The Open Economy, Oxford University Press for World Bank, 1988.

18/ Anguilla is also a member of the ECCB.

supply of EC dollars unsupported by government revenues or hard currency assets, and thereby maintain the value of the EC dollar against the US dollar. They should not be relaxed, since it is important to maintain the stability of the link with the U.S. dollar.

3.04   Although the OECS countries do not experience the same inflation rates, sharing a common currency places a limit on the degree to which inflation rates differ. Differential inflation rates imply differential real exchange rates. These in turn affect the export competitiveness of goods and services, and the attractiveness of imports. If a country were to experience more rapid inflation than its neighbors, a reduction in aggregate demand would follow and inflation would ameliorate.

Changes in Real Exchange Rates

3.05   A number of factors could cause domestic price levels to diverge among the OECS countries as a group, and between them and the United States and other countries. This section estimates the numerical significance of these factors. The analysis focuses in particular upon the resource gap, the price of bananas and the exchange rate between the US dollar and other major currencies. The main conclusions are: (i) an increase in the resource gap increases domestic prices through an increase in the demand for non-traded goods; (ii) increases in the real U.K. price of bananas push up domestic prices in banana exporting countries through substitution effects on production and through demand effects on non-traded goods; and (iii) changes in the real exchange rate between the US dollar and other major currencies affect domestic prices through their impact on the prices of traded goods.

3.06   The OECS countries have had a real exchange rate decrease, i.e. an appreciation of the currency, since the late 1970s,[19] as evidenced by a decline of the relative prices of traded goods in terms of prices of non-traded goods (see Table 4.9 Statistical Appendix). In this connection, the real exchange rates of the OECS countries have decreased not only with respect to the composite price index of traded goods but also with respect to U.S. prices (see Table 4.10 Statistical Appendix).[20]

19/ As used here, a "real exchange rate decrease" implies the countries have become "less competitive" in world markets. The real exchange rate can be measured in a number of ways. Two are used here, one using a price index of traded goods in a number of major countries, the second using the U.S. wholesale price index. The real exchange rate calculated as the ratio of a composite price index of internationally traded goods to the consumer price index of each country uses a weighted average of the wholesale price indexes of the main currency areas in U.S. dollars. The weights of this index are those implicit in the basket of currencies in the SDR. Implicit in the index is the idea that those currency areas are large enough in the world economy to be price makers in the traded goods market.

20/ The price index of traded goods is the U.S. wholesale price index, since the OECS countries have their currency pegged to the U.S. dollar.

3.07   A common feature to the OECS countries is a persistent excess of real aggregate expenditure over real output during the recent past, which has brought about changes in the exchange rate[21] (see Table 2.21 Statistical Appendix). A second feature common to a subset of the OECS countries is the preferential market for bananas in the U.K. market. Banana producing countries, i.e., Dominica, Grenada, St. Lucia, and St. Vincent and the Grenadines, receive a price for bananas much higher than the price received by Central American producers. An increase in the price of bananas has both expenditure and substitution effects on domestic price levels.[22] A third feature is that the OECS countries peg their currency to

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21/ The excess of aggregate expenditure over real output has been financed in a number of ways, including foreign aid and foreign private investment. This resource gap or excess demand for goods and non-factor services is, by definition, the excess demand for traded and non-traded goods and services. However, an excess demand for non-traded goods will be eliminated by changes in the relative prices of non-traded goods, generating a change in the real exchange rate. As a result of these changes in the relative price of non-traded goods, resources will be reallocated toward production of non-traded goods and domestic expenditure will be switched toward traded goods. The analysis suggests the existence of a direct relationship between the real exchange rate and the resource gap because the gap measures the excess of aggregate expenditure over aggregate supply.

22/ Production and sale of bananas on a weekly basis provides farmers with a cash flow throughout the year. Since banana farmers face a borrowing constraint, an increase in the price of bananas will allow farmers to achieve a higher level of expenditure, resulting in an increase in the prices of non-traded goods as long as part of the increase in expenditure is devoted to the acquisition of non-traded goods. On the other hand, given an increase in the price of bananas, producers will tend to switch production from other goods to bananas. This amounts to saying that if the price of bananas increases, an excess demand for non-traded goods will be generated, resulting in an increase in the relative price of non-traded goods.

the U.S. dollar.[23] The decrease of the OECS real exchange rate in the early 1980's was a direct by-product of disequilibrium real exchange rates prevailing between the U.S. dollar and other major currencies.

3.08   The real exchange equation implicit in the above discussion has been estimated with annual data for the OECS countries for the period 1977 to 1986. This period was chosen because of data availability. The real exchange rate of each country is regressed against a resource gap variable and the real exchange rate of the U.S. dollar against the major currencies, plus, in the case of Dominica, Grenada, St. Lucia, and St. Vincent and the Grenadines, the real price of bananas. The equation is specified as log-linear in the levels of all the variables except the resource gap. Details of the calculations are presented in Annex 3. The regression results confirm that real exchange rates are strongly influenced by the resource gap and the US real exchange rate, and that the price of bananas is relevant in Dominica, St. Lucia and Grenada. The only surprise in the results is that the price of bananas does not appear to be a significant variable in St. Vincent and the Grenadines. In summary form, a one percentage point increase in the resource gap as a proportion of GDP causes a real appreciation of the exchange rate from 0.2% to 0.7%, the average being 0.4%. A one percentage point appreciation of the US dollar vis-a-vis other major currencies results in a real exchange rate appreciation of between 0.5% and 0.8%, the average being 0.7%. Finally, a 1% increase in the real price of bananas causes about a 0.4% to 0.5% appreciation of the

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23/ This raises the issue of how the real exchange rates of the OECS countries behave when the price of the U.S. dollar changes vis-a-vis the major currencies (i.e., major European currencies and the Japanese yen). If the domestic price levels of all the major countries (i.e., U.S., EEC countries and Japan) were to be equalized in terms of the same currency (i.e., the U.S. dollar), then variations in the exchange rate between the U.S. dollar and other major currencies would not affect the real exchange rate of those countries pegging their currencies to the U.S. dollar. That is, movements in the exchange rate between the U.S. dollar and the major currencies would be compensated by variations in price levels across countries. In this sense, the competitiveness of those countries against others outside the U.S. dollar area would not be affected. However, if prices are not equalized among countries, then disequilibrium real exchange rates between the U.S. dollar and the other major currencies will affect the real exchange rate of the OECS countries. Thus, an appreciation of the U.S. dollar making the cost of living in the U.S. more expensive in terms of the Japanese yen and the European currencies will also make the cost of living in the OECS countries more expensive in terms of those currencies.

real exchange rate in Dominica, Grenada and St. Lucia.[24] These results should not be taken to imply that a reduction in the resource gap through a reduction in foreign assistance would be desirable, since the infrastructure and other needs of the economies remain large.

Maintaining Exchange Rate Stability with External Shocks

3.09   Bananas are an extremely important export crop for three countries (Dominica, St. Lucia and St. Vincent and the Grenadines), an important crop for another one (Grenada), and have no direct significance as an export crop in two of them (St. Kitts and Nevis, and Antigua and Barbuda). However, bananas have great significance for all OECS countries together, owing to the possible impact of a sharp fall in the price of bananas on the stability of the exchange rate system. At present bananas are sold in the protected UK market under a Lome Agreement Protocol between the European Economic Community (EEC) and the ACP states, at a price which is well above their world price. Given the movement toward a single integrated market in the EEC by 1992, the current market arrangements for bananas cannot continue. A number of alternative arrangements are being discussed between representatives of the OECS and the EEC. Those closely involved in these negotiations believe that an agreement may be reached to provide some measure of protection to output from the Windward Islands, possibly through the establishment of a common EC tariff on bananas combined with a quota system designed to limit the extent to which so called "dollar bananas" can squeeze out traditional supplies. It is significant that the recent Lome IV Agreement has the same Protocol in bananas as Lome III, and that the application of this Protocol has been limited to traditional ACP suppliers. This should provide some protection to the Windward Islands, but until the actual mechanism by which this protection will be given has been agreed upon, the long-run prospects for banana production are uncertain. While some arrangement is definitely needed to avoid large external shocks to the OECS economies, it is too early to predict the likely outcome of these negotiations.

24/ Note that the real exchange rate does not include the price of bananas. Changes in the real exchange rates are the result of the specified economic factors, and the resulting real exchange rates are therefore equilibrium exchange rates in the sense that they will prevail over time, assuming no other changes affect the system. A rise in the real price of bananas, for example, results in a decrease of the real exchange rate which produces a reduction of other exports and an increase in imports, other things being equal. This new configuration will be an equilibrium one even though some products, such as manufactured products, have been priced out of export markets. This is the Dutch-disease phenomenon much discussed in the economic literature in recent years.

3.10   The value of the subsidy implicit in the guaranteed UK market for bananas was worth approximately US$149 million to Dominica, Grenada, St. Lucia, and St. Vincent and the Grenadines from 1980 to 1986.[25] This is equal to 6% of the combined GDP of these countries over this period, and 8% for St. Lucia, 7% for Dominica, 6% for St. Vincent and the Grenadines and 2% for Grenada. Since banana output grew faster than total output, the value of the subsidy tended to increase over the period. Prorating the subsidy on the basis of the output figures demonstrates that the implicit price subsidy in 1986 was large. It amounted to approximately 12% of St. Lucia's GDP, 10% of Dominica's, 7% of St. Vincent and the Grenadine's and 2% of Grenada's. The value of the subsidy in 1986 for the four countries combined was about US$38 million, or 37% of total banana exports of US$103 million.

3.11   Reduction or elimination of the subsidy on bananas would have immediate and simultaneous adverse income, output and price affects. First, real GDP would drop sharply by the amount of the reduction in the subsidy, i.e. by US$38 million in 1986 if the subsidy were entirely eliminated. Second, the sharp fall in the real price of bananas would cause growers to substitute other crops or activities which are currently far less profitable for the falling banana production. Third, the sharp fall in the real price of bananas would increase the real exchange rate, i.e. there would be a real depreciation as the real prices of non-traded goods and real wages would fall sharply in response to expenditure and substitution effects.

3.12   Part of the potential depreciation in the real exchange rate has been estimated using the regression results described above. Holding the resource gap constant, the substitution effect from a 50% reduction in the real price of bananas would result in a depreciation of the real exchange rate by 31% in Dominica, 28% in St. Lucia and 25% in Grenada. If the impact of the fall in the real price of bananas on the resource gap were to be included in the calculations, the increases in the real exchange rate would be even higher. With constant prices of internationally traded goods, increases in real exchange rates of these magnitudes would imply strong deflationary pressures on domestic price levels. If prices of non-traded goods were downwardly rigid, those changes in real exchange rates could be achieved by a devaluation of the exchange rate with respect to the U.S. dollar.[26] However, the shock from the fall in the real price of bananas would affect the individual OECS countries differently, since some would not experience changes in their domestic prices. As changes in the exchange rate regime require the consent of all of the members of the OECS, it is doubtful that a devaluation would be readily agreed to.

25/ _Caribbean Exports: Preferential Markets and Performance_, IBRD. Calculations based on German rather than U.S. comparison prices show smaller but still significant levels of subsidy.

26/ Other variables such as the demand for real cash balances are not invariant with respect to the exchange rate regime. An expected future devaluation of the exchange rate is likely to produce a flight from domestic to foreign currency because of the capital losses implied to money holders.

3.13   A reduction in the real price of bananas would put severe pressure on the balance of payments of the affected countries, and hence of the region as a whole. Both the reduction in the price level and in real output would generate an excess supply of real cash balances. This, in turn, would tend to generate balance of payments deficits, given the countries' fixed exchange rate regime, resulting in spillover effects on the holdings of foreign exchange reserves for the region as a whole. Foreign exchange reserves might not be large enough, for a particular country, to eliminate its excess supply of real cash balances. As a result, the total foreign exchange reserves of the region would have to be utilized to keep the exchange regime in operation.

3.14   In the short term, a sharp fall in the real price of bananas would cause sharp reductions in income, a substantial fall in the output of bananas and severe deflationary pressures on prices, offset to some extent by increases in non-banana agricultural output and in other traded goods output (i.e. manufactured products), and possibly tourism.[27] Once a reallocation of resources takes place following the altered price incentives, overall income would still be lower by at least the amount of the reduction in the implicit subsidy on bananas, ignoring any sources of growth elsewhere in the economy.

3.15   A sharp fall in the price of bananas would subject the exchange rate system to a different sort of shock than it has experienced in the past. The oil shock and the recession of the early 1980's impacted on all countries to more or less the same extent, and the natural disasters of the

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[27] The impact of a fall in the real price of bananas on the output of bananas and of other agriculture output can be estimated from price and cross elasticities of supply (see Chapter IV). Such an approach indicates that banana output is highly responsive to the real price of bananas. Estimates of supply price elasticities range from 1.6 in Dominica to 2.8 in St. Lucia, and all are highly significant. A 10% price reduction would result in output declines of 16% in Dominica and 28% in St. Lucia. Many agricultural products are substitutes in production with bananas, and their output could therefore be expected to increase with a fall in the price of bananas. In addition, a fall in the price of bananas would raise the price of non-banana crops relative to the price of non-traded goods. Both of these effects are significant in most crops, exceptions being plantains in Dominica and in St. Vincent and the Grenadines and cocoa in Grenada. Empirical results suggest that a 10% price reduction in bananas would tend to result in a 2% increase in coconut output in Dominica, a 5% increase in nutmegs in Grenada, a 4% increase in cocoa in St. Lucia, a 15% increase in arrowroot, 12% increase in coconuts, 28% increase in mangoes and 13% increase in yams in St. Vincent and the Grenadines. However, despite the large size of some of these cross elasticities, the quantities involved are small relative to the size of the banana crop, and total agricultural output would almost certainly fall, especially in the short term.

late 1970s and early 1980s which struck some countries were limited in the period of their impact. A sharp fall in the real price of bananas would impact severely and for a long period of time on some countries but not on others. The banana boom was accompanied, by chance, by strong growth in tourism in St. Kitts and Nevis, and in Antigua and Barbuda, and in any event a sharp increase in the real price of bananas is much easier to absorb than a sharp fall. Surpluses of foreign exchange can easily be invested off-shore, for example, but deficits are harder to handle.

3.16   The fixed exchange rate system has served the OECS well and has the advantage of being simple to administer in comparison to a floating rate or adjustable peg system which tends to require continuous political and administrative attention. The system is by no means doomed to break up. It has survived sharp differential movements in real exchange rates among its members in the past, and could do so again. The banana and tourist booms have enabled the Central Banks and the commercial banks to add to their net foreign assets, the Central Bank by US$54 million or 54% between December 1985 and December 1987, commercial banks by US$71 million or 125% for the same period. Yet, total net foreign assets of both the ECCB and commercial banks in December 1987 equalled only US$282 million or the equivalent of about 4 months of imports of the OECS countries, not a large amount given the potential magnitude of a banana shock.

3.17   It is desirable that the price subsidy for bananas be only gradually phased-out over the longer-term. It is also desirable that the proceeds of the subsidy be invested efficiently and not consumed away. The phasing-out of the subsidy inevitably involves diversification into other agriculture, manufacturing, tourism and services. These possibilities should not, however, be overstated. Even tourism, which has the strongest potential growth prospects, is projected to generate additional gross receipts of only about US$9 million each year to 1994 in the four Windward Islands (see Table 6.1 Statistical Appendix). Since these are gross receipts, and the price subsidy on bananas (an estimated US$38 million in .986) is a net gain, it would take a long period for tourism to generate an equivalent increase in net income for the Windward Islands.

3.18   For all six OECS countries, gross receipts from tourism are projected to rise sharply, by about US$26 million per year, since substantial increases are projected for St. Kitts and Nevis, and Antigua and Barbuda. This suggests that the region as a whole might not experience an unsustainable balance of payments problem, but that strong balance of payments strains are likely to emerge within the economy. One way of reducing these would be to promote greater freedom of movement of capital and labor among the OECS countries. Labor would tend to move from the banana producing countries to St. Kitts and Nevis, and Antigua and Barbuda, and capital might tend to move from balance of payments surplus to deficit areas. Another way of reducing these pressures and maintaining the stability of the exchange rate system is to adopt policies that encourage flexibility in resource use. Money wages, in particular, would have to be sufficiently flexible so as to promote employment; land use restrictions, company law and other restrictions on factor mobility would require revision.

3.19   In summary, if the subsidy in the price of bananas were to be reduced, real incomes would fall. One option to prevent real income losses from becoming even larger would be to adjust the exchange rate system. In its absence, other measures would be needed. However, the changes in real income arising from changes in the terms of trade would be unavoidable. Flexibility in resource use would be essential. Otherwise, the real income loss from the reduction in the subsidy would be multiplied by output losses resulting from underutilized resources, especially labor and land.

3.20   A possible exchange rate option would link the EC dollar to a basket of currencies rather than the US dollar alone. This option would not provide an advantage were the price of bananas to fall as a result of events in 1992 in Europe, given the absence of change in the configuration of world exchange rates. In more general terms, the idea of a link to a basket currency might be thought to be attractive because the OECS countries' exports are directed to two main markets, the U.S. (tourism, manufactured goods, some agricultural produce) and the U.K. (bananas). European tourism is also gaining in significance. Changes in the dollar-sterling exchange rate would pose problems when the dollar rises against the pound. However, linking the EC dollar to a basket of currencies would raise two key issues. Unanimous political agreement on a basket of currencies option would be no easier to achieve than unanimous agreement on a change in a single currency link. Maintaining a link with a basket, on the other hand, would introduce uncertainty and complexity into the operation of the system as a whole. Under present circumstances very careful consideration would be required before undertaking such a major step. Such consideration would have to consider, among other matters, the possibility that the process of adjustment to a new link would itself introduce instability into the exchange rate system.

C. Mobilization of Domestic Savings

3.21   A competitive and diversified institutional credit system is important to mobilize domestic savings to finance additions to the capital stock. The OECS countries have the basic infrastructure required to develop a well-diversified financial sector, but important institutional and regulatory problems continue to exist.[28] The strengths of the system include an indigenous commercial banking sector, a foreign commercial banking sector with strong international linkages, an emerging non-bank financial sector, especially in development banks and credit unions, and a relatively new Central Bank with powers to expand its role in developing the financial sector. Weaknesses include insufficient competition to ensure normal spreads between borrowing and lending rates of interest, an absence of investment finance institutions which issue and trade bonds and equities, and a multiplicity of laws and regulations throughout the OECS which hinder the creation of a unified capital market.

28/ See OECS Capital Markets and Financial Institutions Project, prepared for Eastern Caribbean Central Bank under the auspices of USAID by R.R. Nathan Associates Inc. and Price Waterhouse, December 30, 1988.

3.22   The ECCB already has taken some steps to reduce barriers to the movement of funds among OECS countries. An inter-bank market mechanism was developed in 1986 to improve mobility of funds within the banking system, and a treasury bill market was created in 1988. The ECCB also has assisted in the preparation of draft legislation for consideration by member governments relating to the harmonization of banking acts for domestic banking operations and to new exchange control acts to remove existing foreign exchange barriers. However, many restrictions will exist even if these draft regulations are approved. These have been identified in the Capital Markets Study commissioned by the ECCB, and include different treatment among member countries on: interest rate ceilings, withholding taxes on interest bearing deposits, withholding tax on interest, taxes on bank branches, corporate income tax on financial institutions, bank loans to aliens, value-added tax on bank services, and the ability of aliens to use land as collateral. The spread between bank lending rates and the cost of their money has generated controversy. The Capital Market Study appears to accept the view that the spreads are higher than "normal", but proposes no specific solution other than measures to increase competition in the system as a whole. It cautions against direct ECCB intervention and control of spreads.

3.23   A major finding of the Capital Markets Study is that small and medium-sized enterprises (SMEs) face the most difficulties in securing medium and long-term financing, and it recommends that the ECCB implement a loan guarantee scheme for SMEs. In the longer term a special facility, possibly an "Eastern Caribbean Development Fund" which would complement the efforts of the CDB, should be investigated. This recommendation raises a number of concerns. SMEs are not clearly delineated from other enterprises, so any special facility might end up applying "across the board." It is not clear why, if a special facility is required, it could not be developed directly through the CDB rather than create yet another institution. Finally, it would involve a major change in emphasis by the ECCB, which up to now has confined itself to traditional Central Bank activities, which it has handled well. The ECCB has developed two guarantee schemes, but these apply to exporters and involve short-term finance.

3.24   Many of the recommendations of the Capital Markets Study would work towards increasing the efficiency of the credit system if implemented. The credit system appears to be developing a more diversified structure over time, and to a large extent the creation of new financial institutions will depend upon demand. Given the importance of developments in tourism to the region's future, it would be useful to examine the feasibility of a "special facility" for this purpose, along with or in addition to a special facility for SMEs.

D.   The Revenue Generating Capacity of the OECS Governments

3.25   A recent report on the Caribbean has argued that fiscal capacity is low and that the buoyancy of tax revenues with respect to GDP is also

low in many Caribbean countries, including some in the OECS.[29] Conclusions relating to the OECS were based on the period from 1977-82. Summary data for more recent years suggests that fiscal buoyancy of central government current revenues is greater than 1.0 for every country except St. Kitts and Nevis. (See Table III.1). St. Kitts and Nevis is an exception because the ratio of tax revenue to GDP in the late 1970's was 47%, an extremely high ratio which was reduced during the 1980's to 29%. The high buoyancy ratios for Dominica and St. Lucia suggest that government revenues have benefitted from the banana boom, despite the fact that bananas bear very little or no direct taxation. The ratios of current tax revenues to GDP shown in Table III.1 a:e not low compared to representative countries at similar income levels or to a sample of small countries.

TABLE III.1: OECS COUNTRIES - CENTRAL GOVERNMENT CURRENT REVENUES IN
RELATION TO GDP AT FACTOR COST, VARIOUS PERIODS

	OECS	Antigua and Barbuda	Dominica	Grenada	St. Kitts and Nevis	St. Lucia	St. Vincent and the Grenadines
Ratio of Current Revenues to GDP							
Late 1970's	32	25	28	85	47	82	85
Late 1980's	83	27	38	84	29	40	87
Change in Current Revenues as proportion of change in GDP	1.1	1.1	1.8	1.0	0.6	1.8	1.1

Source: World Bank, National Estimates and OECS/EAS. Periods used are: Antigua and Barbuda (1978-80, 1985-87); Dominica (1977-79 to 1985-87); Grenada (1980-81 to 1986-87); St. Kitts and Nevis (1978-80 to 1986-88); St. Lucia (1977-79 to 1985-87); St. Vincent and the Grenadines (1977-79 to 1984-86).

3.26   There are wide differences in the forms in which individual countries collect current revenues, but in approximate terms there are no sharp differences between the sources of tax revenues in the OECS countries and in other countries at similar levels. Excluding Social Security or National Insurance Scheme contributions, in 1985 the OECS countries generated about 33% of current revenue from taxes on international trade, about 29% from other indirect taxes, about 23% from income taxes and 15% from other sources. Other small countries tend to raise relatively more from taxes on international trade, and countries at similar income levels

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29/ See Caribbean Development to the Year 2000: Challenges, Prospects and Policies, prepared for the CARICOM Community Secretariat by Compton Bourne, June, 1988.

raise less, but the overall patterns are comparable. Since the early 1960s the OECS countries have experienced a sharp reduction in reliance on taxes on international trade, which constituted 60% of current revenues in 1961.[30]

3.27   At a broad level the OECS countries have the ability to generate tax and other revenue in proportion to changes in GDP. At the micro level, reforms are necessary to make tax systems simpler and more uniform across the region, so that administrative costs and economic disincentives are reduced. Grenada's experience with the introduction of a value added tax suggests that tax reform is a complex operation that requires careful attention at political and administrative levels. Economies of scale may well exist if these problems are tackled on a regional level through the OECS offices in St. Lucia, and Antigua and Barbuda.

E. Conclusions

3.28   The OECS countries share a common currency managed by the Eastern Caribbean Central Bank (ECCB). The exchange rate can be altered only by unanimous agreement. Two key elements provide it with stability and should not be relaxed: (i) strict limitations on the ability of governments to monetize debt by borrowing from the ECCB; and (ii) the backing of at least 60% of the demand liabilities of the ECCB by hard currency assets.

3.29   The real exchange rate in each of the OECS countries changes in response to changes in the resource gap, in the relative price of bananas, and in the U.S. dollar against other major currencies in real terms. Given the infrastructure needs of the countries necessary to strengthen their economic base, however, continuation of foreign assistance in the form of grants and concessionary loans will be required.

3.30   Four of the OECS countries (Dominica, Grenada, St. Lucia, and St. Vincent and the Grenadines) receive a substantial subsidy in the form of sales of bananas in the U.K. at prices above world levels. The recent LOME IV Agreement has the same Protocol in bananas as LOME III and its application has been limited to traditional ACP producers. However, the actual mechanism by which this protection will be given has been agreed upon. The long-run prospects for banana production are uncertain. If the negotiations surrounding the creation of a single market in the European Economic Community by 1992 were to lead to a reduction in the subsidy received on bananas, the impact on the OECS countries would be severe. Banana growing countries would experience sharp falls in income and severe deflationary pressures, offset only marginally by increases in non-banana agricultural production in the short-term. All OECS countries together could experience a large shock to the exchange rate system.

3.31   Diversification into tourism, manufacturing, other agriculture and services could be enhanced by policies which promote greater freedom of movement of labor and capital among the OECS countries, and sufficient

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30/ For 1961, see Carleen O'Loughlin, A Survey of Economic Potential and Capital Needs of the Leeward Islands, Windward Islands and Barbados, HMSO, London, 1963.

flexibility in wage rates. Emphasis should be given to the development of the support services that are needed to complement the expansion of agriculture, manufacturing and tourism. At the same time, the countries should assess the role of the construction industry and its effects on wages, prices and resource shifts.

3.32   It is desirable that the price subsidy for bananas be only gradually phased-out over the longer-term to prevent an abrupt shock to the economies and to allow for the development of alternative activities. The phasing-out of the subsidy inevitably involves diversification into tourism, manufacturing and other agriculture, together with the services the growth of these activities will generate. These possibilities should not, however, be overstated. Tourism, which has the strongest growth prospects, is projected to generate additional gross receipts of only about US$9 million each year to 1994 in the four Windward Islands (Dominica, St. Lucia, St. Vincent and the Grenadines, and Grenada). Since these are gross receipts, and the implicit price subsidy on bananas (an estimated US$38 million in 1986) is a net gain, it would take a long period for tourism to generate an equivalent increase in net income for the Windward Islands.

3.33   For all six OECS countries, gross receipts from tourism are projected to rise sharply, by about US$26 million per year. This suggests that the region as a whole might not experience an unsustainable balance of payments problem, but that strong balance of payments strains are likely to emerge within individual economies. One way of reducing these would be to promote greater freedom of movement of capital and labor among the OECS countries. Another way of reducing these pressures and maintaining the stability of the exchange rate system is to pursue policies that encourage flexibility in resource use. Money wages, in particular, would have to be sufficiently flexible so as to promote employment, and land use restrictions would require revision.

3.34   The institutional credit system has become more diversified and open in recent years, but weaknesses remain. Spreads between lending and borrowing rates are high, there is an absence of institutional traders in bonds and equities, and regulations are unnecessarily diverse and complex. Increasing the efficiency of the credit system is an important objective.

3.35   Reforms are necessary to make tax systems simpler and more uniform, through coordinated regional action. Grenada's experience with the introduction of a value added tax suggests that tax reform is a complex operation that requires careful attention at political and administrative levels. Economies of scale may well exist if these problems were tackled on a regional level.

CHAPTER IV

TRADE

A. Overview

4.01   This chapter analyzes the common trade framework of the OECS countries and discusses general prospects for trade in manufactured products and in agricultural products. Detailed discussion of manufacturing in each country is contained in Chapter VI.

B. CARICOM and the OECS

4.02   The OECS countries are members of the Caribbean Community (CARICOM). The general framework of rules and regulations governing CARICOM is very complex, and not all of them are universally observed. CARICOM is legally a "common market", but it lacks provisions for the free movement of capital and labor found in true common markets. It is not a customs union, since all members of a customs union share a common external tariff. and typically within a customs union little attention need be paid to the "origin" of output that is involved in intra-customs union trade. CARICOM members have four separate common external tariffs (CET), and the "rules of origin" are extremely complex.

4.03   The six independent members of the OECS have a CET, but Montserrat has a different one. The other two CET's are possessed by Belize, and by all other members of CARICOM. If a product passes the rules of origin test and therefore is judged to be of CARICOM origin, trade is supposed to be unrestricted by tariffs, stamp duties, quantitative restrictions and similar barriers to trade, unless specified exemptions are invoked. These exemptions can relate to dumping, national security, balance of payments considerations and other specified circumstances. Trade between CARICOM and the rest of the world is constrained by both quantitative restrictions (QRs) and the CET. However, neither QRs nor the CET are uniform across all CARICOM countries. The CET tends to be higher for regionally produced products, for consumer goods and for goods that are major sources of revenue. In addition, goods of particular importance to the less developed countries (LDCs) within CARICOM have higher tariffs, and all members of the OECS are classified as LDCs. An important provision is that the CET for a particular product can be reduced by a country under specific circumstances, the most important being tariff relief on selected products granted to new firms for specified periods of time. These national exemptions can be used by a country to increase the effective protection on selected final products by reducing tariffs on associated inputs.

4.04   Since 1986, CARICOM countries have agreed to reduce the barriers to intra-CARICOM trade. On January 1, 1988, the OECS countries agreed to dismantle existing trade barriers among themselves, and CARICOM as a whole followed suit on October 1, 1988. Certain restrictions remain, but markets in Trinidad and Tobago, Jamaica, and Guyana in particular should now be more open to products from the OECS countries than previously. Likewise the OECS markets are more open to products from the rest of CARICOM and from other members of the OECS. In addition, an extensive review of

CARICOM is underway, and it is possible that by 1990 the CET will be both simplified and harmonized. Also under review by CARICOM are the harmonization of tariff nomenclature, possible limits on tariff exemptions by individual countries, and clarification of the rules of origin.

4.05   The reality of trade practices within CARICOM does not always correspond to official precepts, and countries frequently restrict intra-CARICOM trade in ways that are not consistent with the CARICOM trade provisions. Jamaica, Trinidad and Tobago, and Guyana have each, under balance of payment pressures, imposed trade barriers that have severely restricted intra-CARICOM trade. A number of countries, including Grenada, St. Kitts and Nevis, St. Lucia, and Antigua and Barbuda, have imposed stamp duties on CARICOM imports that are claimed to be contrary to CARICOM regulations. OECS countries continue to restrict trade among themselves in various ways, despite the agreement on trade liberalization of January 1, 1988. For example, negative lists prohibit imports from all sources, and St. Kitts and Nevis has a quota on all imported beer.

4.06   The OECS countries agreed along with other members of CARICOM to harmonize their fiscal incentives for industry, and appropriate Fiscal Incentives Acts were passed by each country. The Grenada Fiscal Incentives Act of 1974 is typical. This Act allows the Minister for Industry to grant certain benefits to "approved enterprises:" (i) a permit for duty free import of any equipment, spare parts or raw materials of any product that is judged to be unavailable from CARICOM members. This benefit is not provided to an enclave enterprise, and is available only for the length of the "tax holiday" granted to the firm, and only for constructing or equipping the firm; (ii) relief from income tax may be granted for a certain period, depending upon local value added, the degree of capital intensity and whether the firm is an enclave enterprise. The tax holiday runs from 10 to 15 years; and (iii) relief from some income tax on profits generated by exports to firms not enjoying benefits under (i) and (ii) above may be granted, if such firms export non-traditional products outside CARICOM. Benefits for a restricted number of years are available for profits on exports to Jamaica, Trinidad and Tobago, and Guyana. Tax relief ranges from 25% to 50%, depending upon the proportion of total profits derived from exports.

4.07   The Fiscal Incentives Acts make an important contribution to consistency among incentives offered by CARICOM members, and they probably prevent some bargaining by prospective firms who wish to obtain increased benefits from member states. However, since they are somewhat imprecise in their interpretation, and since discretion is given to each country to interpret the various clauses, the possibility for bargaining is not eliminated. The Minister of Industry has considerable discretion to allow duty free import from outside CARICOM, in interpreting the phrase "available from Member States," and to extend the period of tax holiday.

4.08   Apart from the issue of consistency of treatment among member states, there is a question of whether the Fiscal Incentives Acts are a suitable mechanism to subsidize exports in the face of import duties that discriminate against exports. Benefits are not in general restricted to firms that export, except for the benefit of tax relief on some profits generated by non-traditional exports. The Fiscal Incentives Acts allow only for relief from "customs duty" otherwise payable on imports from non-

CARICOM countries, but it does not apply to other taxes on production such as consumption taxes, stamp duties and customs administrative levies. The one specific benefit to export industries is confined to non-traditional exports, and is limited to profits on exports outside CARICOM (except for a time limited benefit on exports to Guyana, Trinidad and Tobago, and Jamaica). Finally, and perhaps most important, the Fiscal Incentives Act takes no account of the additional costs borne by exporters when they use inputs available from within CARICOM--the prices of which are likely to be above world prices and whose use generates a competitive disadvantage for export oriented firms.

4.09   The Fiscal Incentive Acts in the OECS countries have generated a misallocation of resources by encouraging inefficient import substitution industries, but the Acts also have encouraged export industries, including tourism. On balance they should be retained, with a periodic review to ensure that they are continuing to encourage appropriate development, and that their cost in terms of revenue foregone is justified. This conclusion is strengthened by the fact that other jurisdictions in CARICOM and elsewhere offer similar incentives.

C.   Trade Relationships with Europe and North America

4.10   The OECS countries, along with other countries, enjoy preferential access to markets in Europe and North America under a number of trading arrangements.[31] The Lome Convention offers duty free entry to Europe for many OECS products, in addition to providing guaranteed markets for bananas and sugar. The Caribbean Basin Initiative (CBI) offers duty free entry to the U.S. for all but a few products. Prior to the initiation of the CBI in 1984, many OECS products were able to enter the U.S. duty free under the General System of Preferences (GSP). Several non-garment firms in the OECS exporting to the U.S. were in fact set up prior to 1984. Items exempted from duty free treatment under the CBI include apparel and footwear. However, under the Tariff Schedule of the U.S., and in particular under tariff provisions 806 and 807, imports into the U.S. which include selected components that were produced in the U.S. are exempt from duty on the value of these components. Many firms in the OECS produce wearing apparel with U.S. materials and export the products back to the U.S. under these provisions. Finally, the U.S. makes available a sugar quota, on an annual basis, to St. Kitts and Nevis as part of the overall protection of its domestic sugar industry. Access to the Canadian market is provided under a program known as CARIBCAN on a duty free basis to all but a select group of commodities including apparel and footwear.

4.11   During 1982-1986, exports of manufactured products from the OECS countries to markets in the European Community and in Canada averaged only US$3.7 million or EC$10 million per year, excluding sugar. Over the same period, U.S. imports of manufactured products from the OECS countries averaged US$44.5 million or EC$120 million per year, although these figures are inflated to a large degree by the inclusion of re-exports from the OECS countries. In the longer term the OECS countries might attempt to diversify their manufacturing exports by selling more in the European Community and in Canada, but in the short to medium term the best strategy would appear to be to expand manufactured exports to the U.S. There are

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31/ For a more detailed discussion and analysis, see The Caribbean Export Preferences and Performance, IBRD.

costs as well as benefits to market diversification, in the form of
increased travel and advertising, identification of market requirements,
and the establishment of transportation links.

D. The Uruguay Round and Other Trade Developments

4.12   The Lome Agreement provides for special treatment for bananas and
sugar. Vis-a-vis the U.S., OECS firms can potentially benefit from the
GSP, the CBI and the 806/807 arrangements, and St. Kitts and Nevis has a
sugar quota. Preferential arrangements are unilaterally given, and they
can be unilaterally taken away. In addition, there is the potential that
they can be indirectly eroded by negotiations such as those taking place
under the current Uruguay Round of negotiations.

4.13   The OECS countries will be influenced by the results of the
Uruguay Round. The 806/807 type preferences which have engendered
offshore-assembly firms that export to the U.S. are vulnerable to a general
reduction of Most Favored Nation (MFN) tariffs, as well as the GSP which
provides preferential tariff treatment to some exports from developing
countries. Empirical analysis supports the view that reductions in MFN
tariffs are on balance helpful to developing countries despite their effect
on the erosion of GSP benefits, but this conclusion does not embrace the
possible impact of MFN tariff cuts on 806/807 type preferences in the U.S.
In addition, what is true across all developing countries may not be true
for any given sub-set, such as the OECS countries. The possible impact of
the Uruguay Round negotiations on trade between the OECS countries and the
U.S. in particular is therefore uncertain at this stage, and a detailed
examination would have to await the outcome of the Uruguay Round itself.

4.14   Other negotiations also may impact on OECS trade prospects. By
far the most important are related to banana and sugar exports to Europe
under Lome, given the prospect of a fully unified European market in 1992.
The situation vis-a-vis bananas is discussed in the chapter on the macro-
economic framework, while the sugar situation is discussed in the context
of St. Kitts and Nevis.

4.15   Another important set of discussions relates to revisions to the
U.S. Caribbean Basin Initiative, commonly known as CBI2. Three provisions
of the proposed new legislation are of special significance to the OECS
countries: (i) duty free preferences would be extended to apparel made
from fabric "cut and formed" in the U.S. At present only the U.S.
component of such apparel is duty free; (ii) a minimum level equal to the
1989 Caribbean total import quota would be set for the region's sugar
quota; and (iii) the expiration date of September 30, 1995, would be
repealed and a 12 year notice of termination would replace it. Another
possible change related to CBI2 would switch some textile quotas from Asian
countries to Caribbean countries, but at present this has no direct
significance for OECS countries since none of their textile exports are
subject to U.S. quotas. An OECS proposal that their exports be granted
preferential treatment with respect to the degree of local value added that
would qualify for tariff exempt status has not been included. The CBI2
proposals are significant not only for their specific content but because
they embody a general desire to increase access to the U.S. market by CBI
countries, and if enacted should improve trade prospects with the U.S.,
even without the special provisions sought by the OECS.

TABLE IV.1:   EXPORTS OF MANUFACTURED PRODUCTS FROM THE OECS TO THE
EUROPEAN COMMUNITY, CANADA AND THE UNITED STATES, 1980-86
(US$ million)

	1980	1981	1982	1983	1984	1985	1986
EUROPEAN COMMUNITY							
Antigua and Barbuda	0.0	0.2	0.0	0.0	0.0	0.0	0.2
Dominica	14.9	2.4	3.3	0.8	0.6	0.9	1.2
Grenada	0.3	7.6	0.2	0.4	0.4	0.4	0.4
St. Kitts and Nevis	1.2	1.1	0.3	0.4	0.2	0.1	0.3
St. Lucia	0.3	0.4	0.3	0.3	0.3	0.5	0.5
St. Vincent and the Grenadines	0.8	0.5	0.8	0.8	0.5	0.9	1.2
TOTAL	17.6	12.2	4.9	2.7	2.0	2.8	3.8
CANADA							
TOTAL	0.9	0.8	0.4	0.5	0.3	0.3	0.8
UNITED STATES							
TOTAL	16.4	28.2	22.7	27.6	37.6	66.0	68.5

Source: World Bank.

4.16   The Canada-U.S. Free Trade Agreement has implications for OECS
trade with these countries, since by lowering tariffs between Canada and
the U.S. over a ten year period it reduces the value of preferential trade
arrangement to the OECS of agreements involving the OECS and the two
signers to the Free Trade Agreement (i.e., CBI and CARIBCAN plus GSP and
806/807 arrangements). For example, electronic components produced in
Canada could conceivably replace electronic components produced in the OECS
countries as a result of the reduction in the U.S. tariff in Canadian
produced components.

4.17   The Multi-Fibre Agreement (MFA) recently has been extended to
1991. The MFA does not at present impact directly on OECS countries, but
indirectly there may have been a positive spillover effect in that foreign
investors from MFA-constrained countries (i.e., from South Korea and Hong
Kong) were attracted to the OECS. Changes in the MFA could impact
positively or negatively on the OECS garment trade with the U.S., but the
very smallness of their output may continue to protect the countries from
MFA constraints on sales to the U.S. In addition, CBI2 proposals are a
potential offset to any MFA restriction.

E. A Strategy for Manufacturing in the OECS

4.18   There are two key questions for trade policy: (i) the kind of sector to be developed; and (ii) the trade policies necessary to lead to the establishment of the desired sector.

Types of Manufacturing

4.19   At present, there are three kinds of firms in the OECS: enclave, agro-processing, and import substitution. Enclave firms typically assemble products for the U.S. market, especially garments and electronic components. They employ a high percentage of women, can be managed by local or foreign personnel, and have strong ties to U.S. firms or agents. They are growing quickly in several OECS countries. They are foot-loose: often they have few or no immobile assets in the OECS. Transportation costs are not a major problem, but frequency of service can pose difficulties. Air freight service normally is used. Enclave firms receive tax holidays and remission of certain import duties for certain periods of time, and they require a wide range of infrastructure facilities (factory shells, utilities, transportation facilities). Apart from payment of user fees for infrastructure facilities (often below cost), and payment of wages to local labor, they tend to purchase few local inputs.

4.20   Agro-processing firms in principle could process a wide range of fruits and vegetables that can be grown in the OECS, but large scale agro-processing is confined in practice to a few products: sugar cane, coconuts and citrus fruit. Small scale agro-processing of rum, sauces, jams and jellies, spices and juices also occurs. Agro-processing firms serve a range of markets: the U.S., Europe, CARICOM and domestic. The major products are refined sugar, soap, coconut oil and concentrated fruit juices. Management is local or foreign; ownership is Government, joint venture or local. Agro-processing firms have not displayed strong growth in the 1980s, whatever their market. They are capital intensive and tend to produce bulky commodities that rely on sea freight. In principle these firms are eligible for tax holidays and remission of tariffs, but they tend to be too old to continue to be eligible. They pay a variety of taxes and duties, but because of the large agricultural labor force which depends upon them for employment, they receive government support and subsidies when they run into financial difficulties (i.e., sugar in St. Kitts and Nevis, and citrus processing in Dominica). To the extent that they cannot purchase their inputs at world prices, they experience negative effective protection and cannot compete in world markets (i.e., soap in Dominica). They depend upon Government for utilities and transportation facilities, especially docking and loading facilities. In addition to user fees, taxes and wages, they purchase large volumes of locally produced agricultural products (i.e., sugar cane, copra, grapefruit and limes).

4.21   Import substitution industries are characterized by a high proportion of processing and assembly type operations, rather than basic production operations. A fairly narrow range of products is produced. All final products are protected by tariffs, but many imported inputs are exempt from tariffs. Table IV.2 below shows three tariff rates for selected industries, including most of those identified as import substitution industries. The "ECCM" rate is the one published for OECS countries plus Anguilla, but Montserrat also has a different schedule. The

"St. Kitts" rate was adopted in 1985 as a result of the agreement at the
1984 Nassau Accord that all CARICOM countries would increase tariff rates
on selected products.[32]   However, few countries adopted the rates by the
agreed upon deadline. The "CARICOM rate" is added for comparative purposes
only. In the selected rates shown, the CARICOM rate equals or exceeds the
ECCM rate, but there are exceptions in the overall tariff schedules (i.e.,
copra is 25% in the ECCM schedule, 10% in CARICOM). The upshot is that
import substitution industries in the OECS countries generally have
received high levels of protection in the past, and that on many products
these were increased substantially as a result of the Nassau Accord. Since
the ECCM tariff schedule displays the usual tariff escalation from raw
material to intermediate product to finished product, levels of effective
protection are generally higher than the nominal rates shown. (See Table
IV.2 below for examples of tariff escalation). On products such as wheat
flour, where domestic value added is a small fraction of total sales value,
a seemingly small tariff differential of 5% between wheat and wheat flour
can generate a very high rate of effective protection. For example, if
wheat is the only product input and domestic value added is 20%, a 5%
nominal tariff on wheat flour generates a 25% effective protection rate on
domestic value added. As most import substitution industries rely heavily
on imported inputs, they enjoy high levels of effective protection.
Exemptions from tariffs which countries can grant under the various Fiscal
Incentives Acts cause even more divergence of nominal and effective rates
since they tend to be granted on imported inputs. Products which do not
rely on imported inputs, such as agro-processing products and wood
products, tend to have high nominal tariffs, but effective protection rates
may in fact be low. This is likely to be the case with household and
toilet soap produced in Dominica.

4.22   These various types of industries have different advantages and
disadvantages, and strongly held opinions exist as to their desirability.
Economists of the "dependence" school, who have tended to argue that
Caribbean economies have been distorted by production for export rather
than production for domestic needs, favor import substitution industries.
Exponents of "linkages" tend to favor agro-processing industries. Enclave
industries tend to be dismissed by many as low paying, exploitative,
temporary industries run by foreign entrepreneurs for the benefit of
foreigners, but others stress their importance in transferring industrial
technology and skills to developing economies. Import substitution
industries are said to be high cost and inefficient, and agro-processing
industries perpetuate a dependence on agriculture. Such arguments tend to

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32/ Selected products include pineapple products, luncheon meat, chewing
gum, cocoa products, biscuits, peanut butter, table salt, cement,
ammonia based fertilizer, varnishes and paints, soap, plastic bags,
tires, rough, squared and sawn wood, fibre board, prefabricated
buildings, selected wood and paper products, selected steel products,
selected chemical products, selected home appliances, furniture,
mattresses, and a few miscellaneous products. In every case the
previous ECCM rate was raised by 15 percentage points (i.e., from 30%
to 45%).

imply that countries can pick their manufacturing sector by administrative fiat. This is seldom the case, for where it has been tried it often has not worked.[33]

TABLE IV.2: TARIFF RATES ON SELECTED MANUFACTURING INDUSTRIES
(in percent)

TARIFF NO.	PRODUCT	ECCM	ST. KITTS AND NEVIS	CARICOM
10.06.21	Rice in Packages	15%	15%	15%
10.06.1	Rice in the Husk	0	0	0
11.01.1	Wheat Flour	5%	5%	10%
10.01	Wheat	0	0	0
15.31.1	Margarine	5%	30%	30%
20.05.1	Jams, Jellies of Citrus	20%	20%	45%
21.04.1	Tomato Ketchup and Sauce	20%	20%	30%
22.02.1	Aerated Beverages	30%	30%	30%
22.03.1	Beer	30%	30%	12 UA/Gal.
24.01	Unmanufactured Tobacco	$1.54/kg	$1.54/kg	6.6 UA/kg
24.02.2	Manufactured Tobacco - Cigarettes	$17.64/kg	$17.64/kg	44 UA/kg
25.23.11	Building Cement (grey)	0	15%	6.9 UA/tonne
32.09.4	Water Thinned Paints	15%	30%	45%
34.01.2	Toilet Soap	30%	45%	30%
34.06	Candles	20%	20%	30%
42.03.1	Gloves-Leather	30%	30%	45%
44.13	Wood-Planed	15%	15%	1.3 UA/M.[3]
48.16.2	Cardboard Boxes	15%	30%	20%
64.01	Footwear-Plastic	20%	20%	25%
69.12	Tablewear-Pottery	20%	20%	25%
94.01.12	Chairs-Wood	30%	45%	45%
94.04.1	Mattresses	30%	45%	45%

Note: UA=0.4 grams of fine gold (approximately).

Source: Eastern Caribbean Common Market Tariff; St. Kitts and Nevis Customs Tariff (Custom Duties) Order, 1985; and Caribbean Community, International Customs Tariffs Bureau.

33/ In 1974 the OECS countries selected 35 industries and allocated them am. ag the seven member countries. An examination of the results showed that the Industry Allocation Scheme was not a success. Few industries were actually established, several of which would anyway have been successful without a special allocation status, and others of which failed or operate unprofitably. See Ramon L. Marks, "Impact of the Industry Allocation Scheme on Industrial Development in the 1980s", OECS Secretariat, August 30, 1986.

4.23   The OECS countries will never be diversified sufficiently to prevent external shocks from impacting on them. In these circumstances, a sound strategy is to opt for a flexible and adaptable economy which can respond quickly to changing circumstances. Flexibility comes from a number of sources: a well trained labor force, simple rules and regulations, and adaptable entrepreneurs. Enclave industries, and to a lesser extent agro-processing industries, are most likely to impart the skills to both labor and management that will provide for such flexibility, and import substitution firms are least likely to do so. Agro-processing industries (still a critical employment sector in most OECS countries) also play a key role in supporting agricultural activities. Import substitution firms which import high percentages of their material inputs, which exist because of high levels of effective protection, and which tend both to be small scale and to suffer excess capacity, are ill-equipped to adapt to changing circumstances. ("Small scale" and "excess capacity" can co-exist: two persons operating a plastic moulding machine can produce far more shoes than could ever be sold in any one of the OECS countries.)

4.24   Experience suggests it is critical that firms operate in an environment where competitive pressures are present. Two reforms are desirable: (i) the harmonization of existing intra-OECS trade regulations by the establishment of a common controller of customs and excise, charged with ensuring fair treatment for all intra-OECS trade and for a common administration of the CET pertaining to the OECS (with such adjustment for Montserrat as may be needed). Until such time as it is possible to establish over the medium and longer term a common controller of customs and excise, a committee of customs controllers should be set up to report to the OECS on progress made in achieving increased harmonization; and (ii) the OECS should promote, within CARICOM, a reversal of the 1984 Nassau Accord, and seek to lower tariffs to a more moderate level. A more ambitious step would be to adopt a common tariff level for all products, thus eliminating the negative effects on production caused by high and variable levels of effective protection.[34] Lower tariff levels (or a common tariff for all products) would reduce the incentives to import substitution industries, particularly those which rely heavily on imported inputs. A low, uniform tariff for all products also would reduce smuggling.

F. Agriculture in the OECS

4.25   Agriculture remains the most important industry in Dominica, Grenada, St. Lucia, and St. Vincent and the Grenadines, and it is still very important in St. Kitts and Nevis. As a consequence, much research has been devoted to the industry and its potential. Agricultural diversification has been a major theme of this research, as countries have been highly dependent on one of two export crops, especially sugar

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[34] See Arnold C. Harberger in "Reflecting on Uniform Taxation", paper presented at the 44th Congress of the International Institute of Public Finance, Istanbul, August, 1988.

(historically) and bananas (currently). However, agricultural diversification has not been easy to achieve. In this section analysis is focused on constraints to diversification and on long term prospects for the sector.

4.26   As a group, the banana producing countries have become more dependent on bananas in the 1980's than in the 1970's, as measured by banana's share in domestic exports (see Table IV.3 below). Dominica and St. Lucia have become even more dependent on bananas, while Grenada and St. Vincent and the Grenadines have become slightly less dependent (Grenada has three traditional agricultural exports--nutmeg and cocoa as well as bananas). Higher prices for bananas in the protected U.K. market have generated a strong banana boom since 1985. St. Kitts and Nevis, on the other hand, has reduced substantially its dependence on sugar. The increasing dependence of the Windward Islands on banana exports is remarkable in view of the long term decline in agriculture's share in GDP, discussed in Chapter II, and demonstrates clearly the strength of the current banana boom.

Table IV.3:   OECS - BANANA AND SUGAR EXPORTS, 1977-79 AND 1985-87
(as percent of domestic exports)

	Dominica (bananas)	Grenada (bananas)	St. Lucia (bananas)	St. Vincent and the Grenadines (bananas)	Total Banana Producers	St. Kitts and Nevis (sugar)
1977-79	56	20	48	41	41	70
1985-87	64	18	67	36	50	43

Source: IBRD. Domestic exports of St. Vincent and the Grenadines are adjusted downward to account for overinvoicing errors in 1985 and 1986.

4.27   While there are many constraints to the development of a more diversified agricultural base,[35] the emergence of the boom in bananas has been a major factor in recent years. The increase in the real price of bananas has resulted in a decrease of the real exchange rate, which has dampened increases in the production of most other agricultural commodities. In addition, the real exchange rate has further decreased by increases in the resource gap, putting further downward pressure on all agricultural output, including bananas. (Annex VII contains historical and institutional details on the banana industry).

35/ See, for example, Review of Agricultural Diversification in the OECS, CIDA, January 1987, Two Volumes.

4.28   In Dominica, the real price of bananas increased by about 40% from 1984 to 1987, and banana production increased by about 64%.[36] In St. Lucia, the increase in banana production was almost 70% in 1986 with respect to 1984. In 1987, bad weather conditions caused banana production to decline by 20% with respect to the previous year. In St. Vincent and the Grenadines, production of bananas increased by about 19% in 1986 with respect to 1984. In 1987, weather conditions also resulted in a decline of 11% in banana production with respect to 1986. In Grenada, production of bananas started to recover in 1987 after declining since the late 1970s. These increases in output have caused some ecological concerns, particularly in St. Lucia.

4.29   Dominica and Grenada have been pursuing agricultural diversification programs to reduce their dependence on bananas. In addition, there are regional attempts to diversify agricultural production through joint marketing of common crops.[37] Dominica is a pioneer in the field of diversification, having started its agricultural diversification program after the devastating effects of hurricane David in 1979. Coconuts have received special attention. The Coconut Rehabilitation and Expansion Project (CREP) was implemented in 1981 as a joint effort between the Governments of Canada and Dominica. The program provided seedling to farmers for planting 2,936 acres, fertilizer and access roads. During 1983-84, these efforts resulted in increased coconut production, comparable to levels reached before 1979. However, coconut production has been declining since then, and in 1987 coconut production was 17% lower than in 1983. The CARICOM Oils and Fats Agreement has not been successful in providing markets for coconut oil. Other agricultural diversification efforts have had similar lack of success.

4.30   In St. Kitts and Nevis, sugar production has been declining systematically since the early 80s. Non-sugar production has been almost stagnant since the late 70s. In Antigua and Barbuda, agricultural output has been declining during the last ten years.[38] In Grenada, the prospects for nutmeg and mace are rather uncertain. First, the increase in the price of nutmeg since the agreement between Indonesia and Grenada in 1986 (the main world producers) resulted in increased production of nutmeg in Grenada by about 24% between 1986 and 1988. However, the volume of nutmeg exports declined by 27% during that period, resulting in a rapid accumulation of stocks. Second, there are indications that farmers in other countries are increasing acreage devoted to nutmeg to take advantage of the real price increases.

36/ The real price of bananas is the unit export value deflated by the CPI.

37/ See, A Programme for Agricultural Diversification in the OECS, November 1988, a CDB/IICA study on agricultural diversification. Several crops with export potential are identified and joint marketing efforts are suggested to export them.

38/ Three year moving averages indicate that, in 1986, agricultural output was about 8% lower than in 1978.

4.31   In all the OECS countries, real exchange rates have been
decreasing systematically since the early 1980's. This means that the
relative price of non-traded goods has increased compared to traded goods,
and as a result, production has moved away from traded goods toward the
production of non-traded goods. In banana producer countries, the decrease
in the real exchange rate has been partly the result of increases in the
price of bananas. In those cases, resources move away from non-banana
crops towards production of bananas and non-traded goods.

4.32   Changes in the relative price of bananas can affect production of
non-banana agricultural commodities through three different channels:

(i)   Substitution or Complementary Effects. These are the usual
        effects of a price change on the production of non-banana
        crops. Commodities are substitutes or complements depending on
        the sign of the cross-supply price elasticities;

(ii)   Real Exchange Rate Effect. As long as the real price of
        bananas affects the real exchange rate, the relative price of
        non-banana export crops vis-a-vis non-traded goods is going to
        be affected, and producers will reallocate resources toward
        production of non-traded goods;

(iii)   Borrowing Constraint Effect. Bananas generate an almost
        constant cash flow to producers throughout the year. As long
        as farmers face borrowing constraints, an increase in the real
        price of bananas can be a substitute for borrowing because of
        its effect on producers' cash flow. A larger cash flow allows
        farmers to achieve higher levels of utilization of agricultural
        inputs and to turn to more capital intensive techniques. This
        effect can have a positive effect on the production of non-
        banana crops by easing the borrowing constraint on financing
        the expansion of these crops.

4.33   Detailed regression results are presented in Annex IV. The
measured relationships are complex, but significant patterns occur. In all
countries, the estimated response of the supply of bananas to its relative
price is highly elastic, ranging from 1.6 in Dominica to 2.8 in St. Lucia.
The results suggest that diversification efforts have not succeeded because
the high price of bananas reduces the production of non-banana export crops
through two channels: (i) direct substitution effect away from non-banana
export crops; and (ii) the effect on the relative price of non-banana
export crops vis-a-vis the price of non-traded goods. These effects occur
in most of the responses of non-banana crops to the relative price of
banana. Only in the cases of plantain in Dominica and St. Vincent and the
Grenadines, and of cocoa in Grenada, do positive supply responses occur
with respect to the real price of bananas.

4.34   The responses of non-banana crops to prices, although similar in
nature, differ among countries. All agricultural crops respond to price
incentives, but, for example, the supply price elasticity of coconuts in
Dominica is lower than in St. Vincent and the Grenadines (0.2 and 1.2,
respectively). The estimated supply price elasticity of plantain, is also
lower in Dominica than in St. Vincent and the Grenadines (0.3 and 3.3,
respectively). In general, supply price elasticities are much higher in

St. Vincent and the Grenadines than in Dominica. One possible explanation
is that only 3% of the total area in Dominica is under a 10% slope; the
proportion is 7% in St. Vincent and the Grenadines. In addition, soil
conditions in St. Vincent and the Grenadines appear more suitable for non-
banana crops than in Dominica.

The Real Exchange Rate and Agricultural Output

4.35   'All of the OECS countries have experienced large resource gaps,
the result of capital inflows taking the form of foreign aid, direct
investment and/or foreign borrowing. Increases in the resource gap result
in a decrease of the real exchange rate. As most of agricultural
production is internationally traded, the drop in the relacive price of
traded goods vis-a-vis the price of non-traded goods will reduce
agricultural production.

4.36   The empirical results reported in Annex V confirm that an increase
in the domestic price level vis-a-vis the price of agricultural output
results in a decline in agricultural production for export. Thus, an
increase in real aggregate expenditure relative to real output moves
resources out of agriculture to production of non-traded goods. In Antigua
and Barbuda, where there have been significant increases in real aggregate
expenditure financed by borrowing abroad to build the tourism industry,
there is no prospect that agriculture will grow at faster rates than in the
last ten years, since resources are being transferred from agriculture to
tourism and construction. The main lesson for countries such as St. Kitts
and Nevis, which are just beginning to develop tourism on a large scale, is
that once real domestic expenditure starts growing at higher rates than
real output, efforts to develop agriculture will tend to be self-defeating
in the long run.

4.37   Agricultural diversification has been proposed as a solution to
regional economic problems at least since the 1897 Royal Commission on the
West Indies. In recent decades, there have been substantial changes in
agriculture, including a sharp drop in the percentage of GDP attributable
to the agricultural sector, and a switch from sugar to bananas in several
countries. The success of bananas has encouraged the belief that joint
marketing of agricultural output could provide a means of successful
diversification. A recent study has proposed ten specific commodities
where joint marketing should be examined: breadfruit, mango, plantain, hot
peppers, sweet potato, pineapple, soursap, carambola, paw paw and passion
fruit.[39] Heads of Government of the OECS have approved the establishment
of an organizational framework to implement these recommendations,
including the involvement of the Caribbean Trading Corporation (CATCO).
These efforts should be encouraged. Nevertheless, in the short term,
prospects for rapid diversification are blunted by the banana boom. In the
medium to longer term, some diversification will be essential should the
real price of bananas fall, but the ten products included in the joint
marketing study will not provide a sufficient base for a diversified
agricultural sector. The list is biased towards products that could be
sold fresh in the U.K. and therefore excludes agro-processing possibilities
such as grapefruit, coconut, fruit and vegetable production for the growing

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39/ See A Programme for Agricultural Diversification in the OECS, CDB/IICA.

tourist market, production of seeds for sale, and cut flowers. Even if the production targets outlined in the programme were met, only a small fraction of the land currently utilized for bananas i.e., about 10%, would be utilized for the jointly-marketing crops. Agricultural officials are aware of these shortcomings in the joint-marketing strategy, but have not been able to develop to date an effective substitute. Some success has been achieved, however, especially in St. Vincent and the Grenadines.

4.38   Given the slow progress to date from specific diversification efforts and the existing constraints, the OECS countries should avoid overemphasizing agricultural diversification as a long term growth strategy. Over time the number of persons employed in agriculture will decrease as the shift to fast growing tourism, manufacturing and services activities continues, although total agricultural output could continue to rise if productivity improvements can be fostered, efficient import substitution can be undertaken, and other profitable agricultural exports can be developed. Agricultural diversification has a role to play, but one which will be constrained by the economic factors that push against long term agricultural development. Agricultural diversification should result from the exploitation of natural market opportunities, both local and foreign, rather than from protectionist policies which generate high cost crops aimed at import substitution. All OECS countries need to re-examine their policies with respect to agricultural diversification to ensure that they would not simply encourage inefficiency in production with no offsetting gain in stability of income.

G.   Prospects to the Year 2000

4.39   Despite the increasing d. endence of some countries on bananas in recent years, the long term trend in agriculture as a share of GDP is downward in all countries.[40]   Based on these long term trends and on experience in other middle income countries, projections of the share of agriculture in GDP have been developed (see Table IV.4 below). Dominica is projected to retain a relatively large agricultural sector, but in the other countries the share of agriculture is projected to be 10% or less.

40/ Agriculture for this purpose includes crops and livestock, but excludes forestry and fishing. Forestry has limited potential in all of the OECS countries except for Dominica, where it has some prospects. Fishing potential does exist in all countries, but high levels of investment in infrastructure and protection services are required, and it is unlikely it would ever generate more than 2% to 3% of GDP in any country. Indicative of the problems relating to the fisheries is the fact that despite extensive consultation, it was not possible to obtain a clear picture of the prospects for the industry. More and basic research is required.

TABLE IV.4: OECS COUNTRIES - CROPS AND LIVESTOCK, 1977-2000
(yearly averages as a share of GDP)

	1977-79	1980-84	1985-88	2000 (projected)
Antigua and Barbuda	4.9	3.8	2.6	3.0
Dominica	31.3	22.9	24.9	15.0
Grenada	n.a.	17.6	15.1	10.0
St. Kitts and Nevis	17.5	13.1	8.8	3.0
St. Lucia	14.6	11.6	14.7	10.0
St. Vincent and the Grenadines	15.1	14.4	15.2	10.0

n.a.: Not available.

Source: Tables 2.1-2.6, Statistical Appendix.

H. Conclusions

4.40   Manufacturing prospects will be affected by the outcome of current negotiations concerning the Uruguay Round, Lome, the Caribbean Basin Initiative and the Multi-Fibre Agreement. In general, the OECS countries stand to lose some of their preferential trading relationships if there are general reductions in tariff and non-tariff barriers, but they stand to gain from a more liberalized world trading regime.

4.41   Manufactured goods are exported to the U.S., Canada and Europe. The latter two markets, however, purchase little at the present time, and since the U.S. market is open and more easily accessible, resources should be devoted to expanding sales there.

4.42   The Fiscal Incentives Acts have been utilized to encourage manufacturing, and to offset some of the costs imposed on manufacturing exports by the CET. However, the Acts are deficient in several respects, especially in that they take no account of the additional costs borne by exporters when they use domestic inputs protected by CARICOM tariff schedules and other restrictions. The best solution to this deficiency is to lower import tariffs on final goods and eliminate import restrictions on inputs. Consideration also should be given to incentives that encourage exports of manufactured products through reduced tax rates on profits earned on exports, a program already in place in some of the countries.

4.43   The OECS countries will never be diversified sufficiently to prevent external shocks from impacting on them. In these circumstances, a sound strategy is to forge a flexible and adaptable economy which can respond quickly to changing circumstances. Flexibility comes from a number of sources: a well trained labor force, simple rules and regulations, and adaptable entrepreneurs. The OECS countries contain three types of manufacturing firms: enclave, agro-processing, and import substitution.

The latter receive high levels of effective protection, are small in scale and unsuited for adapting to changing economic circumstances. Enclave industries, and to a lesser extent agro-processing industries, are more likely to impart the skills to labor and management that will provide for flexibility in response to changing circumstances.

4.44   There is no magic formula for trade policies that will maximize the growth of a sector that over time will generate productivity gains through adaption and innovation. Experience suggests it is important that firms operate in an environment where competitive pressures are present. In principle, that is the current policy stance of the OECS countries. In practice, trade continues to be restricted among OECS countries, intra-CARICOM trade is subject to changes in countries policies (devaluations, licensing, foreign exchange controls), and the CET is neither harmonized among countries nor consistently implemented. Among OECS countries, there is an absence of tax harmonization and no consistency in the administration of incentives or of regulations relating to manufacturing, let alone freedom in the movement of capital and labor. The CET generates very high rates of effective protection, and there is no clear rationale for the levels of tariffs that exist. Two reforms are desirable: (i) the harmonization of existing intra-OECS trade regulations by the establishment of a common controller of customs and excise, charged with ensuring fair treatment for all intra-OECS trade and for a common administration of the CET pertaining to the OECS (with such adjustment for Montserrat as may be needed). Until such a time as it is possible to establish over the medium and longer term a common controller of customs and excise, a committee of customs controllers should be set up to report to the OECS on progress made in achieving increased harmonization); and (ii) the OECS should promote, within CARICOM, a reversal of the 1984 Nassau Accord, and seek to lower tariffs to a more moderate level. A more far-reaching trade reform would be to adopt a common and uniform tariff level for all products, thus eliminating the effects on production caused by high and variable levels of effective protection. Lower tariff levels (or a uniform tariff for all products) would reduce the incentives to import substitution industries, particularly those which rely heavily on imported inputs. A uniform tariff for all products also would reduce smuggling.

4.45   As a group, the banana producing countries have become more dependent upon bananas in the 1980s than in the 1970s despite the long-term decline in agriculture's share in GDP. The profitable use of resources in bananas, operating through substitution and real exchange rate effects, has been a factor in limiting the development of a more diversified, although less profitable agriculture. Empirical results show that the supply of bananas is very responsive to their relative price, and that most other crops are substitutes for bananas. In addition, an increase in the relative price of bananas results in a decline in the price of non-banana crops relative to the price of non-traded goods, putting further downward pressure on non-banana agricultural output. Moreover, increases in the resource gap have adversely affected the production of non-banana crops, since such increases reduce the relative price of traded goods through the real exchange rate effect.

CHAPTER V

TOURISM

A. Overview

5.01   The number of tourists in OECS countries has been increasing at an annual average of about 7% for the last five years. Their market share of the Caribbean region and of worldwide traffic has increased. However, traffic flows to OECS countries are still relatively small--about 5.4% of Caribbean traffic and just over 0.1% of world traffic. Accordingly, there remains substantial scope for expanding OECS tourism without impinging significantly in absolute volumes on competing destinations.

5.02   The reasons for this recent traffic growth are various. First, as the regional Caribbean market matures, tourists begin to search for new destinations within that region, particularly on smaller islands. Second, as tourism traffic develops, air passenger service improves, with respect to both long-distance direct routes and intensified feeder services. Finally, with the decline between 1985 and early 1989 in the value of the U.S. dollar and therefore the EC dollar, the OECS countries have become a more attractive destination for Europeans, and transatlantic air services have accordingly been augmented. Advantages of the European market are that the average length of stay is much longer than the North American market and that the Europeans come not only in the winter but during the summer, thereby helping to mitigate seasonality.

5.03   The distribution of tourist arrivals is not even as between the individual OECS countries. In 1988, Antigua had nearly 37% of the stayovers in the OECS market and St. Lucia 24%, with St. Kitts and Grenada each above 10% and St. Vincent and the Grenadines below 10%, while Dominica obtained only 5% (see Table V.1 below). This distribution of tourism volumes reflects the current status of tourism assets in the individual countries, particularly the number of available rooms.

5.04   All the OECS countries plan to boost their tourism sectors further. Tourism is an economic activity that can generate more employment opportunities and higher real wages than other sectors.[41] However, further tourism development is subject to several constraints. First, public sector investment in infrastructure is seriously lagging in several OECS countries. Deferred road maintenance, electricity and water supply require attention, and several countries need extensive airport works, if tourism traffic is to increase unhindered. Another constraint in some countries is the scarcity of suitable hotel finance for investment in visitor accommodations, despite the prevalence of various fiscal incentives. There is a risk that latent demand will be frustrated by a lack of an adequate supply of visitor rooms. An augmented traffic volume and a changing geographical distribution of traffic flows will require additional air access adapted to the new requirements. Finally, environmental concerns

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41/ See Annex 6 for a detailed analysis of past trends and projections of tourism in each of the OECS countries.

require attention, especially with respect to sewerage, the protection of forest cover, and the prevention of beach mining. The latter problem is a critical one, and efforts are necessary to bring in sand from elsewhere to prevent the steady erosion of this major tourist resource to feed the needs of the growing construction activity.

5.05   Based on a scenario of reasonably attainable marketing targets for a growing tourism capacity and the progressive removal of constraints, tourism volumes and their impact on gross receipts and on employment are projected for the end of two five-year periods, 1994 and 1999 respectively (a summary of these results is presented in Table 6.1, Statistical Appendix). Substantial growth in percentage terms is projected for all countries, with St. Kitts and Nevis and Grenada showing exceptional growth prospects.

Table V.1: OECS COUNTRIES - TOURISM INDICATORS, 1988

	Grenada	St. Vincent and the Grenadines	St. Lucia	Dominica	Antigua and Barbuda	St. Kitts and Nevis	Total
Stayovers:							
Arrivals ('000)	61.8	45.5	125.3	26.7	190.9	69.2	519.4
% Distribution	11.8	8.8	24.1	5.1	36.8	13.3	100.0
Cruise:							
Passengers ('000)	136.0	62.5	79.5	14.3	198.6	62.4	553.3
% Distribution	24.6	11.3	14.4	2.6	35.9	11.3	100.0
Available Rooms:							
Number	763	936	1,956	407	2,879	791	7,732
% Distribution	9.9	12.1	25.3	5.3	37.2	10.2	100.0
Gross Receipts:							
EC$ million	76.0	132.0	236.4	32.8	358.5	86.9	922.6
% Distribution	8.2	14.3	25.6	3.6	38.9	9.4	100.0
Employment:							
Number	1,526	1,250	4,049	693	6,420	1,440	15,278
% Distribution	9.9	8.1	26.3	4.5	41.7	9.4	100.0

Source: Bank staff estimates.

B.   Tourism in Grenada

Traffic Trends

5.06   Traffic trends have been erratic since 1972, owing to oil shocks and political factors. Substantial growth has occurred since 1983, and stayover visitors almost doubled between 1983 and 1988. In 1988 arrivals from the U.K. and Europe exceeded those from the U.S.--a significant trend since the average length of stay of the former is longer. Total receipts from visitors in 1988 were EC$76 million, which represents a 90% increase since 1983.

Commercial Accommodations

5.07   A major constraint to the development of tourist traffic from outside the Caribbean, which is the higher spending segment of the total market, has been the limited availability of appropriate accommodations. In early 1986, there were only 378 available hotel rooms in 16 establishments. There were also 152 rooms of varying standards in guesthouses and vacation apartments. By 1988 the number of available rooms had risen to 518 in 17 hotels, while 245 rooms were listed in other commercial accommodation establishments. Even though hotel capacity increased by 37% between 1986 and 1988, the average room occupancy rate rose from 42% to 48%, still a low rate.

Developments to 1999

5.08   Grenada has strong potential for tourism development. Based on existing plans and proposed developments, room capacity is projected to more than double to 1999, and employment in hotels and directly related activities is projected to keep pace (see Table V.2 below). Gross receipts from stayover visitors and from cruiseship passengers are projected to increase at a lower but still substantial rate of about 80%.

Table V.2: GRENADA - TOURISM PROJECTIONS, 1989, 1994 AND 1999

	Available Rooms (number)	Gross Receipts (1989 EC$ million)	Direct Employment (number)
1989	763	86.1	1528
1994	1289	118.8	2578
1999	1815	153.8	3630

Source: Bank staff estimates and projections.

Government Policies

5.09   Even though the main thrust of future tourism development of Grenada is expected to be based on private investment to expand accommodation capacity, there are a number of policies and programs which the Government should initiate without delay if the existing tourism sector is to prosper.

5.10   The general improvements underway in the road network, electricity supply, telecommunications, water supply and sewerage--all high priorities in the Government's public investment program--will have a positive impact on tourism, as on other sectors. Such improvements in the tourism zones--in the southwest and possibly elsewhere--are essential if future development of hotels and other related facilities is to take place in a timely fashion. Whereas a broad-based designation of land uses for all purposes throughout the island already has taken place, a detailed land-use plan within the specified tourism zones is necessary, if infrastructure priorities are to be adopted and a work program implemented. Steps need to be taken to ensure that the land-use plan is enforced.

5.11   There is still a water shortage in the dry season (which coincides with the peak international tourism period), particularly on the southwest peninsula, the main tourism zone. In the long-run, further sinkings of boreholes and extensions of the distribution network are required and the early initiation of such works would ensure adequate water supply to the hotels and related facilities expected to be installed in later years. In the meantime, conservation measures should be implemented. In addition, consideration should be given to requiring hotels to install storage tanks which would at least even out supplies.

5.12   Measures are being taken to mitigate frequent electricity outages. These have had a negative impact on tourist perceptions and have added to the already high cost of energy by inducing the use, in most hotels, of standby generators. Steps should be taken to conserve energy, particularly in view of high energy costs.[42]

5.13   Grand Anse, the main beach, is threatened with pollution which could have a negative impact on tourism amenities. An outfall has been constructed to carry sewerage 600 meters out to sea from St. Georges beyond a deep water ledge, thus dealing with sewerage created in the town and also preventing such sewerage from being carried by currents to the adjacent Grand Anse beach and its offshore reef. However, the high water table below the flat land backing the beach results in occasional leakages from individually installed septic tanks. A central sewerage treatment plant is being installed near Grand Anse together with a collector pipe which would pass by existing hotels and new hotel sites as delineated in the proposed land use plan.

5.14   Grand Anse also is being threatened by beach erosion. Pollution control, as outlined above, will contribute to an improvement by preventing further reef dieback which has already reduced the reef's protection of the beach. Also, additional drainage to control water runoff from the hills behind the beach during rains would eliminate erosion from this source. The implementation of the 50-meter setback regulation for new construction near beaches would reduce erosion resulting from closer construction, but this regulation does not affect existing buildings many of which are built directly on the beach. Sand-mining is prohibited by law but not always enforced. Apart from enforcement, steps need to be taken to seek alternative sources for building materials which will be required for new hotel and other construction purposes. Some beach erosion is caused by sea swells during storms and could be mitigated by the construction of groins

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42/ According to Pannell, Kerr and Forster, an internationally recognized firm of hotel accountants and consultants, energy costs in the Eastern Caribbean amounted to 8% of total hotel revenues in 1987, as compared with a worldwide average of 4%. This is a major contributing factor to average income before fixed charges (gross operating profit) equalling only 14% of revenues as compared with a worldwide average of 26%.

(or stone jetties) at certain intervals along the beach. A program of sand replacement from elsewhere is also being considered. Finally, some environmental experts believe that the mooring, or beaching, of some craft at Grand Anse beach should be prohibited, particularly the large, 50-passenger tenders from some cruise ships moored offshore.

5.15 Given the multifarious possible causes of erosion at Grand Anse beach, a coordinated and interlocking program of work is clearly necessary. Consideration also might be given to limiting development on Grand Anse in view of carrying capacity constraints resulting from these natural causes. It might be wiser to develop other beaches which are threatened less by erosion and sewerage problems, such as Pingouin, Jardin Madame and Morne Rouge along the southwest coast, and also at Lance aux Epines and Levera. The proposed detailed land-use plan would take these considerations into account.

5.16 The Government's policy is to leave hotel operation and investment to the private sector. It therefore altered the management structure of the Ramada Renaissance Hotel (known when government-owned successively as the Holiday Inn and the Grenada Beach Hotel) by leasing the existing buildings (and land) to a private group which invested in the hotel's refurbishment and renovation and later in its expansion, and then arranged for the Ramada Corporation to operate it for them on management contract. The Government also divested itself of several small hotels and closed down the publicly-owned Grenada Resorts Corporation which had previously operated them.

5.17 In the future, the Government will support hotel development by a package of fiscal and other investment incentives, by general market promotion, and by the encouragement of air services to deliver tourist traffic to the hotels and related tourism services.

5.18 All new hotel projects require approval, first by the Industrial Development Corporation and then by Cabinet decision. Only approved hotel projects are eligible for Government incentives or for leases on Crown land. Approved projects benefit from an exemption from customs duties on the equipment and materials imported to implement projects. Also, in the case of foreign investment in tourism, there is an exemption from the withholding tax on repatriation of profits. Finally, those who obtain long-term leases on public land benefit from imputed costs much lower than the market price of private land. On the other hand, leaseholders have greater difficulty in obtaining loans than those who own land outright.

5.19 Local sources of finance for hotel development are very limited, and available only at high interest rates and short amortization schedules. It is thus inevitable that new hotels, if large, will have to be financed by foreign investors.[43] Since it is important that Grenadians continue to

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43/ Total investment for a 200-room hotel would amount to more than US$20 million, which would be the largest single private investment ever carried out in the country.

participate in tourism development, local investors in small hotels, which in any event correspond to a particular market segment which prefers small hotels, should be encouraged. Foreign investors, who can demonstrate availability of funding, should be encouraged to build the larger establishments. Options on hotel sites on prime beach land should be of limited duration, so that their exploitation is not blocked by promoters without adequate capital and/or other sources of finance.

5.20   One important reason why a few larger hotels ultimately will be required relates to the need to improve air services to Grenada, particularly on longer distance routes from North America and Europe. At present, Grenada faces the dilemma which confronts all tourism destinations in the early stages of development: the airlines are reluctant to operate services in the absence of hotel bed capacity while investors hesitate to build more capacity in the absence of sufficient air seats being flown to the country. In the 1988-89 winter season hotel reservations have been cancelled as a result of the failure of intending visitors to obtain air reservations. One option would be to encourage air charter operations, which are more flexible than scheduled services in that they can be adapted not only to seasonality but to varying demand within each week. Most tourists tend to travel during weekends. But the most economic charters are those operated in relatively large aircraft.[44] Thus, they require a relatively large hotel capacity to match the passenger capacity of the aircraft.

5.21   Another advantage of air charters is their lower cost per passenger since they operate at high load factors and they only operate when demand justifies them. A study of comparative tourism pricing by the Government of Barbados reports that demand in both North American and European markets has been demonstrated to be far more sensitive to changes in disposable income, exchange rates and particularly air fares, than to changes in room rates since the latter usually have a smaller weight in the total cost of a trip than the air fare.[45]

5.22   Until the late 1980's, virtually all scheduled air services to Grenada were regional, mainly by LIAT. Since the opening of Point Salines airport, there has been a gradual increase in long-distance scheduled air services. By 1989, BWIA was operating daily from Miami (via Antigua and St. Lucia) and three times a week from New York (via Antigua and Barbados). It was also possible to connect for Toronto at Antigua. BWIA flights from London, Stockholm and Frankfurt also connect with other flights to and from Grenada. British Airways has one flight a week from London and requested a second flight to start in 1989. American Airlines was planning a weekly flight from New York in addition to feeder flights via San Juan. Two

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44/ The new airport at Point Salines is capable of accepting all types of aircraft, in terms of both runway and terminal capacities.

45/ In any event, hotel prices in Grenada at present are competitive with alternative destinations in the Caribbean. However, the heavy investment costs in new large hotels could dictate higher room prices to achieve profitability, particularly in view of the relatively low average annual occupancy rates that result from acute seasonality. Thus, containment of investment costs is vital for maintaining competitiveness.

Venezuelan airlines have permission to operate from Caracas and Margarita Island respectively. ALM was initiating a weekly flight from Curacao. In all, air service is finally responding to increased hotel capacity and may be expected to expand further if projected tourism development in the 1990s takes place.

C. Tourism in St. Vincent and the Grenadines

Traffic Trends

5.23   Tourism growth has been slow in recent years, and much of it has been concentrated on the Grenadines. Air excursionist traffic -- visitors flying in for one day visits--has, however, grown rapidly. The share of U.K. and European visitors has increased, owing to exchange rate movements. Gross receipts from tourism amounted to EC$132 million in 1988, a slight decline from 1987.

Commercial Accommodations

5.24   There were 936 rooms available for visitors at the outset of 1989 (see Table V.3 below). Of these, 60% are in the Grenadines and 40% in St. Vincent. All establishments are small, there being 51 with an average capacity of 18 rooms. The largest hotel, the Canouan Beach Hotel, has 35 rooms. Less than half the rooms--428--are in hotels, the remainder being in apartments, guest houses, cottages and villas. There are five luxury class hotels, while the standards of the remaining hotels vary. The hotel industry is not at present capable of dealing with large groups.

Table V.3: ST. VINCENT AND THE GRENADINES - AVAILABLE ROOMS BY TYPE, 1989

Island	Hotels	Apartments	Guest Houses	Cottages	Villas	Total
St. Vincent	162	110	62	41	-	375
The Grenadines	226	23	55	37	180	561
Total	428	133	117	78	180	936

Source: Bank staff estimates.

5.25   In the high season, several of the luxury hotels achieve very high occupancies. The Petit St. Vincent resort, for example, had a 95% room occupancy and the Young Island resort about 85% in 1988. On the other hand, many hotels achieve only 50-60% in the high season and much less in the low season. It is estimated that in 1988 the annual average occupancy for all accommodations was no more than 35%.

Developments to 1999

5.26   Despite current low occupancy rates, several new hotels are under construction or planned, both on the mainland and in the Grenadines. Room availability will show an expansion of about 45% to 1999 (see Table V.4

below). Receipts from tourism, which reflect expenditures mainly by hotel guests, but also by air excursionists, cruiseship passengers and yacht occupants, are projected to increase by about 30% to 1999, and direct employment in tourism by about 35%. These increases are modest in relation to projections for the other OECS countries, but they nevertheless indicate that tourism will continue to play a key role in the development of the country.

Table V.4: ST. VINCENT AND THE GRENADINES - TOURISM
PROJECTIONS, 1989, 1994 AND 1999

	Available Rooms (number)	Gross Receipts (1989 EC$ million)	Direct Employment (number)
1989	936	138.5	1,310
1994	1,140	160.5	1,520
1999	1,344	177.1	1,790

Source: Bank staff estimates and projections.

Government Policies

5.27   St. Vincent and the Grenadines are endowed with a wealth of natural attractions which are relatively unspoiled and constitute the underlying tourist appeal of the country. However, the geographical diversity of the various attractions means that they are relatively difficult to access. The factors of diversity and inaccessibility, including the excessive bureaucracy at the hubs, severely constrain the type of tourism which can be developed. The Grenadines offer the white sand beaches that the market prefers. St. Vincent does not have as many beaches. The relatively modest accommodation expansions projected for the next few years are private sector activities supported by governmental policies and programs with respect to investment incentives, air accessibility and selected infrastructure works.

5.28   Under the Hotels Aid Act of 1988, incentives are provided for the construction of new hotels and the renovation, refurbishment and expansion of existing hotels. Qualified investors are allowed to import building materials and hotel equipment free of customs duties and consumption tax, or, if purchased within the country, free of the consumption tax. Furthermore, new hotels are exempt from income tax for ten years if there are 5-20 rooms, for twelve years if there are 21-34 rooms and fifteen years if there are 35 or more rooms. In the case of enlargement of existing hotels, the tax holiday is for nine, ten or fifteen years according to the number of additional rooms, and applies only to that part of the profit attributable to the extension.

5.29   Local sources of finance for hotel development were at one time scarce. The commercial banks, however, are now accustomed to hotel mortgage lending, and the Caribbean Financial Services Corporation also

provides financing. Another main source of local funds is the Development Corporation (DEVCO) which was established in 1978 and merged with the Agricultural Credit Bank in 1982. After an initial period of funding by the Government, the corporation borrowed from the Caribbean Development Bank (CDB) and the European Investment Bank (EIB). The CDB funds may be onlent for agriculture, industry and tourism while the EIB funds are restricted to industry and tourism. The DEVCO portfolio comprises 35% in tourism, 15% in manufacturing and 50% in agriculture. Resources available for lending at the outset of 1989 amounted to EC$5.5 million with a rate of interest of 11% and an amortization period of up to 20 years. EIB funds are restricted to loans of more than EC$90,000. DEVCO's tourism loans average EC$150,000 and are devoted primarily to modest extensions and renovations. The CDB also finances a few new hotels directly, without the intermediary of DEVCO. But a large hotel, such as the 100-room hotel at Ottley Hall, which would cost at least EC$30 million to construct, would have to be financed almost entirely from abroad. The Government is prepared to offer additional incentives to investors in such a hotel.

5.30   Much of the infrastructure works required for the development of tourism are related to improved access by air and by sea. The lack of an international airport could over the longer term deter long-distance travellers. To extend the runway at Arnos Vale, the existing main airport, by the 2,000 feet required, would entail construction into the sea which would be very expensive. Take-offs would still be down-wind and there is doubt as to whether landing by jet aircraft would not be inhibited by restrictions on abort space imposed by the nearby mountains. In view of the potentially heavy costs and technical limitations, the possibility of an entirely new site for an airport on St. Vincent has been considered. The International Civil Aviation Organization is assisting the Government in drawing up the terms of reference for a feasibility study for an airport in St. Vincent.

5.31   Improvements in access to the Grenadines are expected as the result of airstrip upgrading and construction. The resurfacing of the Canouan runway has recently been completed. The already-established tourism potentials of Bequia will be enhanced with the construction of an airport. Detailed engineering design and tender procedures have been initiated and physical works are scheduled to start in 1990. This project is a critical development to support air communications into St. Vincent and the Grenadines. Plans for the redesign and reconstruction of Union Island Airport are also underway. A new fifteen year agreement with Mustique should contribute to the investment and development of up-market residential tourism in that island.

5.32   The Government has been negotiating on behalf of LIAT, the principal regional airline, to obtain improvements in scheduled services. A joint venture operation with a majority of shares held by Caribbean shareholders has been proposed.

5.33   With respect to cruise business, the Government is planning improvements in docking arrangement at Kingstown (St. Vincent) to expedite passenger traffic through the commercial cargo facilities. Since total receipts from cruise passengers are relatively modest, the Government must ensure that public sector investment is likewise relatively modest. There may be a conflict, however, between the requirements of higher market and

the mass market of cruise ships. The two may not be compatible. Policy discussions should be able to differentiate between their relative advantages and disadvantages. St. Vincent and the Grenadines are an important centre for yacht activity, and should continue to capitalize on this market.

D. Tourism in St. Lucia

Traffic Trends

5.34   Tourism has been a dynamic sector in the economy throughout the 1980s, with stayover traffic increasing by 44% between 1984 and 1988, and air excursionist and cruise traffic increasing even faster. Air access has been improving constantly and the depreciation of the U.S. dollar between 1985 and early 1989 contributed to a large and growing U.K. and European flow. Gross receipts from tourism were EC$237 million in 1988, or 46% greater than in 1984.

Commercial Accommodations

5.35   By 1987, it had become clear that the supply of visitor accommodations was constraining tourism development. Although there had been selective extensions to existing hotels, there had been no new hotel constructed in the previous ten years. In 1988, with a record 1,956 rooms available, the average annual occupancy rate, at 77%, was also a record. Furthermore, although air services are generally adequate to carry the required traffic, the volume of peak-season air seats, particularly from the U.S., is insufficient to fill the number of beds available.

5.36   Of the existing supply of rooms in 1988, about one-third were in four of the larger establishments which operate as all-inclusive vacation resorts. Pioneered by Club Mediterranean and further developed in Jamaica, the concept has now spread to St. Lucia and elsewhere. Very popular among action-oriented market segments, the all-inclusive resort offers accommodations, food, drink, sports, entertainment and other activities for a prepaid amount so that the guest can count on being free of any extra charges. The resort operator has the benefit of capturing virtually the total expenditure of each guest, usually for a minimum stay of one week. Furthermore, the guests are delivered in volume by air charter which helps fill the hotels at a relatively low air transport component in the total package price. The tourist authorities in St. Lucia, while accepting that all-inclusive resorts respond to a market segment, are concerned that eventually there could be an oversupply of this type of vacation product which would militate against a prudent diversification of the sector. Furthermore, with the preponderance of the tourists' expenditure taking place (prepaid) within an individual resort, the effective diffusion of such expenditure throughout the tourism economy is severely restricted.

5.37   The hotel industry is a major purchaser of local agricultural produce. The negative list on imports requiring a license includes most agricultural produce that hotels require and can be grown locally. An agreement with the Marketing Boards gives a two-week priority to local producers after which imports are permitted with preference for CARICOM countries.

5.38   An 8% occupancy tax is levied on hotels for rooms and meals. In 1988, the total yield was about EC$8 million.

Developments to 1999

5.39   In response to the current room shortage, a number of new hotel projects are under construction or in an advanced planning stage. Room availability is projected to increase by over 50% by 1999 from a base which is already a strong one. Gross receipts are projected to increase by over 40%, and direct employment by over 55% (see Table V.5 below). These projections imply a continuing major role for tourism in St. Lucia.

Table V.5: ST. LUCIA - TOURISM PROJECTIONS, 1989, 1994 AND 1999

	Available Rooms (number)	Gross Receipts (1989 EC$ million)	Direct Employment (number)
1989	2,116	259.6	4,380
1994	2,774	325.4	5,742
1999	3,224	371.0	6,873

Source: Bank staff estimates and projections.

Government Policies

5.40   The increased economic importance of the tourism sector should be matched by institutional strengthening of the Tourist Board. Already the Board has increased promotional efforts, particularly through its overseas offices in the U.S., Canada, UK, Germany and France. There is also close cooperation with the private-sector St. Lucia Hotel Association which represents virtually all hotels and other guest accommodations.

5.41   The hotel industry benefits from fiscal incentives authorized under the Hotel Aids Ordinance of 1959. This ordinance, similar to those enacted by the other OECS countries at about the same period, is the only one that had not been updated as of early 1989, although a new ordinance was expected to be enacted later in the year. In the meantime, hotels and other guest accommodations can obtain an income tax holiday for seven years. They can also, in effect, import duty-free the materials and equipment required for construction. The new ordinance should deal with the present practice whereby a hotel is sold to a new owning company established solely to extend the income tax holiday beyond the initial seven years. This would be achieved by defining the tax holiday in terms of the enterprise itself rather than of the owning company or companies.

5.42   Most of the hotels in St. Lucia were financed by equity funds internally generated and by very limited funds borrowed on relatively short term from local commercial banks. In 1988 and 1989, the banks were quite liquid - bank deposits depend on the state of the banana trade - and they started to offer mortgages and other long term finance for apartment

hotels, time-sharing units and condominiums. The larger more traditional hotel projects are financed overseas by foreign investors with their own sources of equity and collateral for loan finance.

5.43   Public sector investment in infrastructure is needed to support private sector investment in hotels and other tourism enterprises. For example, the Roseau Dam project will develop potable water resources both for residential, commercial and industrial consumption in Castries and also for the hotels of the Northwest. Likewise, road construction and road maintenance, sewerage and electric power are needed for the general development of the country including the tourism sector. Many if not most of these projects are already under way.

5.44   Closely linked with tourism are the proposals for additional investment in airports. There is a relatively small airport at Vigie, very close to Castries, the capital, and quite close to the tourist resorts in the Northwest. Subsequently, the Hewanorra airport was built at the other end of the island more than an hour's drive from most of the hotels. Hewanorra is able to take all wide-bodied intercontinental aircraft and thus traffic from Europe and North America is routed there. Vigie airport is served by the regional feeder services, particularly LIAT but including several other airlines operating smaller planes. The Hewannora Airport Improvement Project, which is estimated to cost about US$26 million, includes the expansion of the passenger terminal and airport apron, and the construction of a new taxiway. At the same time, expansion at Vigie is envisaged. At a cost not specified, the existing runway would be lengthened from 5,700 ft. to 6,300 ft. (of which 200 ft. would have to be reclaimed from the sea) so as to accommodate medium-size jets which would operate as charters supplying passengers to the nearby hotels. Hewannora would receive the existing regional feeder services. The Government must consider the full implications of these projects and whether they are mutually exclusive. At present, the project at Hewannora is proceeding while the project at Vigie is under study.

5.45   Hewanorra is served by British Airways three times a week from London, BWIA twice a week from Miami and Air Canada once a week. In addition, many charters serve St. Lucia. Since Eastern Airlines eliminated its direct service to St. Lucia, many U.S. passengers fly from New York and elsewhere to Barbados with an onward connection by LIAT to Vigie, particularly if the BWIA flight from Miami is fully booked. The Eastern pullout temporarily created an imbalance between air seats from the U.S. and hotel beds. However, American Airlines is initiating a feeder service to and from its hubs in Barbados and San Juan.

E.   Tourism in Dominica

Traffic Trends

5.46   The tourism sector is small and has experienced slow growth: stayover visitors increased by only 20% between 1984 and 1988. The country lacks white sand beaches and appeals to those tourists who seek scenery and outdoor activities, a small segment of the overall market. Cruiseship traffic and air excursionists increased at a faster rate. Gross receipts

from tourism in 1988 were EC$33 million, up 22% over 1984. However, local value added is estimated to be twice as much as that in the other islands of the Eastern Caribbean.

Commercial Accommodations

5.47   Rooms in commercial accommodations numbered 407 in 1988, about the same as during the previous year. Accommodation capacity increased steadily from 263 in 1982, although there was a setback in 1986 when a hotel was destroyed by fire. Most of the capacity increase has been in traditional hotels, rather than guest houses or cottages. Many of the hotels do not offer the facilities and standards which the international travel market has come to expect. Upgrading existing hotels should have priority over increasing total capacity. In 1987-88, average occupancy rates for total room capacity averaged 30-35%, so that visitor traffic increases could easily be accommodated in existing hotels.

Developments to 1999

5.48   Dominica is unlikely to become a major tourism destination in the next decade, but effective promotion of tourism assets would generate steady development of the sector. Dominica has good potential in health spas and related attractions, and diving also represents an attraction that can be developed. Room availability along with employment is projected to increase by about 50% over the decade, while gross receipts are projected to rise by about 35% (see Table V.6 below). However, the existing base is so low that the sector will not be a large contributor to the economy even by 1999.

Table V.6: DOMINICA - TOURISM PROJECTIONS, 1989, 1994 AND 1999

	Available Rooms (number)	Gross Receipts (1989 EC$ million)	Direct Employment (number)
1989	440	34.2	748
1994	556	40.3	945
1999	672	45.6	1,143

Source: Bank staff estimates and projections.

Government Policies

5.49   The institutional arrangements for public sector activities in tourism underwent a radical change as a result of the National Development Corporation Act of 1988. In effect, the existing Dominica Tourist Board was merged with the existing Industrial Development Corporation into a single National Development Corporation (NDC) comprising two divisions, one for industry and one for tourism. Such an arrangement is rare, with few, if any, equivalents elsewhere. At the ministerial level, there is a single

Ministry of Agriculture, Industry, Trade and Tourism that has ultimate responsibility for both industry and tourism. Furthermore, there is a special Assistant Secretary for Tourism in the Ministry.

5.50   The NDC will jointly promote investment, be it in industry or tourism (namely hotels). The tourism division of NDC (which at the outset had the identical staff as its predecessor, the Dominica Tourist Board) will continue to be responsible for market promotion, supervision of operational standards, liaison with airlines and shipping, training, hotel classification, and improvement and collection of tourism statistics. In short, the tourism division will have functions similar to any other national tourist organization, but will be linked with the industry division for the purpose of investment promotion and also evaluation of investment proposals.

5.51   The budgets of the Tourism Board and the IDC were EC$400,000 and EC$420,000 in 1988-89 while the combined budget for NDC during its first year of operations, 1989-90, will be about EC$1.6 million. In particular, NDC will strengthen its project evaluation capability. Even before the merger, IDC carried out evaluations for both industry and tourism.

5.52   Project evaluation is especially necessary because approvals are required in the granting of fiscal incentives under the Hotel Aids Ordinance. (There is a separate, but similar, ordinance for industry). Approved hotel projects of 10 rooms or more benefit from a ten-year income tax holiday for a new establishment, pro rata for extensions to existing establishments, but no tax concessions for renovations and refurbishments. However, all hotel projects are exempt from customs on materials and equipment required for the investment. Because there is a heavy demand for under-water sports, five companies benefit from customs exemption on scuba and snorkeling equipment and power boats.

5.53   There are two airfields: Melville Hall, which is capable of accepting the 44-seat HS 148 and similar aircraft but is 58 km. distant through mountainous terrain from Roseau, and Canefield, which is capable of receiving only much smaller planes such as the 19-seat Twin Otter but is only 5 km. from Roseau. Regional and feeder airlines operate with aircraft which the present airfields can accommodate. Access from Europe is via Guadeloupe and Martinique or via Antigua and Barbuda, and Barbados, the latter two also being access airports from North America. Furthermore, American Airlines is planning a feeder service from its hub at San Juan, Puerto Rico. However, the existing airfields cannot be operated at night, and safety concerns require changes to the existing facilities. There is a need, therefore, to determine the least cost solution to these concerns, based on feasibility studies which take account of both economic and safety criteria relevant to airports.

5.54   The 300-mile main road network is excellent. Minor access roads are needed to connect with important sites such as lakes, waterfalls, hot springs and geysers. Sewerage improvements are underway in Roseau, financed by CIDA. Dominica has abundant fresh water (some of which is exported to neighboring islands) but the pipe distribution network in some areas is suffering from deferred maintenance.

F. Tourism in Antigua and Barbuda

Traffic Trends

5.55   Traffic volumes are large and growing: Antigua and Barbuda
receives 35% of the total tourist trade in the OECS countries. Stayover
arrivals increased by 40% between 1984 and 1988, and cruiseship passengers
by 200%. The U.S. remains the largest source of visitors, but U.K. and
European traffic is increasing rapidly. Gross receipts from visitors
totalled EC$359 in 1988, a 69% increase over 1984.

Commercial Accommodations

5.56   The supply of rooms in commercial establishments scarcely
increased between 1983 and 1985 (see Table V.7 below). Since traffic was
increasing rapidly during this period, occupancy rates reached 72% in the
latter year. Encouraged by traffic growth and occupancy increases,
investors constructed an additional 930 rooms by 1988 when those were a
total of 2,879 rooms in operation, an increase of 4b% over 1985. Although
stayover traffic was developing briskly, it was not increasing as fast as
the additional supply of rooms so that the average annual occupancy for all
commercial accommodations fell to 57%, a rate at which the more successful
hotels remain profitable.

5.57   Hotel prices have been the highest in the region, partly because
of a favorable demand-supply relationship, but also because of inherent
operating costs. In addition to general inflation, the incidence of
customs duties on most operating inputs is heavy. Furthermore, a shortage
of skilled labor has resulted in high wages and low productivity: payroll
costs average 46% of total revenue compared with 25.6% worldwide and 33.4%
in the Caribbean region as a whole; also the employee-room ratio in Antigua
is 1.43, the highest in the Caribbean. Energy costs, at about 14% of total
revenue, are also among the highest in the region.

Table V.7:   ANTIGUA AND BARBUDA - NUMBER OF ROOMS IN ACCOMMODATION
               ESTABLISHMENTS AND ANNUAL AVERAGE OCCUPANCY RATES, 1983-88

Year	Hotels	Guest Houses	Apartments	Total	Average Occupancy Rate (%)
1983	1,610	129	220	1,959	55.4
1984	1,684	126	121	1,931	57.9
1985	1,718	106	125	1,949	71.5
1986	1,818	70	509	2,397	58.8
1987	2,081	78	593	2,752	53.5
1988	n.a.	n.a.	n.a.	2,879	56.7

Source: Bank staff estimates.

Developments to 1990

5.58   The country's very strong base in tourism is projected to show substantial growth in the next decade, pushing total direct employment above 10,000 by 1999 (see Table V.8 below). About 1000 rooms will be added in each 5 year period, generating, along with growth in cruiseship traffic, a growth in gross receipts of about 60% over the 10 year period. Development at this pace may generate shortages of labor in the sector, ui ' ss labor inflow from other countries is encouraged.

Table V.8: ANTIGUA AND BARBUDA - TOURISM PROJECTIONS, 1989, 1994 AND 1999

	Available Rooms (number)	Gross Receipts (1989 EC$ million)	Direct Employment (number)
1989	2,938	413.7	6,550
1994	3,898	539.7	8,692
1999	4,858	664.4	10,833

Source: Bank staff estimates and projections.

Government Policies

5.59   To help maintain the developmental momentum in the tourism sector, the governmental structure has been streamlined by incorporating the Antigua Department of Tourism as a division within the Ministry of Tourism headed by a senior Director General. The division's responsibilities include market promotion and the other regulatory and development functions carried out by most national tourist organizations. Tourist offices are maintained in New York, Toronto and London and representation elsewhere is assured by Antigua's membership in the Caribbean Tourism Organization. There is close cooperation between the Ministry and the private sector Antigua Hotel Association which itself is a member of the Caribbean Hotel Association. The Antigua Tourist Board has operated on an annual budget of about US$10.3 per stayover arrival which is very low by regional norms: Barbados' national tourism organization spends US$18.9 per stayover arrival, The Bahamas spends US$21.6 per stayover arrival and Jamaica US$43.7. A case thus could be made for increasing the Department of Tourism's annual budget at least to maintain the present per capita expenditure, thereby rising from EC$5.9 million in 1989 to EC$7.3 million in 1994 and to EC$9.7 million in 1999. Further increases, as justified, could be financed by increasing the Department's share in the 7% hotel occupancy tax.

5.60   A potential constraint on tourism expansion could be the availability of suitable sites for further construction of hotels and other tourism facilities. Prime beach-front property on the desired western (Caribbean) coast of Antigua is virtually saturated. As a result land costs are so high that they add significantly to total investment costs and

therefore to the prices which must be charged. The Development Control
Authority is nominally responsible for physical development and a land-use
plan was prepared with UN assistance in 1975. However, the plan has not
been enforced by law. New hotel projects must submit location, site and
structural information, together with technical descriptions of sewerage
disposal, environmental considerations and pollution controls.

5.61   A permit to construct a hotel is necessary when applying for
fiscal incentives. Approved projects for new hotels and other
accommodations, including condominiums, or for extensions to existing
facilities, are eligible for a corporate income tax holiday for up to eight
years, and for customs exemptions for imports of materials and equipment
used in such projects. The customs exemptions are a very effective
incentive because, following the abolition of personal income tax, the
general level of import duties was raised sharply.

5.62   Another constraint on tourism development is water supply.
Antigua is not endowed with sufficient fresh water resources to meet needs
during the dry months. Accordingly, a desalinization plant operated on the
waste heat of the nearby electric power plant has been installed at a cost
of EC$128 million. The distribution networks, both for water and
electricity, are under construction at a cost of EC$70 million and are
scheduled to be completed by early 1990. Ensuing supplies are expected to
be adequate for some years but further studies as to long-term requirements
until 1999 should be undertaken without delay.

5.63   Antigua's superior air access facilities have always been the key
to the success of the country's tourism sector. Over the years, the
airport's capacity and facilities have been regularly upgraded to meet
evolving requirements. By 1988, there were 47,091 aircraft movements in
and out of the V.C. Bird International Airport, the highest ever recorded.
There were nine scheduled airlines, of which four operated large wide-
bodied aircraft. In addition, there more than 8,000 aircraft movements of
chartered lines. There was also a considerable movement of private
aircraft. In all, there was an average 130 movements per day. There were
also average daily overflights of 53 aircraft requiring the services of
Antigua's air traffic control.

5.64   As a result, negotiations were undertaken in early 1989 with the
EIB to consider improvements in radar surveillance equipment which would
enhance safety and security and generate fuel savings. The project would
cost about EC$11 million including procurement, installation, spare parts
and training. Three additional air traffic controllers would be required
and one extra maintenance engineer. In addition, because of traffic growth
and the bunching of much of that traffic at certain times on certain days,
the airport terminal building requires expansion. The arrivals hall needs
to be enlarged and the capacity of the baggage carousels enhanced. More
counter space is required and the departure hall should be enlarged. As
yet, there are no specific designs and therefore no cost estimates. These
should be undertaken without delay so that the mounting congestion at the
airport does not prejudice traffic growth. Finally, to avoid further
congestion on the airfield itself, parking aprons should be expanded and a
parallel taxiway installed. The works are estimated to cost about EC$8
million but would have substantial economic returns.

5.65   The airport is operated by the Aerodrome Superintendent and his staff as direct employees of the Ministry of Transport. There is no autonomous body. Thus, the airport is included directly in the central budget, transmitting revenues to the Treasury and receiving operating funds in accordance with the approved budget. There is no necessary relationship between the two and the 1989 budgeted profit and loss statement projects a profit of EC$1.2 million which, if received, will accrue to the central budget. In addition, the passenger departure tax is collected by Customs and is remitted directly without any impact on the airport's financial operations. In many countries, there is an autonomous airport corporation which is thus in law able to enter into contracts and engage in commercial activities. International lenders frequently prefer to deal with such a corporation because its accounts are segregated and thus more readily identifiable.

G.   Tourism in St. Kitts and Nevis

Traffic Trends

5.66   Tourism expanded rapidly from 1984 to 1988: stayover visitors increased by 73% and cruise passengers by 83%. Increasing proportions of stayover visitors are from the U.S., unlike the experience in other OECS countries, where the U.K. and European traffic share is rising. Gross receipts from visitors totalled EC$87 million in 1984, a 112% increase over 1984.

Commercial Accommodations

5.67   Apart from the 268-room Jack Tar, the average capacity in 1988 of hotels was 27 rooms. Most of the small hotels suffer from high seasonality and low occupancy rates and are not geared to the requirements of large-volume international vacation travel. Thus, the average occupancy in 1988 of 48.4% (see Table V.9) reflects much lower occupancies in most hotels and a 81% occupancy rate recorded by Jack Tar.

Table V.9:   ST. KITTS AND NEVIS - NUMBER OF ROOMS IN ACCOMMODATION
              ESTABLISHMENTS AND AVERAGE ANNUAL OCCUPANCY RATES, 1984-88

Year	Available Rooms	Average Occupancy (%)
1984	548	n.a.
1985	531	29.6
1986	603	32.0
1987	712	49.9
1988	791	48.4

Source: Bank staff estimates.

5.68   Most of the increase in room capacity in the last five years has resulted from extensions to existing hotels or the construction of additional small hotels. The average annual increase in room capacity during the five-year period, 1984-88, was 8.8%, starting from a relatively low base, and still not adequate to stimulate volume tourism with a match between seats on wide-bodied charter aircraft and hotel beds. The exception is Jack Tar, which operates its own charters and markets through its own company-owned tour operators, resulting in high occupancy rates and high profitability.

Developments to 1999

5.69   The country appears to be on the brink of a major expansion in tourism, owing to the opening up of the South-East Peninsula and to major projected developments in Frigate Bay and Nevis. Room availability is projected to increase almost four-fold to 1999, and gross receipts are projected to triple (see Table V.10 below). Employment generation will result in shortages of labor, particularly during heavy construction periods, and consideration will have to be given to encourage an inflow of labor.

Government Policies

5.70   The infrastructure required to open up the South-East Peninsula for tourism development is estimated to cost EC$24 million and is financed by USAID. In addition, water supply :· . ·red by a pipeline laid below the road surface and connected to a n.· ervoir, both financed by CIDA at an estimated cost of EC$17 million. . ectr·city distribution system also is being laid under the road ·· · · t of EC$5 million. The cost of connections will be the responsibi. · ·· the user enterprises.

Table V.10:   ST. KITTS AND NEVIS - TOURISM PROJECTIONS,
1989, 1994 AND 1999

	Available Rooms (number)	Gross Receipts (1989 EC$ million)	Direct Employment (number)
1989	864	101.2	1,572
1994	2,051	195.8	4,102
1999	3,302	312.6	6,274

Source: Bank staff estimates and projections.

5.71   There are several further works required to complete infrastructure at Frigate Bay. A central sewerage system is being installed at a cost of EC$22 million. A new reservoir, specifically designed to supply water to Frigate Bay, is being constructed with funding from BDD at an estimated cost of EC$4 million. Within the Frigate Bay Development itself, all building lots are now financed. The access road from Basseterre to Frigate Bay and onward to the South-East Peninsula urgently requires

resurfacing at an estimated cost of EC$227,000, which represents a modest expenditure to remove a potential bottleneck for traffic to the two main tourism development zones of the country.

5.72   The South-East Peninsula Development and Conservation Board, an independent body appointed by the Government, is charged with preparing a development and land-use plan for the peninsula and overseeing its implementation. A first draft was submitted in early 1989 with final adoption envisaged for later in the year. The plan seeks to ensure both the optimal use of the serviced land and compliance with an appropriate zoning law to protect environmental and visual standards. A national park or reserve on one part of the peninsula is under active consideration.

5.73   All the land on the peninsula is privately owned. When the proposed road and related utilities developments became known in the mid-1980s, land prices soared. In order to share in the windfall capital gains, the Government imposed a special 10% land transfer tax, payable by the seller, and a 4% tax payable by the buyer. However, such transactions are exempt from the 4% Alien Holdings Tax. The land transfer tax is payable on each occasion of title transfer so that, for example, the tax is payable both by the developer of a condominium property and each individual purchaser of a component condominium.

5.74   The Government's policy is to predicate the future development of tourism on the construction of larger hotels with sufficient capacity to encourage wholesale marketing and to induce augmented scheduled air services and increased air charter traffic. Accordingly, special fiscal incentives are provided for the construction and operation of hotels of 200 rooms or more. Like smaller hotels, these larger hotels would benefit from a corporate income tax "holiday." While the benefit for small hotels is limited to 10 years, the larger hotels can negotiate a duration of 15-20 years. Furthermore, in addition to customs exemptions on the materials and equipment necessary for the construction of any new hotel over 10 rooms, the larger hotels also will be exempted from customs duties on imports of operating inputs not available in the country. Besides giving them a competitive edge over their smaller colleagues in St. Kitts and Nevis, this particular exemption should give them a pricing advantage over larger resorts on neighboring islands. Alternatively, the beneficiary hotels may decide instead to maximize gross operating profits in order better to meet heavy fixed charges, particularly debt service.

5.75   The exemption of customs duties on operating inputs is both generous and sacrificial in a country like St. Kitts and Nevis, which, having eliminated personal income taxes, relies heavily on customs duties to make a major contribution to the central budget. The Government should initiate a study to quantify the economic and financial impact with or without such incentives or with varying packages of such incentives.

5.76   The only direct long-distance flights to and from St. Kitts are provided by BWIA: on Mondays from Toronto on a L1011 aircraft with a capacity of 249 passengers; on Tuesdays from Miami on a DC9 with a capacity of 118 passengers; and daily in season from New York aboard a MD83 aircraft with a capacity of 139 passengers. American Airlines operates a hub at San Juan which provides 4 feeder services a day to St. Kitts. These services provide connections to various U.S. destinations. British Airways and Air Canada connect through Antigua mainly by LIAT. WINAIR operates from St.

5.77   Clearly, if the foregoing tourism development scenario is to be retained, considerably augmented scheduled services will be required. Already, American Airlines is planning to upgrade its feeder service from the Short 360 which carries 34 passengers to the A300 which carries 122 passengers. Furthermore, charter operations are likely to proliferate as the larger resort hotels begin operations. Already, Jack Tar has an investment in Air 2000, a Canadian charter airline operating Boeing 757's with a 252-passenger capacity.

5.78   Golden Rock Airport on St. Kitts has a runway adequate for all types of aircraft. However, as traffic grows, the airport will require an expanded parking apron and possibly an extra taxiway. The terminal building is already congested at peak hours. Its capacity will need to be augmented.

5.79   Flights from Newcastle Airport on Nevis connect with St. Kitts and Antigua. Having only a 2,500 foot runway, operations are restricted to the 9-seat BN Islander and the 18-seat Twin Otter, rather than the larger 44-seat Avro 748 and the 37-seat Dash-8 with which LIAT is also equipped. This major constraint on air access could be eased if the runway could be extended 1,000 feet. Its construction, together with safety and other equipment is estimated to cost EC$9 million although final engineering designs have yet to be prepared and a source of finance located. The early completion of the airport expansion project is of great importance to Nevis tourism development.

H. Conclusions

5.80   Tourism, broadly defined, is the largest industry in the world, and has excellent growth prospects, with an overall income elasticity of demand well above unity. An expanding market clearly exists for the OECS countries, and their overall share of world or regional tourism is so slight that major expansion is possible without causing disruptive competitive pressures. The industry has the potential to generate more employment opportunities and higher real wages than other sectors. The major external determinants of the expansion of tourism in the OECS countries are the growth of income in North America and Europe, and the evolution of the U.S. dollar. Internally, the supply of accommodations and the suitability of infrastructure, especially air transport links, are the key determinants.

5.81   Movements in the U.S. dollar were favorable to OECS tourism growth until recently. A depreciating U.S. dollar encourages both U.S. and European tourists to travel in dollar areas, and the growth of European tourism has been especially strong. An appreciation in the U.S. dollar will dampen some of this growth, but growth will continue unless there is a major disruption such as a world recession or oil shock.

5.82   Government incentives for tourism are adequate in all OECS countries. Commercial accommodations are expected to expand in all OECS countries, substantially in some. Large projects usually are foreign financed, often with government involvement. It would be beneficial that this type of development be complemented by local finance of locally owned

but smaller projects. Consideration of a regional facility to support such development should be undertaken by the ECCB as part of its broader capital markets study.

5.83   Transport links have developed substantially in recent years in response to market demand. The role of LIAT, the regional air-carrier, in providing internal flights has been examined to d.termine whether a more competitive environment would facilitate the further development of transport links. A joint venture operation with a majority of shares held by Caribbean shareholders has been proposed. Some airport facilities will need to be improved to accommodate anticipated traffic, particularly those in Antigua and Barbuda, St. Kitts and Nevis, St. Lucia and St. Vincent and the Grenadines. Other major tourism-related infrastructure requirements include water, sewerage, electricity and roads maintenance and rehabilitation, together with improved health facilities and human capital development. The possibility of joint-tourism promotion efforts should also be considered.

5.84   Tourism development is likely to generate costs, e.g., environmental contamination. Their small size makes the OECS countries particularly vulnerable, and some environmental degradation already has occurred. The solution is not to forego tourism but to ensure that planned development is followed. Government planning resources, however, are not at present capable of handling these problems and need to be reinforced to ensure that the environmental costs of tourism development are minimized.

CHAPTER VI

MANUFACTURING

A. Overview

6.01   This chapter analyzes trends in manufacturing and discusses measures that might help improve manufacturing prospects. Since the OECS countries differ with respect to their manufacturing industries and development prospects, they are treated separately in the subsequent sector discussion.

6.02   For the OECS countries as a group, manufacturing as a percent of GDP at current factor cost peaked at 8% in 1982, and subsequently declined to about 7% in 1987. Exclusive of Grenada, manufacturing in constant 1977 prices showed an increase in every year from 1980 to 1987, but about half of the overall increase had occurred by 1982.[46]

6.03   A major development affecting the growth of the manufacturing sector has been the expansion from 1978 to 1982 and then decline from 1983 in the CARICOM market, particularly in Jamaica and Trinidad and Tobago. The OECS manufacturing industries geared up to sell in this expanding market in the late 1970s and early 1980s, and had great difficulty in finding new markets when economic decline, trade restrictions and devaluations impacted upon access to markets in Jamaica and Trinidad around 1983. Some firms were not able to adjust to the changed conditions and disappeared, others contracted their scale of operations, albeit a number were able to maintain or expand their CARICOM trade. The overall impact was negative. Since 1983 the sector has been linked to domestic and to the U.S. markets. This in turn has produced a mixture of high cost firms enjoying high levels or effective protection and serving domestic markets, and of low cost firms enjoying zero or negative effective protection and competing in the U.S. (or in some cases regional) markets.

6.04   In the OECS economies as a whole, the key influences on the pattern of growth of the sector have been developments in agriculture and in tourism. On the one hand, booms in tourism and bananas have resulted in a decrease of the real exchange rate and raised the level of real wages. Both developments have impacted negatively on the growth of the sector. The banana boom in the Windward Islands and the tourist boom throughout the OECS have attracted resources away from other sectors, including manufacturing, and, to the extent that the latter depends on external markets, they have reduced its competitiveness. On the other hand, these booms have stimulated the development of manufacturing through various

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46/ For Grenada, 1984 weights were used in measuring sectoral GDP in constant prices, and therefore Grenada cannot be added to the other countries. Its inclusion, however, would not influence the overall pattern.

linkage effects. Firms that have forward links to tourism have experienced a positive stimulus, but there are few such firms and those that do exist tend to be very small in scale (batik fabric, handicrafts, furniture, table mats). Firms with backward linkages to tourism, such as food and beverage firms and firms producing construction materials, also have experienced a positive stimulus. Firms linked to the banana industry as suppliers of inputs have received a positive stimulus from the banana boom, the most significant example being the cardboard box industry. Cardboard box processing firms exist in St. Lucia, St. Vincent and the Grenadines and, since early 1989, Dominica. In addition, the income effect of these booms has generated increased demand for locally produced products such as beverages, construction materials, food products, furniture and locally assembled appliances. Given data deficiencies on the value of manufacturing output by industry, it is difficult to estimate the significance of these linkages in the overall manufacturing sector, but such evidence as exists suggests they are important.

B. Manufacturing in Antigua and Barbuda

Background

6.05 Manufacturing has experienced a ten year cycle of relative expansion and decline (see Table 4.1 Statistical Appendix). Manufacturing as a percent of GDP in current prices increased from 4.4% in 1977 to 5.3% in 1980, held steady for about two years, and then began a period of relative decline to 3.7% of GDP in 1987. In terms of 1977 prices, expansion has been from EC$7 million to EC$16.5 million, with most of it taking place from 1977 to 1981. While the cyclical effect is not observed in the absolute dollar figures, it is nevertheless real and of major significance for the future of manufacturing. The country experienced a short-lived boom in manufactured exports, especially to the U.S. market, but current and future market prospects for manufactured goods appear limited to the local market and to selected regional markets. High and rising real wage rates make Antigua and Barbuda an unattractive location for firms exporting to the U.S. The garment industry, at least for the present, has disappeared, and most factories producing electrical components likewise have closed down. Existing factory shells are on hold for potential occupants, some of whom are interested in the garment trade, but any return to previous levels of output in this industry seems highly unlikely.

6.06 The garment industry illustrates vividly the history of manufacturing in Antigua and Barbuda in recent years. Production of garments, as measured by the gross current value of output, expanded very rapidly from 1978 to 1984, from less than EC$2 million in 1978 to EC$24 million in 1983. In 1983, garments employed 47% of all manufacturing workers and generated about 35% of total sector production. U.S. Department of Commerce trade statistics show that most of this output was sold in the U.S. under 807 regulations. In 1983, exports to the U.S. of products entering under 806/807 regulations, most if not all of which were garments, amounted to US$5.8 million on a c.i.f. basis. By 1986, exports had dropped to US$4.9 million--still over 40% of all Antigua and Barbuda's exports to the U.S. in that year. In early 1989, all 807 garment factories had closed down.

Exports

6.07   There are some inconsistencies among the various data sources on exports from Antigua and Barbuda. The key difference appears to be in the treatment of fuel, and especially of fuel re-exports, which are very small in the Statistical Yearbook published by the Department of Statistics of Antigua and Barbuda but very large in other sources. For purposes of measuring exports of manufactured products, the best approach appears to be to use domestic exports (excluding re-exports) under SITC sections 6-8 (i.e., "manufacturing goods -lassified chiefly by materials", "machinery and transportation equipment" and "miscellaneous manufactured articles"). This omits some potential manufactured products, but probably provides as accurate an indication of trends in exports of manufactured products as is possible. The current value of exports of manufactured products as measured in this manner show a dramatic increase in 1980 over 1979 (from EC$8 million to EC$22 million), a slight increase to 1982, and a gradual decline to EC$18 million in 1985.

6.08   While garments were produced for the U.S. market, other manufactured products appear to have been produced for local or regional markets. Problems in CARICOM markets, particularly in Trinidad and Tobago, caused difficulties for Antigua and Barbuda manufacturers. Problems involving landing rights with Trinidad and Tobago which ended normal trade relations for some time now appear to have been resolved. Antigua and Barbuda's manufacturing future seems to be based on local and regional trade prospects. In 1986 and 1987 Antigua and Barbuda's exports to CARICOM (excluding re-exports) amounted to EC$11 million and EC$10 million respectively. About 60% of these went to other OECS countries, about 33% to Barbados, and small amounts to other CARICOM countries. Significant trade flows to individual countries in terms of SITC categories are shown in Table VI.1 below.

6.09   Among the OECS countries, St. Kitts and Nevis was the most important market for Antigua and Barbuda in 1986/87 with 33% of its exports, followed by St. Lucia (27%), Dominica (21%), Montserrat (7%), Grenada (7%) and St. Vincent and the Grenadines (5%). According to local sources, the specific products which are exported from Antigua and Barbuda to regional markets are mattresses, paint, toilet paper, furniture, small appliances, galvanized sheeting, plastic cups, T-shirts and rum. Products which no longer are exported, in addition to garments, are electrical components, hosiery and biscuits. Many of the products which continue to be exported have a high import content, and hence the probability exists of high effective protection to local value added in the protected CARICOM market.

Prospects

6.10   Many types of manufacturing cannot compete for labor with tourism and construction. Wages and tips in the tourist industry are of the order of EC$500 per week in the peak season, and EC$200 per week in the off season. These rates are well above wages paid in manufacturing in other OECS countries. High real wages have squeezed out manufacturing firms, and those which remain are small scale, not labor intensive, highly specialized and serve a protected local and regional market. New firms have been established each year (detergents, solar heaters assembly), and more are proposed (frozen beef, motor assembly, garments). The trend, however, is downward in terms of the number of firms and their relative significance in the economy, a trend that is not likely to be reversed.

TABLE VI.1 - ANTIGUA AND BARBUDA, EXPORTS TO CARICOM, 1986-87
(By SITC Category and EC$)

SITC Category	Country of Destination	Average Value of Exports
Beverages and Tobacco (1)	St. Kitts and Nevis	436,000
Beverages and Tobacco (1)	St. Lucia	236,000
Chemicals (5)	Dominica	560,000
Chemicals (5)	St. Kitts and Nevis	284,000
Chemicals (5)	St. Lucia	1,025,000
Chemicals (5)	St. Vincent and the Grenadines	212,000
Chemicals (5)	Guyana	682,000
Manufactured Goods (6-8)	Dominica	579,000
Manufactured Goods (6-8)	St. Kitts and Nevis	1,200,000
Manufactured Goods (6-8)	Barbados	3,492,000
Total		8,706,000

Source: Antigua and Barbuda Statistical Office.

C. Manufacturing in Dominica

Background

6.11   Manufacturing as a percent of GDP in current prices peaked in 1982 at 8%, and has since declined to nearly 7% in 1987. In constant dollar terms the absolute level of value added more than doubled between 1977 and 1982, but in the next five years it increased by only 14%. Manufacturing is dominated by agro-processing, particularly by the success of one firm processing copra into soap, edible oil and cosmetic products. Enclave type assembly manufacturing has been difficult to attract to Dominica, and many firms which have been enticed to establish facilities subsequently have withdrawn or gone bankrupt. Local opinion cites the inadequacy of airport facilities as the main reason for the absence of enclave industries, but other factors also may be important.

Output

6.12   The production of soap and of other products produced from coconuts dominates in value terms the output of manufacturing products. Recent figures on the value of industrial output by individual products are not available, but in 1982 soap output was valued at current prices at EC$23.4 million, other coconut products at EC$6.1 million, and other selected manufacturing output (soft drinks, cigarettes, pipe tobacco, preserves, galvanized sheets and garments) at EC$6.4 million. These figures exclude products such as lumber and cement blocks, and there have been some additions to industrial production since 1982, but the overwhelming importance of the processing of coconuts remains a feature of the sector. Apart from coconut products, which are virtually all exported,

the current sector consists mainly of firms which are geared to the local market, including building materials (concrete blocks, lumber, prefabricated housing) and beverages (soft drinks and rum). Industries more geared to the regional export market include citrus juice, sauces, jams and jellies, spring water, paint, candles, gloves, and garments (including one major foreign firm from Korea). A galvanized sheet metal firm operated for a few years but has recently closed. A firm that will manufacture cardboard boxes, especially for the banana industry, is to open in 1989. The firm has been established with finance from tax free or so-called 936 sources in Puerto Rico. It will compete with similar firms in St. Lucia and St. Vincent and the Grenadines. Dominica's imports of cardboard boxes averaged about EC$7 million per year from 1981 to 1986, and totalled EC$16.5 million in 1987, making them one of the most important imports. By way of comparison, imports of transport equipment were EC$12 million in 1987.

Exports

6.13   Exports of manufactured products are as concentrated upon products derived from coconuts as is total manufacturing output. Coconut-based products (i.e., soap, coconut oil, bay oil and glycerol) constituted 29% of all domestic exports over the 1978-87 period, and 64% of all non-banana domestic exports. Bananas and coconut products together accounted for 83% of all domestic exports over this period.

6.14   In recent years a number of new products appeared on the list of exports. These include agricultural-based products such as glycerol, vegetable extracts, and water (spring water and other water sold to Antigua and Barbuda). In addition, there are more traditional new manufactured products including paint, gloves, candles, furniture, galvanized sheets, prefabricated buildings and textiles. However, despite the lengthy list, these new products constitute a very small proportion of domestic exports (see Table VI.2 below).

6.15   All new manufactured exports (i.e., any product introduced as an export item in the 1980s) amounted to about 4% of total domestic exports in 1987, or about 15% of domestic exports excluding bananas and other fruit and vegetables. Domestic exports excluding bananas and other fruit and vegetables are highly concentrated on agro-processing industries--as shown above agro-processing (including water) accounts for at least 83% of non-fruit and vegetable domestic exports.

6.16   In 1987, the geographical distribution of Dominica's total exports in 1987 was remarkably similar to the distribution in 1978, but the intervening years showed marked shifts (see Table 4.4 Statistical Appendix). These shifts had two causes: (i) the variability of exports of bananas to the U.K. as a result of weather and price changes; and (ii) the strong boom and subsequent sharp decline in exports to Jamaica. The Jamaican market is very important for soap products from Dominica, one which developed strongly in the early 1980's and which has been maintained at a high level through the decade. However to retain this key market for soap products may prove more difficult in the future. Dominica's exports to the U.S. were at very low levels throughout the period, as measured by Dominica's trade figures. U.S. figures show a dramatically different

TABLE VI.2: DOMINICA - DOMESTIC EXPORTS, 1987
(EC$ million)

Items	Value	Share of Domestic Exports	Percent of Non-Fruit and Vegetable Exports
Bananas	86.4	71.1	n.a.
Other Fruit and Vegetables	3.6	3.0	n.a.
Soap, Coconut Oil and Bay Oil	23.8	19.6	75.3
Sauces, Concentrated grapefruit juice	1.5	1.2	4.7
New Agricultural Based manufactured Products	0.9	0.7	2.8
Other New Manufactured Products	3.8	3.1	12.0
All other Exports	1.6	1.3	5.1
Total	121.6	100.0	100.0

n.a.: Not applicable.

Source: Annual Overseas Trade Report for 1987, Dominica, Statistical Office.

picture, but there is some question as to their reliability as a representation of export activity in Dominica, owing to their inclusion of re-exports.[47]

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[47] U.S. imports from Dominica, as measured by the U.S. Department of Commerce, show an increase from EC$232,000 in 1984 to EC$38,234,000 in 1985, with high levels persisting in 1986 and 1987. Dominica's trade reports, on the other hand, show exports to the U.S. of EC$1,137,000 in 1984 and EC$2,635,000 in 1985. Detailed figures on U.S. imports for consumption available for 1986 show a wide range of manufactured and other products being imported from Dominica. The seven leading products are listed in the table, and of these only "lime and orange oils" and "toilet soap" appear to be consistent with Dominica's own trade statistics. The largest items in value terms are parts for shovels, bulldozers, winches, etc., at EC$6.5 million. A possible explanation is that the U.S. figures include the re-export to the U.S. of used construction and other equipment, which would be unrecorded at the Dominican end. However, there are many entries in the U.S. estimates of imports which cannot be explained in this manner, and which do not appear in the Dominica-based records. Rock lobster tails at EC$1.2 million and phonograph records at EC$0.8 million are examples. Since the U.S. estimates are roughly in agreement with domestically produced estimates for most other OECS countries, the sharp discrepancy in the case of Dominica is puzzling. The Dominica-based estimates are relied upon, however, since they are consistent with the nature and extent of its manufacturing sector.

Prospects

6.17   In the early 1980s manufacturing seemed geared for a take-off:
factory shells were constructed for foreign garment manufacturers and
others, and plans for considerable expansion were underway. In the event,
it did not materialize. In 1989 Dominica had virtually no foreign enclave
industries, and, apart from one very successful agro-processing firm, and
one moderately successful agro-processing firm, there have been few
advances in agro-processing. The failure of manufacturing to expand beyond
a very narrow base is important to the future of the country, since
Dominica is not in a position to expand its tourist industry significantly
in a short period of time should the banana market be disrupted by the full
integration of the European Economic Community market in 1992.

6.18   The conventional explanation for the failure of the manufacturing
sector to grow is that the airport facilities are inadequate to support an
export-oriented enclave type manufacturing sector. The inadequate
facilities, it is claimed, make it difficult for output to be shipped
abroad by air and, at the personal level, make it difficult for foreign
executives and their families to visit Dominica. The airport facilities
are undoubtedly a factor restraining manufacturing growth, but they relate
more to enclave type industry than to agro-processing industry. They also,
at least for the present, exist as a "given" which must be taken into
account in formulating a manufacturing strategy, rather than an absolute
constraint against manufacturing development. Other factors may have
worked against the development of manufacturing in the 1980s: the banana
boom,[48] the regulatory framework, and the incentive structure.

6.19   The banana boom has been associated with a construction boom, and
together these two industries have tended to attract labor away from
manufacturing. Despite high published rates of unemployment, employers
report difficulty in hiring skilled labor. The labor situation in
construction is such that the industry has asked for permission to import
labor from other OECS countries (masons, plumbers, etc.).

6.20   The regulatory framework has been improved with a view to
encouraging the manufacturing sector, such as in the simplification of
investment application procedures. The Government encourages private
sector investment in manufacturing through the creation of appropriate
infrastructure and institutional support. However, it may be possible that
the current regulatory framework may not the most conducive vehicle to
encourage new manufacturing industry. For example, it is claimed that the
application of the Alien Land Registration Act to firms with even one
shareholder abroad discourages private sector investment in manufacturing.
Likewise, the provisions of the Dominica Export-Import Act, which in
principle allow the Government to regulate the export or import trade in
any commodity, are said to be a deterrent to private sector investment.
Dominica must not only welcome private sector investment but it must be
seen to be welcoming it, and provisions such as those cited, whatever their

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48/ The value of exports of banana increased by EC$50 million or by 140%
     between 1985 and 1987, compared to nominal GDP (at factor cost) of
     about EC$275 million in 1987.

intended effect, could have a deleterious impact on private sector investment far out of proportion to any conceived benefit. However, it must be noted that Dominica is not alone in this respect, since the OECS countries have similar regulations.

6.21   The incentive structure does not fully support the manufacturing sector, particularly that segment dependent on export markets. There are legislative measures designed to assist manufacturing, including the Fiscal Incentive Act and recent reductions in the company tax and the tax on foreign exchange, and the simplification and consolidation of the system of indirect taxes. These recent tax changes, while extensive and helpful, do not appear to go far enough in encouraging export based manufacturing. Given that the export sector in general is negatively impacted by the low real exchange rate engendered by the banana boom, export based manufacturing is further constrained by the high costs of inputs protected by the Common External Tariff (i.e. copra), and by a non-refundable one percent customs levy on all imports (which replaced a number of excise duties and the foreign exchange levy). Agriculture and construction receive subsidies which cause resources to flow into those sectors, whereas manufacturing for export is in effect taxed by the existing import restrictions.

6.22   Indicative of the lack of development of export based manufacturing in the 1980s is the virtual absence of firms exporting to the U.S. under 806/807 regulations. There are no firms whose output is sold exclusively in the U.S. under 806/807 regulations, and only two or three firms have any 806/807 sales to the U.S. (garments, gloves, ribbons). U.S. Department of Commerce figures show 806/807 imports from Dominica in 1986 of only EC$0.5 million. In the same year, 806/807 imports from St. Lucia were EC$17.7 million, from Antigua and Barbuda, $13.3 million, and from St. Vincent and the Grenadines, $5.6 million. Grenada, with its large international airport, had 806/807 exports to the U.S. of only EC$0.5 million. The success that Dominica has had in manufacturing in the 1980s is in the processing of coconut products. However, this was based to a large extent on the Jamaica market, a market which has become much more competitive owing to the recent construction of new soap manufacturing facilities there. The situation adds support to the proposition that Dominica needs to continue to review and modify its regulations and incentives as they apply to the manufacturing sector. Differential tax rates on exports and on domestic sales, as exist in St. Kitts and Nevis and as recently introduced in St. Vincent and the Grenadines, may be one useful approach.

D.   Manufacturing in Grenada

Background

6.23   Manufacturing as a percent of GDP in current prices has tended to increase since 1980 (the first year for which complete GDP figures are available: from 3.9% of GDP in 1980 to 5.4% in 1987. In constant dollar terms the manufacturing sector shows virtual stagnation from 1981 to 1986. Nevertheless, the prospects for manufacturing in Grenada during the next ten years would appear to be bright, given its advantages over most other OECS countries in either transportation facilities (St. Vincent and the Grenadines and Dominica) or wage rates (Antigua and Barbuda and probably St. Kitts and Nevis). For manufacturing to grow, however, exports to the

U.S. will have to increase, and agro-processing will have to develop. Neither are significant at present, but both appear to have potential, given the level of success each has achieved in other OECS countries.

Output

6.24   Published figures on "selected industrial production" show a sector that is strongly geared to local markets, and that has a high import content. Products in this category include beer, stout, malt, cigarettes, flour, wheat bran and poultry feed. Products that utilize local inputs include rum, edible oil, coconut meal and soap, but the failure of the local copra processing plant will impact severely on the local output of edible oil, coconut meal and soap. The small cosmetic, furniture and building materials industries also utilize local inputs. Apart from rum, the only export-oriented manufactured product is clothing. An electronics firm recently has opened. The clothing industry expanded quickly in the early 1980s, in part to serve the Trinidad and Tobago market. Sharp declines occurred after 1983, and the industry has now focused on the U.S. market. The industry is in the early stages of developing this market, in part through 807 production, and no problems have yet arisen in penetrating it.

6.25   The weakness of agro-processing industry is somewhat surprising, given the diversified nature of agriculture production in the country. Bananas, cocoa, nutmeg and mace, and fresh fruits are all significant export products, and root crops and vegetables also are produced. Virtually all exports of agricultural products are in a fresh or unprocessed form. Apart from rum, the only processing undertaken at present is that of tomatoes and some fruits. The small scale of output is a significant constraint on processing. In addition, producers receive much higher prices for output sold in the fresh market than in the processed one. Agro-processing will not develop quickly in Grenada, and is more problematic than the development of 807 and CBI industries serving the U.S. market. However, the potential exists. Some fruit crops--mangoes and soursop in particular--offer processing possibilities. There is also interest in re-establishing a copra processing facility.

Exports

6.26   Merchandise exports are dominated by unprocessed agricultural produce, especially bananas, cocoa, nutmeg, mace and fresh fruits. Over the period 1979-85 these products constituted on average 85% of all merchandise exports. Clothing exports constitute the only other identifiable product that is exported. Clothing exports grew quickly to 13% of merchandise exports in 1982 but fell equally quickly to 2.6% in 1985. Exports of clothing to the U.S. have increased since 1984, but the absolute level remains small (US$185,000 in 1987, or only 0.6% of total merchandise exports). The U.S. Department of Commerce statistics on imports from Grenada for years since 1985 are considerably higher than those produced by the Statistical Office in Grenada, and include many products for which there is no known source of supply in Grenada. Barring error, the only explanation is the treatment of re-exports.

Prospects

6.27   A number of factors have been responsible for the poor performance of the sector. The drastic curtailment of the Trinidad and Tobago market in 1983 has been important. However, domestic factors have been more

decisive. Chief among these have been a weak infrastructure, a political climate that did not favor private sector development, and inadequate investment policies (i.e. price controls, high corporate taxes, high stamp duties and foreign exchange taxes).

6.28   The infrastructure for manufacturing has been much improved with the opening of the airport, the construction of an industrial park, the improvement in the road network and the installation of a modern telecommunication system. The political climate remains somewhat unsettled, but private sector development is clearly much more favored than in the early 1980s. Investment policies have been altered, but they remain problematic in their impact on private sector investment. On the positive side, a large number of taxes have been eliminated as of 1986, including consumption duties, stamp duties, airport levies, export duties (on bananas, cocoa and nutmeg), excise duties (on rum, cigarettes and beer), and income taxes. These taxes have been replaced by a so-called Value Added Tax and a Business Levy. The Value Added Tax was introduced in 1986 but various alterations and exemptions have changed it in effect into a variable rate sales tax, with the rate varying from 0% to 20%. Hotels, for example, pay a VAT of 10% on sales of food and beverages, and on accommodation charges. Also, no credit is allowed on VAT paid on inputs. The Business Levy differs as between domestic and foreign companies. Domestic companies pay a levy of up to 2.5% of gross receipts, depending on the volume of receipts, or a charge equivalent to 33.3% of annual net profits, whichever is larger. Foreign companies pay a tax equal to 35% of their gross profits. Firms which enjoy tax holidays under the Fiscal Incentives Act do not pay the Business Levy. On balance, the level of taxation and its complexity have probably been reduced for private sector firms by these various changes. Price controls remain in effect on many items. For some products a maximum retail price is specified, for other separate wholesale and retail margins are determined, and for others a maximum mark-up over landed cost is indicated. Different percentage rates apply to different products. Overall, the price control system seems complex and unenforceable except at great cost, and should be phased out.

6.29   Other constraints are familiar: a small local market, inadequate financial resources especially in an equity form, a weak entrepreneurial base and a shortage of trained labor. Nevertheless, the manufacturing sector has demonstrated that it can respond quickly to economic opportunity, as indicated by the rapid expansion of the garment industry in the early 1980s. A simpler tax and regulatory environment and a more receptive government should allow the sector to respond in the same manner to market opportunities in the U.S.

E.   Manufacturing in St. Kitts and Nevis

Background

6.30   Manufacturing as a percent of GDP in current prices declined from 1977 to 1985, from 18% to 13%, but increased to 15% in 1988. In constant dollar terms value added in manufacturing scarcely has changed since 1977. Data on exports of manufactured products show a sharp increase from 1985 to 1987. Sugar historically dominated exports of manufactured products, but exports of other manufactured products now equal or exceed sugar exports.

Output

6.31   Sugar dominates the landscape in St. Kitts, and its growth and subsequent processing contribute significantly to GDP. In 1977 the growing of sugar contributed 12% to GDP in current dollars, and its processing contributed another 12%. In 1987 these figures were 5% and 4% respectively. Sugar output is variable, being dependent on changing quotas, weather and the availability of labor at harvest time, but even more variability is introduced by changing prices. Between 1981 and 1987 sugar output declined from 32,500 metric tons to 25,700 metric tons, but the value of sugar exports fell from EC$40 million in 1981 to EC$17 million in 1985, and then rose to EC$35 million in 1987. In addition to refined sugar and molasses, cane sugar spirits and ethanol are produced from sugar cane, but their use of sugar cane probably does not exceed 5% of cane output.

6.32   There are a few manufacturing firms which utilize indigenous raw materials: concrete blocks, furniture, pottery and handicrafts. Most other manufacturing firms utilize imported raw materials and produce for local and regional markets (margarine and beverages), or for the U.S. market (clothing and electronic components). Footwear was at one time a major product, but the largest firm recently went bankrupt. In general, the utilization of indigenous raw materials, apart from sugar, represents a small component of manufacturing.

Exports

6.33   Sugar remains the most important export, but exports of other products are increasing in relative importance. Exports of beverages, clothing, footwear, electrical components and other non-sugar manufactured products increased from EC$18 million in 1981, or 28% of domestic exports, to EC$36 million in 1986, or 57% of domestic exports. Enclave industries, particularly clothing and electronic components, have been critical to this expansion.

6.34   In 1985, 95% of domestic exports from St. Kitts and Nevis in 1985 were manufactured products (see Table IV.3 below). Between 1981 and 1985, exports to the U.S. and the U.K. were variable, but the variations offset one another and the two countries together took about two-thirds of domestic exports in each year. Exports to the U.K. consisted of sugar and to the U.S. of sugar and garments and electronics. The OECS was a small but growing market in this period. About 78% of exports to OECS countries went to Antigua and Barbuda and Montserrat, and consisted of margarine, beverages and other food products.

6.35   Estimates of trade flows from St. Kitts and Nevis to the U.S. differ sharply depending on the data source. U.S. imports as measured by the U.S. Department of Commerce show imports from St. Kitts and Nevis two to two-and-one-half times as large as the exports from St. Kitts and Nevis to the U.S. estimated by customs officials in St. Kitts and Nevis for the years 1982 to 1985. This is a very large discrepancy, given that the trade flows are relatively large. Detailed breakdowns of U.S. imports for consumption available for 1986 do not suggest that re-exports of construction materials is a factor, since the products identified are ones that easily can be associated with the country. One possibility is that customs officials are less concerned about enclave industries than other industries because they tend not to be subject to import or export levies.

Prospects

6.36   The importance of sugar to the manufacturing sector and to the
economy as a whole has been declining for at least 10 years, but it is
still an important product in St. Kitts and Nevis. Assessing the future of
sugar is made difficult because of the political nature of decisions
relating to sugar quotas in the U.S. and in the U.K. under Lome. The
overall U.S. sugar quota has declined sharply in the 1980s, and St. Kitts
and Nevis's quota likewise has declined. In 1983/84, the world sugar quota
for entry to the U.S. market was 3,153,000 short tons, and the quota
applicable to St. Kitts and Nevis was 17,000 short tons, or 0.5% of the
global quota. In 1988 the global quota was down to 1,055,000 short tons,
and St. Kitts and Nevis's share was 8,000 short tons, or 0.8% of the global
quota. In 1980, when the U.S. had no quota on sugar, St. Kitts and Nevis
exported 16,000 short tons of sugar to the U.S.

TABLE VI.3: VALUE AND COMPOSITION OF DOMESTIC EXPORTS, 1985
(in EC$ million)

Enclave Manufacturing Industries	Value of Domestic Exports
Electrical Machinery	12.7
Clothing and Apparel	3.8
Footwear	3.2
Telecommunications Equipment	0.2
Subtotal	19.9
Other Exporting Manufacturing Industry	
Sugar and Honey	19.2
Margarine	3.5
Beverages	3.2
Oil Seeds, Nuts and Kernels	0.
Cotton Textile Fibres	0.2
Mineral Tar	0.1
Woven Fabrics	0.1
Base Metal Manufacturers	0.1
Subtotal	26.6
Total Exporting Manufacturing Industries	46.5
Total Domestic Exports	48.9

Source: External Trade Report, 1985, Statistics Division, St. Kitts
          and Nevis.

6.37   The situation with respect to sugar quotas under Lome is quite
different. These have remained relatively constant since 1975. In 1985-86
St. Kitts and Nevis's quota was about 16,000 tons. Under the Lome Protocol
covering sugar, the quotas are said to be permanent. However, the value of

the quota to St. Kitts and Nevis and others depends upon the price of sugar in Europe compared to the world price. The import price of sugar into Europe is linked to the price received by European sugar beet producers, which in turn is linked to the application of the European Common Agricultural Policy. In recent years the price of sugar beets has not increased. Over the longer term, the value of the Lome quota to St. Kitts and Nevis will depend upon the relation between the European beet sugar price and the cost of production in St. Kitts and Nevis. European beet sugar prices will at best increase to cover European production cost increases, and production costs may well rise faster in Caribbean states than in the EEC. In the short term, increased mechanization will help to keep production costs from rising as much as they otherwise would, but over the longer term production costs will be geared to labor costs, and labor costs are rising sharply and would continue to rise as long as tourism booms. The result will be that prices in the EEC will rise less rapidly than costs in St. Kitts and Nevis, progressively reducing the benefits obtained by cane exporters from the Sugar Protocol. Given time to adjust and the availability of alternative employment, a gradual phasing-out of sugar cane production in St. Kitts and Nevis could be achieved without great economic hardship. The macro implications of a long term decline in the sugar industry are currently under review within the context of discussions between St. Kitts and Nevis and the World Bank concerning a proposed loan to assist the industry.

6.38   Currently, the sugar industry is operating at a financial loss. The situation is complicated by the variety of taxes to which the industry is subject: export, excise, import, consumption and corporate taxes plus special levies. The export tax, which has no justification, has been imposed since 1970 as a constant specific tax of EC$8.58 per ton.

6.39   Prospects for enclave manufacturing firms depend upon the particular industry. The major footwear firm recently has gone into liquidation. At one time it employed as many as 165 persons, but it was geared to the Jamaican and Trinidad markets and could not compete outside CARICOM. Two garment firms, one employing about 300 persons and the other about 60, also have closed down. While management problems may have played a significant role in their demise, such problems may well have reflected an inability to cope with rising wages. There are indications that rising wages together with fringe benefits will force out other firms. Proposals for a legislated shorter working week and strong competition for labor from tourism and construction will restrict the development of the industry, and eventually lead to its demise.

6.40   Among the OECS countries, St. Kitts and Nevis has a unique strength in electronics firms. In 1987 employment in electronics firms was larger than employment in garment firms for the first time, a difference that is certain to widen. Unlike garment manufacturers, employers is the electronic business are confident that they can attract labor at prevailing industry wage rates, by tapping into the stream of school leavers. Over the longer term, however, the electronic industry may experience the same fate as that in Antigua and Barbuda and be forced to contract and relocate.

6.41   The policy environment is generally attractive to private sector investment, including foreign investors. St. Kitts and Nevis offers the usual incentives and tax holidays. In addition it offers a reduced

corporate tax on profits earned in exporting after the tax holiday has elapsed. However, the country has retained some residual protectionist policies against other OECS countries that were supposed to have been eliminated on January 1, 1988.

F. Manufacturing in St. Lucia

Background

6.42   Manufacturing as a percent of GDP in current prices was relatively constant from 1977 to 1985, averaging 9% over the period. It dropped to 8% in 1986 and 1987. In constant dollar terms manufacturing value added has been virtually constant from 1983 to 1987. However, the industry is experiencing a sharp boom in some of its sectors, particularly those linked to U.S. markets. The country has been able to attract foreign investment because of its efficient transportation system, favorable investment climate and hospitability. The garments industry is leading the export boom: at least 9 new firms, employing about 900 workers, were established between 1985 and 1987. The stagnation of value added in the face of a sharp export boom in selected items should reflect a decline in other components of manufacturing. There are, however, anomalies in the data.

Output

6.43   In 1987 it was estimated that the sector consisted of about 200 firms employing 3500 workers. In 1988 the "Company Profiles" listed by the National Development Corporation contain entries for 43 of the larger manufacturing firms. Total employees number 4119, over half of whom are employed in the apparel/textile industry, and the rest in electronic components, food products, plastic products, paper products, costume jewelry, beverages, data entry, and miscellaneous industries. Sixteen of the 43 firms listed employ over 100 persons, some well over 100.

6.44   Food products historically have played a large role in the sector. Coconut oil, most of which has been exported, has been a key output. Owing to an insufficient supply of local and regional coconuts, the processing plant has in recent years imported various types of edible oils to supplement local supply. Margarine also is produced in the coconut processing plant, using imported inputs. Other food products produced include spices, jams, jellies and cooking ingredients. Agro-processing has not shown substantial growth because resources have been allocated to banana production and manufacturing.

6.45   Most products manufactured use imported inputs to a significant degree. Beverages (especially beer, rum and soft drinks), tobacco, paper products (especially boxes for bananas), clothing and electrical components constituted about 77 percent of total manufacturing output in 1987, and all these industries rely heavily on imports. Coconut related products (copra, coconut oil, meal and laundry soap) constituted at least 14% of manufacturing output in 1987. (Some of the local output of margarine also may use domestic coconut oil. The calculations presented here assume no double counting of coconut derived products in the statistics on manufacturing production.)

6.46   Certain anomalies exist in the manufacturing data for St. Lucia.
The constant dollar value added estimates in the GDP accounts suggest
stagnation since 1983, but the figures on manufacturing output and
especially on exports of manufactured products for recent years show
substantial growth. Figures on exports for apparel and for paper products
in particular show dramatic increases since 1985 which are not fully
reflected in estimates of output. The recorded value of apparel exports
for 1987 was EC$29 million compared to estimated output of only EC$18
million. And the output of all manufacturing products has increased very
rapidly relative to the estimated value added in manufacturing. On average
in St. Lucia value added in manufacturing is 30% or more of the value of
manufacturing output. Enclave industries have relatively low ratios of
value added to output, but the ratios implicit in the recent estimates for
St. Lucia nevertheless seem unduly low. These anomalies naturally hamper
assessment of economic performance.

Exports

6.47   Major manufactured exports from 1977 to 1987 consisted of coconut
oil, beer, paper products and clothing. These products constituted about
20% to 30% of total exports over this period, and grew from EC$20 million
in 1977 to EC$61 million in 1987. These four products also accounted for
27% to 82% of non-banana exports in this same period, the yearly average
being 54%. Over this period the direction of St. Lucia's total trade
altered considerably. In 1977, Barbados, Jamaica, Trinidad and the OECS
countries took 46% of all exports from St. Lucia, the U.K. took 48% and the
U.S. took only 2%. In 1984, corresponding percentages were 24%, 58%, and
16% respectively. By 1987, the U.S. share had increased to 19%, the other
shares remaining more or less as in 1984. The increasing U.K. share
represented the increasing importance of bananas. The changing trade flows
between the Caribbean countries and the U.S. represented a change in the
nature of manufactured exports and the collapse of the Jamaica and Trinidad
markets. Exports from St. Lucia to the U.S. increased from EC$13 million
in 1983 to EC$48 million in 1987, according to U.S. figures. Exports
classified under U.S. regulations as 806/807 entries increased sharply
(from EC$10 million in 1983 to EC$18 million in 1986) as did exports
entering the U.S. under "most favored nation" status (from EC$3 million in
1983 to EC$9 million in 1986).

Prospects

6.48   St. Lucia has a broadly based and geographically dispersed
manufacturing sector which has demonstrated rapid growth in recent years in
those segments which export to the U.S. Agro-processing, however, has
declined in relative terms, and the CARICOM market has been sharply reduced
for products such as cardboard boxes, edible oil, soap and beer. The U.S.
market is based on garments and electronic components, footloose industries
which can mushroom quickly under the right conditions but which can even
more quickly disappear if these were to change. Apart from some unforeseen
and unlikely change in U.S. trade policy that would impact severely on
St. Lucia, the most likely factor to cause a deterioration in long term
prospects for enclave firms selling in the U.S. market is a rise in the
real wage rate. St. Lucia is experiencing a three-way boom in tourism,
bananas and manufacturing exports, and labor shortages are beginning to
affect some manufacturing firms. Over the longer term, some types of
enclave industry may not be able to compete for labor, especially garments,
if rises in real wages are not accompanied by productivity increases.

6.49   The U.S. International Trade Commission has repeatedly drawn attention to a problem that Caribbean firms face in exporting to the U.S., i.e. "the perceived threat that U.S. protectionism would thwart any successful venture."[49]   Products which, according to the ITC, experienced such setbacks included ethanol, cut flowers, parakeets and scuba wetsuits, the latter two being examples from St. Lucia. In the case of parakeets, the U.S. Department of Agriculture withdrew a quarantine concession originally granted to parakeets imported into the U.S. from St. Lucia. In the case of scuba wetsuits, the product has been classified as rubber rainwear by U.S. Customs and is ineligible for duty-free treatment. While clearly significant to the producers involved, these cases seem to be isolated ones. Apart from agricultural produce, where special regulations apply, few manufacturers in St. Lucia or in any of the OECS countries cited any special problems in dealing with U.S. Customs. Problems which developed were quickly resolved and did not recur. While the threat of retaliation from affected interests in the U.S. always will be present, the infrequency of such retaliation in practice and the small market penetration that OECS producers would ever achieve in the U.S. suggest that such dangers pose slight risks to manufacturing in the OECS.

6.50   An industry which presents opportunities for expansion is the field of data entry and word processing. While sophisticated technical equipment can be used in this industry, the key to the success of the one data entry firm that exists is an efficient courier service. Manuscripts and items such as traffic tickets are sent by courier from the U.S., and the material is placed on computer disc after a complex error-detection system has been used. Disc and original material are returned by courier. The firm has an excess of qualified applicants.

G. Manufacturing in St. Vincent and the Grenadines

Background

6.51   Manufacturing as a percent of GDP in current prices increased steadily from 7% in 1977 to 13% in 1984, but dropped to 8% in 1987. However, even at 8% manufacturing is relatively more important in St. Vincent and the Grenadines than in the OECS countries as a group, and would appear to have potential for rebounding to its previous significance as manufacturers continue to switch to the growing U.S. market.

Output

6.52   Almost all manufacturing firms import their basic raw materials. Some of these firms serve local and regional markets, others serve U.S. markets. The main exception appears to be the arrowroot starch industry, which utilizes locally grown arrowroot. Manufacturing products serving a local or regional market include flour, animal feed, rum, galvanized

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49/ See Annual Report on the Impact of the Caribbean Basin Economic Recovery Act on U.S. Industries and Consumers, Third Report, 1987, U.S. International Trade Commission, September, 1988.

sheets, beer and cigarettes. Manufacturing products serving the U.S.
market include electrical components, clothing and tennis rackets. A
container firm assembles cardboard boxes, many of which are used to export
bananas to the U.K.

6.53   The arrowroot starch industry experienced a loss of markets in the
1980s and a decline in output. The sugar industry operated up to 1984, but
the factory has ceased to operate and molasses are imported to produce rum.
Flour and animal feed output has been virtually stable throughout the 1980s
on a trend basis. Industries producing cooking apparatus and engaged in
the assembly of watches together generated exports of about EC$4 million in
1983, but by 1986 these amounted to only EC$0.6 million. On the other
hand, enclave type industries have developed, and overall the value added
in manufacturing has been relatively constant in real terms throughout the
decade.

Exports

6.54   Published figures on all merchandise exports for at least the
years 1984, 1985 and 1986 are considerably overstated owing to
overstatement of exports, particularly of food products, to Trinidad and
Tobago. The overstatement occurs because importers in Trinidad and Tobago
have inflated the invoice values on imports from St. Vincent and the
Grenadines in order to obtain increased foreign exchange. This practice
results in errors in the trade and output statistics relating to
St. Vincent and the Grenadines because the Statistical Office utilizes
trade data from Trinidad and Tobago to estimate trade and output figures
for St. Vincent and the Grenadines. Local sources believe that
overestimation occurs mainly in selected agricultural products, especially
root crops. Exports of sweet potatoes, eddoes and dasheens to all
countries are recorded as increasing from EC$13 million in 1983, to EC$46
million in 1985. National income estimates, however, have been adjusted to
eliminate this source of overestimation. As an indication of the scale of
the problem, exports to Trinidad in the official statistics show an
increase from EC$38 million in 1983 to EC$66 million in 1984, and they
remain roughly at this level until 1987, when they drop back to EC$30.5
million. Overestimation of total exports by from EC$30 million to EC$40
million per year may well be reflected in the official statistics on trade,
a sizeable fraction of, for example, total exports of EC$172 million in
1986. This suggests that the performance of manufactured exports cannot be
realistically compared to the performance of all merchandise exports.

6.55   Available data identify only selected exports of manufactured
products: flour, arrowroot, cooking apparatus, assembled watches, and
manufactured goods classified under SITC sectors 6, 7 and 8. However,
there is information available on exports to the U.S. which complements the
information available on an all-country basis. Putting these together
indicates that exports of manufactured products in 1986 amounted to at
least EC$36.5 million. Information on imports into the U.S. from St.
Vincent and the Grenadines indicate that tennis rackets were imported to
the value of EC$14.2 million. The low figure of EC$0.5 million in U.S.
import figures for electrical components probably results from the fact
that electrical components from St. Vincent and the Grenadines go to the
U.S. via St. Kitts and Nevis, where they are further processed. St.
Vincent and the Grenadines trade figures, however, appear to classify these

as exports to the U.S. Exports of manufactured products appeared to peak in 1984, probably because of an upsurge and decline in the export of galvanized sheets to Trinidad. Exports of flour, garments and electrical components have been relatively constant from 1983 to 1986, while exports of tennis rackets are expanding rapidly.

Prospects

6.56   Agro-processing is much more closely linked to the processing of imported raw materials than to the utilization of indigenous products, i.e. in the production of flour, bulk rice, animal feed, rum and dairy products. Expansion of this form of agro-processing depends upon diversification into new products, upon growth of local and regional markets, and upon implementation of CARICOM regulations. Agro-processing of imported raw materials tends to generate a relatively low level of value added in relation to sales value, but so long as it is profitable in financial terms this is not an argument against its development. However, it would appear to offer limited prospects for substantial development, since it tends to involve heavy reliance on ocean freight facilities, an area in which the country has no particular advantage over other potential producers. The existing industries are nevertheless an important component of the manufacturing base. Agro-processing of indigenous products is limited to the unprofitable processing of locally grown coconuts, and to the production of some jams and jellies. While development in this area is possible, it cannot be predicted to occur in the near future.

6.57   Exports to the U.S. under 806/807 regulations and under CBI and more general tariff provisions appear to offer potential for manufactures. Manufactures tend to view obstacles to regional trade as being larger barriers to trade than any obstacles they face in the United States. Successful firms with exports to the U.S. employ a competent U.S. broker and ensure that the required paperwork is available for U.S. Customs. A variety of transportation modes are used--from privately chartered planes to roll-on trailer containers. Transportation costs and reliability are important factors, but they do not preclude serving the U.S. market in the light manufacturing area. Unskilled labor is abundant and is said to be easily trained, but skilled and professional labor is more difficult to secure.

6.58   Obstacles to the development of light manufacturing in the short run consist of a shortage of factory shells and the lack of indigenous entrepreneurs. The largest manufacturing firm is said to have selected the country because space was available in the industrial park without delay. Another firm is said to have been waiting for about two years, to date unsuccessfully, to acquire an additional amount of space to expand production. The development of indigenous entrepreneurship is not nearly so simple. One minor but relatively simple solution would be to improve upon local bureaucratic sluggishness in dealing with firms wishing to start up or expand a business. One firm manager cited a process involving six visits by local officials over the course of a year solely to obtain a CARICOM certificate of origin, and in general too many levels of bureaucracy are said to be involved in decisions relating to industrial development.

6.59   The Government of St. Vincent and the Grenadines is committed to a policy of "export led industrial development", and, within that framework, it is particularly concerned to develop local entrepreneurs. The CET applying to the OECS countries has the effect of discriminating against exports, as do all tariff systems which tax imports and thereby discourage production for export. Lower rates of income tax on manufacturing for export are provided through an incentive scheme which taxes business income earned from exports at a lower rate, the actual rate depending on where the products are sold. Profits on extra-CARICOM sales are taxed at 25%, profits on sales to CARICOM outside the OECS are taxed at 30%, profits on sales to the OECS market (including St. Vincent and the Grenadines) are taxed at 35%, and profits from non-manufacturing activity are taxed at 45%. The Government also has altered the remission of duty provisions by extending them to cover the consumption tax on raw materials used for producing specified products, with special consideration to be given to those who export their output. Given the anti-export bias inherent in the CET, these recently enacted provisions appear to be in the right direction. It is not, however, clear why the reduction in the business tax varies as between the destination of exports in the manner indicated, and a simpler rate structure (30% for income on all exports of manufactured products, 45% for all other income) would seem to provide advantages in administrative and economic efficiency.

6.60   The Government is attempting to encourage local entrepreneurs as opposed to foreign firms by defining areas which "normally" will be reserved for nationals (e.g., internal transport, quarrying and advertising). Non-nationals are particularly encouraged in agro-processing and "the manufacture of apparel, sporting goods, toys, electronic components, etc." The economic rationale for such distinctions is not clear cut, and some system of continuous monitoring and review should be established to ensure that such regulations do not impact adversely on the development of the economy as a whole.

H. Conclusions

6.61   In the OECS economies as a whole, the key influences on the pattern of growth of the manufacturing sector have been developments in agriculture and tourism. The banana and tourism booms have impinged negatively on manufacturing through their effect on the real exchange rate and the level of wages. There are important positive linkages between manufacturing on the one hand and agriculture and tourism on the other, but over the longer term, however, the negative impacts will prevail, to different degrees in different countries, particularly the impact of tourism.

6.62   In Antigua and Barbuda manufacturing has experienced a period of growth and then decline. High real wages generated by tourism have squeezed out manufacturing firms, and the downward trend is not likely to be reversed. The country should be careful, therefore, in resource use and not attempt to attract inappropriate, small scale import substitution firms through expensive tax and other incentives and high cost import restrictions.

6.63   In Dominica manufacturing is confined almost entirely to agroprocessing. Enclave industry development is restricted by inadequate airport facilities, but other factors also have had a negative effect: the banana boom, the regulatory framework and the incentive structure. There is a virtual absence of firms selling to the U.S. under 806/807 regulations. The country needs to continue to improve the regulatory climate for new business and to provide incentives to counter the impact of the CET in raising the cost of domestic inputs to firms which have to compete in export markets.

6.64   Grenada has good manufacturing prospects deriving from its transportation infrastructure and wages rates, but investment policies require further improvement. A simpler tax and regulatory environment is needed to consolidate and improve upon recent changes.

6.65   In St. Kitts and Nevis manufacturing is dominated by sugar and enclave industries, particularly clothing and electronic components. Over the longer term the sugar industry would decline as production costs increase faster than prices in Europe. Clothing is sensitive to labor costs and could decline in the face of strong competition for labor. Electronic firms may share the same fate, although in the short to medium term they will experience less difficulty in recruiting labor. The country retains some protectionist policies against other OECS countries that were supposed to have been eliminated on January 1, 1988, and which should be eliminated.

6.66   In St. Lucia manufacturing is highly diversified and in the midst of an export boom generated by sales to the U.S. market. Prospects over the medium term are good, but over the longer term competition for labor may force a slowing down or contraction of exports, particularly in garments. The country should review its policies relating to the inflow of labor from other OECS countries, with a view to making it more open.

6.67   In St. Vincent and the Grenadines manufacturing prospects are based on increasing exports to the U.S. market. Agro-processing is an important component of the economy but has limited growth prospects. Exports to the U.S. under 806/807 regulations face fewer restrictions than those to CARICOM or other markets. However, improvements in bureaucratic efficiency and in the regulatory framework are required. In particular, the process of starting up or expanding a business and the incentive scheme for exports should be simplified.

CHAPTER VII

SELECTED TRANSPORTATION ISSUES

A. Overview

7.01   Transportation is commonly believed to represent a major constraint to development in the OECS countries. High costs, infrequent service and lack of direct links to markets, both for goods and tourism, are said to limit development potential. The OECS countries do not suffer from unduly high freight rates on movement of goods to the U.S. market, but rates and levels of service on inter-Caribbean trade are constraining factors. Transportation infrastructure in addition remains a concern in some countries.

B. Air and Water Freight Rates to U.S. Markets

7.02   Analysis of transportation costs on major export products has been undertaken to determine whether there is evidence of freight rate discrimination against the OECS countries or whether their transport costs are significantly different from those of other countries.[50]

7.03   The empirical analysis indicates clearly that the Caribbean countries as a group rely more heavily on air transport for exports to the U.S. than do most other countries (see Table VII.1 below). This conclusion is even stronger with respect to the OECS countries.[51] In 1987, 24% of Caribbean exports to the U.S. went by air (36% if petroleum and sugar are excluded), but 62% of the exports of the OECS countries (including Anguilla) went by air to the U.S. in 1987. Of the 61 countries for which data are available, only Barbados, Bolivia, South Africa, Israel, and Nepal shipped relatively more of their exports to the U.S. by air than the OECS countries.

50/ For a detailed analysis of Caribbean air and water freight rates to the U.S., see Alexander J. Yeats, "Do Caribbean Exporters Pay Higher Freight Costs?", PPR Working Paper, World Bank, July 1989.

51/ Transport costs on shipments made by air and by vessel to the United States were examined. Empirical information was obtained from official United States import statistics. These official U.S. statistics tabulate imports on a detailed product-by-product basis in such a way that an estimate of the ad valorem freight and insurance cost for moving a product from a given country to the U.S. can be estimated. Since insurance costs are roughly 10% of the total transport and insurance bill irrespective of the origin of the exports to the U.S., the ad valorem rate as calculated can be used as a reliable proxy for the actual freight rate. These nominal freight rates are calculated with the free-alongside-ship (f.a.s.) value of imports in the denominator, and therefore can be compared directly with U.S. tariffs, which are levied on a f.a.s. basis.

Table VII.1: IMPORTANCE OF AIR AND VESSEL SHIPMENTS IN US IMPORTS, 1985-87

Exporter	1987 Exports to US[a]/ (US$ m) by air	by vessel	Share of Exports by Air 1985	1986	1987
CARIBBEAN COUNTRIES	822.0	2,551.0	22.2	23.6	24.4
Bahamas	35.2	373.2	8.0	16.8	8.6
Barbados	42.6	13.2	89.5	89.1	76.1
Belize	1.9	25.7	11.9	9.2	6.9
Dominican Republic	422.7	725.9	33.8	31.0	36.8
French West Indies b/	1.0	1.2	78.8	86.6	45.5
Guyana	11.1	46.4	15.9	14.2	19.3
Haiti	178.6	211.3	49.4	43.3	45.8
Jamaica	75.6	316.8	19.4	19.5	19.1
Leeward & Windward Islands b/	49.5	29.9	60.1	57.5	62.3
Trinidad and Tobago	5.1	807.4	0.4	0.5	0.6
CENTRAL AMERICAN COMMON MARKET	268.8	1,639.1	13.5	10.5	14.1
LATIN AMERICAN FREE TRADE ASSOCIATION d/	1,880.5	17,811.3	8.9	10.1	9.5
DEVELOPING AFRICA	1,067.8	10,218.3	10.4	14.0	9.6
NEAR EAST ASIA	2,081.2	6,454.4	32.7	31.2	24.4
SOUTH ASIA	1,655.1	2,066.7	40.3	44.5	44.5
OTHER ASIA	15,388.7	52,851.3	20.1	22.2	22.6
ALL EXPORTERS c/	67,007.0	244,025.0	19.7	21.9	21.5

a/ Shipments made partly by air and partly by vessel are excluded from these tabulations. For this reason, the sum of the "air" and "vessel" shipments may be less than total export figures.

b/ The French West Indies are Guadeloupe and dependencies and Martinique. The Leeward Islands consist of Antigua and Barbuda, St. Kitts and Nevis, Anguilla and Montserrat. The Windward Islands are St. Vincent and the Grenadines, St. Lucia, Dominica and Grenada.

c/ Includes all countries.

d/ Mexico is excluded.

Source: Bank staff estimates.

7.04   Information on Caribbean countries' overall freight costs, including both air and vessel shipments, does not indicate that they experienced higher than average transport costs. In fact, overall, the Caribbean countries had a 1987 nominal freight rate of 5.6%, which is the lowest figure reported for any group of developing countries. Within the Caribbean group, the OECS countries plus Anguilla had a 1987 nominal freight rate of 3.9% (see Table VII.2 below).

7.05   Official U.S. import statistics do not distinguish between "domestic exports" and "re-exports" from a particular country. Overall this is not a major drawback, but for some OECS countries in 1986 re-exports to the U.S. appear to have been unusually high. The analysis considers only those products which appear to be "domestic exports" from the country in question to the U.S. OECS countries as a group generally

Table VII.2: AGGREGATE FREIGHT RATES FOR EXPORTS TO THE UNITED STATES, 1985-87

Exporter	1987 Exports to US (US$ m) f.a.s.	c.i.f.	Nominal Freight Factor a/ 1985	1986	1987
CARIBBEAN COUNTRIES	3,432.3	3,623.2	4.2	5.3	5.6
Bahamas	416.6	456.6	4.2	4.7	8.2
Barbados	59.6	66.9	1.8	1.8	3.2
Belize	42.2	44.6	4.9	5.9	5.7
Dominican Republic	1,162.7	1,217.6	5.6	4.9	4.7
French West Indies b/	2.3	2.4	5.9	3.8	4.3
Guyana	58.7	66.4	13.7	11.2	13.1
Haiti	394.7	416.1	4.2	4.1	3.9
Jamaica	395.2	422.4	7.2	7.7	6.9
Leeward & Windward Islands b/	86.5	89.9	4.7	4.5	3.9
Trinidad and Tobago	815.6	859.3	3.6	6.6	5.4
CENTRAL AMERICAN COMMON MARKET	1,938.9	2,158.1	11.1	9.5	11.3
LATIN AMERICA FREE TRADE ASSOCIATION d/	20,248.2	21,719.7	7.1	7.9	7.2
DEVELOPING AFRICA	11,939.4	12,679.7	4.8	6.8	6.2
NEAR EAST ASIA	10,810.6	11,602.0	5.3	8.9	7.3
SOUTH ASIA	3,757.5	4,090.3	9.0	9.0	8.9
OTHER ASIA	69,014.3	73,517.2	7.2	7.8	6.5
ALL EXPORTERS e/	405,900.6	424,082.3	4.7	4.6	4.5

a/ Nominal freight factors are measured by the ratio of total transport and insurance costs to the free-alongside-ship value of imports. This ratio is then multiplied by one hundred to derive the nominal freight factor.
b/ Gaudeloupe and dependencies and Martinique.
c/ The Leeward Islands consist of Antigua and Barbuda, St. Kitts and Nevis, Anguilla and Montserrat. The Windward Islands are St. Vincent and the Grenadines, St. Lucia and Dominica.
d/ Mexico is excluded from the total since a large share of this country's commerce with the United States passes directly across the border and does not incur international transport costs.
e/ Includes all countries.

Source: Bank staff estimates.

experience lower nominal freight rates than their competitors on major manufactured products, as is true for Caribbean countries as a whole (see Table 7.1 Statistical Appendix). There are 64 entries in Table 7.1, and in 47 cases the nominal freight rate for the OECS country is below the rate for all other countries. For some countries--Grenada, St. Kitts and Nevis, St. Lucia and St. Vincent and the Grenadines--virtually all the rates shown are below competitors' rates. Rates on all products shown are low--49 of the rates for OECS products are below 5%; only 6 are above 10%. U.S. tariff rates on many of the products are high, especially on garments.

Freight rates are higher than for manufactured goods on the 'ew food and
and agricultural raw material exports from the OECS to the U.S. that
occurred in any significant volume in 1986 (see Table 7.2 Statistical
Appendix). In addition, there is no clear tendency toward a favorable OECS
freight rate advantage over competitors.

7.06   All OECS countries except Dominica have an advantage over
competitors on products which move by air only (see Table VII.3 below).
Dominica has a negative or unfavorable differential of 2 percentage points,
whereas the other five countries have an average favorable differential of
almost 4 percentage points. In proportionate terms the differential
favoring the five OECS countries is large: their average nominal freight
rate is 6.3% compared to 10.2% for competitors--a 38% advantage.

7.07   Information on competitors rates is provided for comparable
products in Table VII.3. To illustrate, in 1986 there were 38 products
shipped from Antigua and Barbuda to the U.S. which went by air only. The
average freight rate on these 38 products was 7.9%. This compares with an
average freight rate of 11.0% on exports by air to the U.S. of these 38
products by all other countries. In 1986, 40 products were shipped from
Antigua and Barbuda by vessel only, and 6 products were shipped sometimes
by air and sometimes by vessel.

7.08   For products which move by water only, the situation is quite
different. Three countries, Antigua and Barbuda, Dominica and Grenada,
have freight rates which are virtually identical with those of competitors.
The three OECS rates average 9.5%, the competitors 9.9%. Two countries,
St. Kitts and Nevis and St. Lucia, have freight rates well above
competitors rates: the two OECS rates average 8.7%; the competitors 5.7%.
St. Vincent and the Grenadines has a significant favorable differential
(22.1% as against 29.5%). For products which move sometimes by air and
sometimes by vessel, the experience of the OECS countries is mixed. For
three countries, Antigua and Barbuda, Dominica and Grenada, the air
transport rate is higher than the rate for competitors, while for the other
three it is less. Nominal freight rates on vessels are higher than for
competitors for goods which can move by air or water for Antigua and
Barbuda, Dominica and St. Kitts and Nevis. For Grenada and St. Lucia there
is a very small favorable difference, and for St. Vincent and the
Grenadines there is a large favorable difference but only two product
categories are represented. The data for the OECS countries is consistent
with that for the Caribbean countries as a whole on one point - the cost
difference between shipping by air and shipping by water, for goods which
can go by either mode, is a small one--4.7 percentage points for all
Caribbean countries and 5.0 percentage points for the OECS countries.[52]

52/ For St. Kitts and Nevis air freight rates (6.1%) are actually below
    vessel freight rates (7.7%) for comparable goods. In most instances,
    water transportation is the most cost effective way to move goods.

Table VII.8: TRANSPORT COSTS FOR OECS AND OTHER COUNTRIES' EXPORTS TO THE UNITED STATES, 1986

| Exporter | OECS Exports by a Single Transport Mode (air or vessel)[a] | | | | OECS Exports Partly Air and Partly Vessel[b] | | | |
| | Air Shipments | | Vessel Shipments | | Air Shipments | | Vessel Shipments | |
	Number of Items	Average Nominal Freight Rate	Number of Items	Average Nominal Freight Rate	Number of Items	Average Nominal Freight Rate	Number of Items	Average Nominal Freight Rate
Antigua and Barbuda								
Antigua and Barbuda	38	7.93	40	15.37	6	12.64	6	6.01
Other Exporters	38	11.02	40	15.60	6	7.73	6	4.36
Dominica								
Dominica	58	11.54	97	10.19	15	16.18	15	11.21
Other Exporters	58	9.50	97	10.23	15	11.93	15	8.36
Grenada								
Grenada	19	7.62	14	3.07	6	8.64	6	3.12
Other Exporters	19	10.02	14	3.81	6	7.07	6	3.28
St. Kitts and Nevis								
St. Kitts and Nevis	44	3.32	28	8.39	10	6.14	10	7.67
Other Exporters	44	8.88	28	5.32	10	9.34	10	4.48
St. Lucia								
St. Lucia	46	4.68	19	9.02	11	8.03	11	3.16
Other Exporters	46	9.93	19	6.11	11	10.23	11	3.67
St. Vincent and the Grenadines								
St. Vincent and the Grenadines	12	7.86	9	22.13	2	22.66	2	12.66
Other Exporters	12	11.24	9	29.47	2	26.99	2	39.64

a/   Entries show: (1) the number and average nominal freight rates for all products exported by each OECS country to the U.S. by vessel; and (2) similar information on shipments by air. The OECS tariff line level products for which this information is recorded totalled at least $10,000 in U.S. exports in 1986.

b/   Entries in these columns show transport cost information for OECS exports for tariff line products where some portion of the annual exports were shipped by air and the remainder by vessel in 1986. The OECS tariff line level products for which this information is recorded totalled at least $10,000 in U.S. exports in 1986.

Note: Mexico and Canada are excluded from the average statistics on "others" exports to the United States.

Source: Bank staff estimates; U.S. Department of Commerce.

7.09   OECS countries all experience an advantage over competitors with respect to the number of products that receive a lower air freight rate on exports to the U.S. (see Table VII.4 below).[53]   Some of these advantages are large: Antigua and Barbuda, St. Kitts and Nevis, and St. Lucia on 40% or more of items shipped by air enjoy a freight rate differential of 5 percentage points or more over competitors. With respect to sea freight, all but Antigua and Barbuda and St. Kitts and Nevis have an advantage over competitors with respect to the number of products that receive a lower air freight rate on exports to the U.S. However, except for St. Vincent and the Grenadines, few items shipped by vessel from OECS countries enjoy a favorable freight rate differential in excess of 5 percentage points.

7.10   The freight rate structure is highly complex. A marginally higher rate for the OECS countries than competitors face on a product subject to intense competition may be far more important than lower rates on a wide variety of less competitive products in determining the direction and profitability of trade. In addition, factors such as frequency and reliability of service may be extremely important in determining competitiveness of exports.[54]   Nevertheless, the array of data reported here for the OECS countries should give pause to those who argue that the region is discriminated against by shippers, and that high transport costs stifle their economic development. In particular, air transport rates appear to be lower than those faced by competitors on many important products, and a very high percentage of OECS exports to the U.S. go by air. Water shipments experience less favorable treatment on average, but there is no evidence of systematic discrimination against OECS goods.

C.   Other Transportation Issues

7.11   In addition to the cost of moving freight, other aspects of international services are of relevance to shippers, including frequency of service, reliability of service, and availability of special features such as refrigerated vessels. There are also questions relating to the cost of

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53/   To illustrate, for Antigua and Barbuda in 1986 43.2% of items exported to the U.S. had freight rates on air shipments which were at least 5.1 percentage points lower than those of competitors and 29.8% of items had air freight rates from 0.6 to 5.0 percentage points lower than competitors.

54/   Port costs, for example, are excluded from the freight rates presented above. These can be high, and are often inflated by inappropriate government policies. The subject deserves additional research, but limited available evidence suggests that substantial economies could be made.

Table VII.4: NOMINAL FREIGHT RATES FOR OECS AND OTHER COUNTRIES' EXPORTS TO THE UNITED STATES, 1986

Country/Transport Mode	% of Items with Lower Lower OECS Rates (difference in points) a/		Difference of +/- 0.5 points	% of Items with Higher OECS Rates (difference in points) b/		Percent of Item with Freight Rates c/	
	Below 5.1	5.0 to 0.6		0.6 to 5.0	Above 5.1	Below Competitors	Above Competitors
Antigua and Barbuda							
Air Shipments	43.2	29.8	2.7	16.2	8.1	72.2	27.8
Vessel	14.6	17.1	9.8	34.1	24.4	36.6	63.4
Dominica							
Air Shipments	19.0	44.8	8.6	12.0	15.6	69.6	31.6
Vessel	17.3	41.8	7.1	20.5	13.3	63.3	36.7
Grenada							
Air Shipments	26.2	31.6	15.8	15.9	10.5	63.2	36.8
Vessel	0.0	71.5	14.3	7.1	7.1	78.6	21.4
St. Kitts and Nevis							
Air Shipments	52.2	38.7	4.5	2.3	2.3	93.2	6.8
Vessel	0.0	28.6	3.6	46.4	21.4	35.7	64.3
St. Lucia							
Air Shipments	55.4	35.4	3.1	4.6	1.5	90.8	9.2
Vessel	5.4	54.0	16.2	16.2	8.2	70.3	29.7
St. Vincent and the Grenadines							
Air Shipments	33.3	33.4	0.0	33.3	0.0	66.7	33.3
Vessel	55.6	11.1	0.0	11.1	22.2	66.7	33.3

a/ The entries show the percentage of tariff line products where the ad valorem transport costs for the OECS country exporter fall below those for all other exporter's average freight rate for the item. The individual columns indicate how many percentage points the OECS nominal freight rates are below the competitor's average.

b/ Entries show the percentage of tariff line products where the ad valorem transport costs for the OECS country exporter exceed those for all other exporter's average freight rate for the item. The individual columns indicate how many percentage points the OECS nominal freight rates are above the competitor's average.

c/ The entries show the percent of tariff line items where nominal freight rates for OECS country exporter exceed or fall below those of their competitors. These figures will not sum to one hundred if there are products where the OECS and "other" exporters freight rates are equal.

Note: The entries in this table are based on nominal freight rates for products which accounted for at least $10,000 of each OECS country's exports in 1986. The "other" exporters group includes all other countries exporting the item to the United States with the exception of Mexico and Canada.

Source: Bank staff estimates; U.S. Department of Commerce.

moving freight to markets other than the U.S., and the cost of moving freight into the OECS countries from all countries. A 1985 survey was conducted of shippers in the OECS. This survey showed that most complaints about rates related to intra-Caribbean trade rather than extra-regional trade. Likewise, the infrequency and inadequacy of service within the region was a common complaint. Regarding extra-regional trade, the absence of direct services to the northeastern ports of North American was a frequent criticism by shippers. Importers were found to be less rate conscious than exporters.[55] The results of this survey appear to be consistent with the conclusion that freight rates to the U.S. market are not a serious concern of OECS shippers. However, other issues relating to transportation are of concern to shippers, especially rates and levels of service on intra-Caribbean trade.

7.12   Interviews with public and private sector representatives from the OECS countries elicited the response that inadequate transportation infrastructure was a constraint on development, particularly in Dominica and St. Vincent and the Grenadines. In both countries, inadequacies in both air and port infrastructure were cited. Dominica's airports have short runways which, in addition, cannot handle night landings because of hilly terrain. St. Vincent and the Grenadines' airport on the mainland is considered to be too short for the larger aircraft that would better serve current and future needs. Bequia in the Grenadines has no airport but is said to need one. Port facilities in both countries are underdeveloped for modern container transport. Despite these handicaps, freight rates on exports from Dominica and St. Vincent and the Grenadines to the U.S. are in many cases lower than the rates on similar products faced by competitors. Frequency and reliability of service, however, are not captured in these comparisons. Firms in St. Vincent and the Grenadines reported contrasting experiences. One, a major producer of sporting equipment, expressed complete satisfaction with a roll-on roll-off container trailer service to the U.S. A second firm, a major producer of children's wear, complained of delays in air service as a result of breakdowns in the air freight carrier's one aircraft. Another firm in electronics had to resort to chartering its own aircraft. Transshipment through Barbados was claimed by others to involve undue delay.

D.   Transportation Policy

7.13   Transportation policy in the OECS countries should seek to maintain and, where possible, improve existing international air and freight services, in order to maintain competitiveness of existing exports and to expand markets for new products. While there are many areas that

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55/ The 1985 Inter-Island Transportation Study is summarized briefly in George Goodwin, "Feeder Services in the OECS-Experience and Perspectives", a paper presented to ECLAC Regional Workshop on Trade in Services, Antigua and Barbuda, March, 1987. The inter-island study appears to have been confined to sea shipments.

require additional resources, those that merit special attention are rates and levels of service on intra-Caribbean trade, and infrastructure expansion in Dominica and St. Vincent and the Grenadines.

7.14   The problem of rates and levels of service on intra-Caribbean trade is related in part to the so-called "huckster" trade. Much of the trade between island countries is handled by the informal huckster sector, and transportation is often effected in small open boats that can risk water damage to cargo. Insurance coverage is generally unavailable, and service is not on a scheduled basis. However, it would be a mistake to restrict the huckster trading arrangements, which provide a flexible and relatively cheap service. It also would be a mistake to establish a new capital intensive, regularly scheduled inter-island vessel fleet. Existing services, including "small vessel service" and WISCO (West Indies Shipping Corporation), plus a multitude of foreign liners, appear adequate to handle existing traffic needs.[56] Total volumes shipped are not large. Data for 1983, the latest available, show that OECS countries exported (and imported) about 30,000 metric tons among themselves, exported about 70,000 metric tons to other Caribbean countries, and imported about 65,000 metric tons from other Caribbean countries, a total of only 165,000 metric tons of freight in an entire year. OECS shipments to Europe in 1983, mainly of bananas, amounted to 126,000 metric tons, and were carried in the relatively small fleet of Geest boats.

7.15   Infrastructure expansion in Dominica and St. Vincent and the Grenadines for air and vessel facilities is said to be required for both freight and passenger traffic. However, freight traffic has little to do with the economic justification of major airport expansions, since such expansions will have to be justified, if at all, by passenger traffic projections for Dominica and St. Vincent and the Grenadines. If a major airport is built in Dominica, for example, air freight carriers will use it, but their contribution to total revenues will be slight in comparison to passenger carriers. At present Dominica's major exports are agricultural, which usually are shipped by vessel since they are high volume low cost products which can bear only low freight rates. High value low weight agricultural products can utilize air transport, but cut flowers and similar products are so small in scale that they could never by themselves justify a major airport. High value products which can bear the higher costs of air shipment, such as electronic products, take up little space and can be handled by relatively few aircraft, which again would not in themselves justify a major airport.

56/ See Goodwin, "Feeder Services", for a general description. Also, a
    publication in connection with the recent Antigua Trade Fair listed 10
    shipping lines which called at Antigua and Barbuda, 19 at Dominica, 8
    at Grenada, 8 at St. Kitts and Nevis, 11 at St. Lucia and 7 at St.
    Vincent and the Grenadines. These lines provide some intra-Caribbean
    links as well as links to Europe and North America.

E. Conclusions

7.16   The freight rate structure is complex. A marginally higher rate
for the OECS countries than competitors face on a product subject to
intense competition may be far more important than lower rates on a wide
variety of less competitive products in determining the direction and
profitability of trade. In addition, factors such as frequency and
reliability of service may be extremely important in determining
competitiveness of exports.

7.17   Freight rates on air shipments from the OECS countries to the U.S.
are lower than competitors' rates, and a high proportion of shipments go by
air. Freight rates on water shipments, however, experience less favorable
treatment on average but there is no evidence of systematic discrimination
against OECS goods. The cost difference as between shipping by air or by
water is a small one for products which can be shipped by either mode. The
OECS countries should exploit the air freight differential to the U.S. and
encourage production of high value, low weight manufactured products such
as electronics. Port improvements, bulking of cargoes and intensification
cf container transport would assist in reducing transport costs on water
shipments, particularly of agricultural products.

7.18   Rates and levels of service on intra-Caribbean trade are matters
of concern to regional shippers. However, the total volumes shipped are
not large, and therefore a high-cost, inter-Caribbean shipping service
could not be supported by the available traffic. Improvement of existing
services in response to increasing demand is more feasible.

7.19   Air freight shipments will not justify heavy expenditures on new
airport facilities: such justification can come only from tourism
development on a scale to warrant such developments. Any major
infrastructure proposals will therefore need to depend upon sufficient
growth of tourism for their economic justification.

CHAPTER VIII

DEMOGRAPHIC, LABOR MARKET AND EDUCATIONAL ISSUES

A. Overview

8.01   Demographic pressures and labor market problems are long-standing ones in the OECS countries, and education and training are seen as at least partial solutions. This Chapter analyzes these issues. Migration has played a key role in adjusting labor markets to demographic pressures, and past patterns of migration are discussed to illustrate the magnitude of this adjustment. Some countries that depend upon tourism have been able to eliminate the net out-migration of their populations: the experience of The Bahamas is discussed. Rapid labor force growth is projected to the year 2000. The current educational system, however, is not responsive to the needs of the economy, and the Chapter discusses changes that are required. Educational quality is low; insufficient resources are devoted to both salary and non-salary components of education budgets; teacher qualifications require improvement; and there is need for better training facilities and more adequate equipment.

B. Population Growth and Migration

8.02   Variations in migration flows, birth rates and mortality rates have produced very different patterns of population growth: St. Kitts and Nevis and St. Lucia illustrate clearly these variations. In 1891 both countries had roughly the same population, but by 1980, St. Lucia's population had virtually tripled while St. Kitts and Nevis's actually had declined slightly. In 1843, St. Lucia had the lowest population among the OECS islands, but by 1980 it had the largest. St. Kitts and Nevis, in turn, had the second largest population in 1843, but the lowest in 1980. Despite their very different experiences, both countries underwent the high out-migration common to the Caribbean as a whole, and both have had high fertility rates until recently. Different rates of population growth have resulted because St. Kitts and Nevis's out-migration has been exceptionally high by any standard: the country is one of the few in the world to have had a roughly constant population over 100 years. St. Lucia has much more arable land than St. Kitts and Nevis, and about 50% more rainfall. These factors are important when population depends heavily on agriculture, as was common until recently. However, patterns of population growth can change with economic developments. In particular, in St. Kitts and Nevis, the future trends may be very different from past and current ones.

8.03   Estimates of migration flows for the period 1880-1920 are problematic because of the lack of data on births and deaths, but demographers have concluded that substantial out-migration was common to all the states in this period, particularly when large transportation projects, i.e. the Panama Canal, the Bermuda Dockyards and various regional

railroads, generated a surge in the demand for labor.[57] Between 1920 and 1946 out-migration was high, except in Antigua and Barbuda, with Grenada experiencing exceptionally high levels of out-migration. For most countries, out-migration was low between 1946 and about 1955, but during the ensuing 15 years out-migration became extremely high, reaching 30 persons per 1000 per year in St. Kitts and Nevis and averaging about 20 persons per 1000 across all countries. Regional migration flows were most important up to 1955, and were caused by demographic pressures on limited agricultural land and by opportunities elsewhere in the Caribbean. Since the mid-1950's, the U.K. and the U.S. have been the most important destinations despite restrictions that have been placed on immigration into these countries from time to time. In the 1970s out-migration slowed down, but the race of 10 persons per 1000 per year was still among the highest regional out-migration rates in the world. Fragmentary evidence available for the 1980s suggests a further drop in out-migration rates has occurred in Antigua and Barbuda (only 2 per 1000 per year and falling), St. Lucia (4 per 1000) and Dominica (6 per 1C00 but rising). St. Vincent and the Grenadines has an out-migration rate of 9 per 1000, but it is falling. In contrast, St. Kitts and Nevis continues to experience a very high out-migration rate, i.e., 30 per 1000 (see Table 1.2 Statistical Appendix).

8.04   Migration reflects both "pull" and "push" factors: economic opportunity abroad; high fertility levels and poor economic prospects at home. Institutional constraints are also important, particularly immigration restrictions in host countries. Migrants from the OECS countries since the mid-1950's have gone in large numbers first to the U.K. and then to North America. These flows are beneficial to the extent they augment global output as resources shift from low to high productivity uses. Caveats to this argument consider possible costs incurred by host societies in the form of increased expenditures on social services, and possible costs incurred by societies from which migrants originate in the form of loss of human capital. On the other hand, benefits other than an increase in output can occur in the form of a return flow of trained and experienced native born labor, a rate of unemployment lower than otherwise in the sending country, and an increase in private transfers (i.e. workers' remittances), to the sending country. In addition to economic arguments, migration raises strong personal and cultural issues, especially in countries where high levels of out-migration thr *ten the stability of family and cultural ties.[58]

8.05   The OECS countries will always be open to migration flows in both directions. Because of their small size, many individuals will wish to spend some time abroad, for education or other objectives. Openness in labor flows within the OECS should be as much an objective as openness in trade flows. Nevertheless, it is also relevant to consider development policies that allow a choice to those who do not wish to leave their country to earn a living. While any industry can in principle support

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57/ See L. F. Bouvier, PRB Occasional Series: The Caribbean (Individual Country Reports - mid-1980's), and Eastern Caribbean Population and Development, RAPID, 1984.

58/ These and many other aspects of migration are discussed in R. A. Pastor (ed.), Migration and Development in the Caribbean, Westview Press, 1985.

development which would allow a country to exist without net out-migration, there are reasons to believe that tourism may offer more prospects in this direction for a small island economy than other industries. At the same time family planning programs will need to be intensified in the OECS countries.

Tourism in The Bahamas

8.06   The experience of The Bahamas indicates that a small island economy need not permanently experience an out-migration of its population. Prior to the 1950's, population growth in The Bahamas for a period of more than one hundred years was reduced by persistent out-migration, much as with the OECS countries. Since the early 1950's, when tourism began to develop, The Bahamas has experienced a net inflow of population.[59] Population growth in The Bahamas averaged 5% per year from 1953 to 1967-- an exceptionally high rate of increase which stemmed from a heavy net inflow of population. Population growth slowed down after 1967, but continued to e ceed somewhat the rate of natural increase.

8.07   All studies of The Bahamas show that by far the most significant contribution to job creation is tourism. The number of hotel rooms increased almost six-fold between 1957 and 1984, reaching over 13,000 rooms of all types. In 1979, tourism generated directly and indirectly about 40,000 jobs compared to about 5,000 provided by manufacturing, 1,300 by agriculture, and 300 by offshore banks. Tourism also has generated high per capita income: 1987 GNP per capita was US$10,280. The Bahamas experience seems relevant for the OECS countries. They are not as close to the large U.S. market, and they do not have as much land, but they have abundant potential for tourism, an industry which could provide enough employment to reverse long standing patterns of high out-migration.

C.   The Labor Force

8.08   Labor force data, including unemployment estimates, are among the weakest of the data sets relating to the OECS countries.[60] The only comprehensive data come from the Census, the last one of which dates from 1980-81. Even that Census is incomplete (Antigua and Barbuda did not participate) and not totally reliable.[61] Unemployment estimates for non-Census years are little more than informed guesses.

59/ See "A General Diagnosis of the Economy of the Bahamas Islands", Clapp and Mayne Inc., 1969.

60/ The OECS countries do not have a unified statistical service except for selected national income figures produced by the Economic Affairs Secretariat. The Eastern Caribbean Central Bank is responsible for assembling balance of payments data. Statistical Offices in each of the states provide other statistical data, supported by outside agencies including the Bank and the Fund.

61/ Nevertheless, limited use is made of labor force data from the 1980-81 Census to illustrate the educational qualifications of the labor force.

8.09   Given the paucity of data, little meaningful analysis of important questions relating to unemployment levels and trends, income distribution, the role of women in development and the extent of poverty is _ ssible. In general, life expectancy at birth, death rates and infant mortality rates are at more favorable levels than those that prevail in other countries at approximately the same income levels (see Table VIII.1 below). However, life expectancy is below that in industrial market economies, and ii.fant mortality rates are considerably higher, except in Dominica which matches the industrial market economy average. Death rates in four countries are below those in industrial market economies. Given the relatively young populations in the OECS countries, low crude death rates would be expected. The general conclusion is that health related statistics indicate health standards which exceed those in countries at comparable levels of income, but which nevertheless are well below attainable levels as represented by the performance of industrial market economies.

TABLE VIII.1: OECS, COMPARISON OF SOCIAL INDICATORS
(reference groups in brackets)1/

	Antigua and Barbuda	Dominica	Grenada	St. Kitts and Nevis	St. Lucia	St. Vincent and the Grenadines	Industrial Market Economies
Life expectancy at birth (years)	73 (67)	75 (59)	68 (59)	68 (59)	72 (59)	69 (59)	76
Crude death rate (per year)	5 (8)	6 (10)	8 (10)	10 (10)	6 (10)	7 (10)	8
Infant mortality rate (per year)	20 (43)	11 (76)	35 (76)	28 (76)	23 (76)	30 (76)	11

1/ The "reference group" is the group of other countries with the same income level.

Source: Social Indicators of Development, 1988, World Bank.

8.10   Subject to the data caveat discussed above, labor force growth in the OECS countries is projected to be rapid to the year 2000. Table VIII.2 below contains three recent estimates derived from very different assumptions and for different periods. All project rapid labor force growth except one estimate for St. Kitts and Nevis, which assumes that out-migration from St. Kitts and Nevis will continue at very high levels of 25 to 30 per 1000, much higher than projected for any other country in Latin America or the Caribbean. Developments in St. Kitts and Nevis, particularly in tourism, are likely to result in much reduced out-migration, with a strong possibility of a net inward flow. Labor force growth of the order of 2% to 3% per year will therefore probably occur in all countries to the year 2000. If labor productivity increases by 3% per annum, annual average economic growth of the order of 5% to 6% will be needed on a sustained basis, to prevent an increase in unemployment rates. Developments in St. Kitts and Nevis, particularly in tourism, are likely to result in much reduced out-migration, with a strong possibility of a net inward flow. Labor force growth of the order of 2% to 3% per year will therefore probably occur in all countries to the year 2000. If labor

productivity increases by 3% per annum, annual average economic growth of the order of 5% to 6% will be needed on a sustained basis, to prevent an increase in unemployment rates.

TABLE VIII.2: OECS - PROJECTED LABOR FORCE GROWTH TO THE YEAR 2000
(compounded annual increase)

Author	Period	Antigua and Barbuda	Dominica	Grenada	St. Kitts and Nevis	St. Lucia	St. Vincent and the Grenadines
Vu	1985-2000	3.9	3.5	2.1	0.0	3.3	2.4
Zaba	1980-2000		2.6	2.4	1.8	2.7	2.8
Bouvier	1980-2000	2.2	2.5	2.0	1.7	3.0	2.6

Sources: M. T. Vu, E. Bos and R. A. Bulatao, Latin America and the Caribbean Region Population Projections, 1988-89 Edition, World Bank. Estimates by B. Zaba are contained in Compton Bourne, Caribbean Development to the Year 2000: Challenges, Prospects and Policies, a report prepared for the Caribbean Community Secretariat, June 1988. L. Bouvier estimates are from PRB Occasional Series: The Caribbean (Reports on individual countries).

D. Current Educational System

8.11   This section discusses key aspects of the current educational system: curriculum and structure, enrollment trends, financial costs and quality. The subsequent section relates education policy to labor market requirements.

Curriculum and Structure

8.12   The formal educational systems in the OECS countries are virtually identical. They were designed before independence and are based upon the British model. Under this system, students are required to take a Common Entrance Examination (generally known as the 11-plus examination) after they have completed primary education to assess their suitability for entering the secondary education stream.[62]   At the completion of secondary

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62/ Those who fail the examination continue to attend "senior primary" school until they reach 15 years of age. In some countries, senior primary students can take special examinations to enter the secondary system. St. Kitts and Nevis has abolished the 11-plus examination, and students in that country have a less restricted entry to secondary education.

education students take either the G.C.E. "O" level examination administered from the U.K. or the CXC examinations administered on a regional basis. The tertiary education system includes the "A" level program which successful "O" level graduates can undertake, plus various technical and teacher education colleges. Successful completion of the "A" level program by passing the G.C.E. "A" level examinations gives entry to university. Some of the colleges offer first year university classes, mainly in collaboration with the University of the West Indies.

Enrollment Trends

8.13   The population age structure at the beginning of the 1980's was very young, with about two-fifths of the population in the 0-14 age group and nearly two-thirds in the 0-24 age group.[63] Birth rates have shown a declining trend in the 1980's, but they remain high in St. Lucia and St. Vincent and the Grenadines (see Tables 1.2 to 1.4 Statistical Appendix). In these countries there will be continued pressure on the educational system from numbers alone, apart from the resources required to upgrade the system.

8.14   **Primary Education.** Education is compulsory to age 15, and most youths attend school. Participation rates for those aged 5-11 range from 78% in St. Kitts and Nevis to 95% in St. Lucia. Rates are also high for those aged 12-15, ranging from 68% in Dominica to 97% in Antigua and Barbuda (see Table 5.1 Statistical Appendix). Enrollments have stabilized since 1983, except in Dominica where they have fallen by 10% (see Table 6.2 Statistical Appendix). The percent of total enrollments that consists of senior primary students (i.e. those who have failed the 11-plus examination) is high except in St. Kitts and Nevis, ranging from 20% in Dominica to 10% in Grenada (see Table 5.3 Statistical Appendix).

8.15   **Secondary Education.** Since 1983, enrollment trends in secondary education are quite different from those in primary education in St. Lucia, St. Vincent and the Grenadines, and Antigua and Barbuda, where enrollments have increased substantially. All other countries have stable enrollments (see Table 5.4 Statistical Appendix). In all countries except St. Kitts and Nevis, there are many more females than males in secondary education, despite a slight reverse ratio at the primary level: the ratio of female to male students range from 1.3:1 in St. Lucia to 1.7:1 in Dominica. It may be relevant that in St. Kitts and Nevis, where the ratio is close to 1:1, the 11-plus examination has been abolished. The other countries should examine whether this examination works against success by male students. Secondary education enrollment as a percentage of all enrollment has been increasing since 1980 except in St. Kitts and Nevis where the proportion of students in the secondary level is the highest, (see Table 5.5 Statistical Appendix), a positive trend since the demand for skilled workers is increasing more quickly than the demand for unskilled workers.

8.16   **Tertiary Education.** Formal tertiary education is pursued in colleges, and individual colleges which offer programs in teacher training, technical training and "A" level classes have been placed together. Hotel

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63/ In developed countries the 0-14 age group makes up from 15 to 20% of the population.

and catering programs and nursing programs have not yet been amalgamated into these larger units. Enrollments in tertiary programs are a small fraction of total enrollments in all countries, often under 2% (see Table 5.5 Statistical Appendix). High admission standards and limits to the number of available places constrain admission to colleges, despite a high demand for graduates.

Financing of Public Education

8.17   Most students attend schools which are publicly supported, including colleges--the private school sector is very small except in Antigua and Barbuda. Public expenditure on education, both current and capital, has been increasing in nominal terms in recent years, but decreasing as a share of GDP (see Table VIII.3 below. However, budgeted capital expenditures tend to differ from subsequent actual figures, since such expenditures tend to be financed by foreign aid or grants (see Table VIII.4 below). Thus, any figures which indicate rising capital expenditures should be interpreted cautiously to ascertain whether governments are beginning to address the serious deficiencies in school buildings and equipment.

TABLE VIII.3:   OECS - PUBLIC EXPENDITURE ON EDUCATION, 1985-89 a/
(% of GDP)

	1985[b]	1986[b]	1987[c]	1988[c]	1989[c]
Antigua and Barbuda					
Current		3.0	3.1	3.2	
Capital			0.1	0.5	
Dominica					
Current	6.2	6.1	5.0	4.6	
Capital	0.4	0.5	0.8	1.2	
Grenada					
Current	7.0	6.6	5.3	5.6	
Capital			0.4	1.3	
St. Kitts and Nevis					
Current		4.7	3.6	3.3	3.4
Capital			0.1	0.0	1.4
St. Lucia					
Current		8.5	7.1	6.9	6.7
Capital				1.7	0.9
St. Vincent and the Grenadines					
Current		6.9	5.8	5.3	
Capital			2.3		

a/ 1985-86 at factor cost. 1987-89 at market prices.
b/ Actual expenditure.
c/ Estimates.

Source: National Budget Estimates.

TABLE VIII.4: OECS - SOURCES OF FINANCE FOR CAPITAL EXPENDITURE
(EC$ million and percent)

	Total	Government Financing	Loan	Aid/Grand
Antigua and Barbuda				
(1988)	3.9	1.6	0.0	2.3
%	100	41	0	59
Dominica				
(1988/89)	4.6	0.1	1.0	3.5
%	100	3	22	75
Grenada				
(1988)	5.2	0.0	0.0	5.2
%	100	0	0	100
St. Kitts and Nevis				
(1989)	5.0	0.3	0.0	4.7
%	100	6	0	94
St. Lucia				
(1988/89)	10.1	6.5	1.2	2.4
%	100	64	12	24
St. Vincent and the Grenadines				
(1987/88)	8.6	4.7	1.2	2.7
%	100	55	14	31

Source: National Budget Estimates.

3.18   In general, public current expenditure on education has not kept pace with the growth of total current government expenditure on nominal GDP (see Table VIII.5 below). There are exceptions, but most trends are downward since 1986, especially in Dominica, St. Kitts and Nevis and St. Vincent and the Grenadines. Differences across countries in public expenditure on education partly reflect differences in the age structure of the populations. For example, St. Lucia and St. Vincent and the Grenadines, in which over 40% of the populations are under 15 years of age, spend about 20% of public current expenditure on education, whereas Antigua and Barbuda, in which about 33% of the population is under 15, spends about 12% of public current expenditure on education. Differences across countries in expenditures on public education also reflect differences in salaries paid, since personal emoluments predominate in current expenditures on education.

TABLE VIII.5: OECS - PUBLIC CURRENT EXPENDITURE ON EDUCATION
(percentage of GDP and of current government expenditure)

	1985		1986		1987		1988	
	GDP	CE[1]/	GDP	CE[1]/	GDP	CE[1]/	GDP	CE[1]/
Antigua and Barbuda	n.a.	n.a.	3.0	10.8	3.8	11.2	3.7	11.8
Dominica	6.2	16.6	6.1	17.5	6.0	16.5	5.7	17.4
Grenada	7.0	14.0	6.6	13.6	6.3	12.8	7.1	15.1
St. Kitts and Nevis	4.3	12.7	4.8	17.1	4.4	14.9	4.1	14.4
St. Lucia	8.4	24.0	8.5	22.9	8.6	21.7	n.a.	22.0
St. Vincent and the Grenadines	6.6	19.0	6.9	20.6	7.0	19.3	6.7	18.8

1/ Current government expenditure.
n.a.: Not available.

Source: Bank staff estimates.

8.19   Expenditures on text books, instructional materials, supplies and equipment are very low as a proportion of total current education expenditures, often below 1% (see Table VIII.7 below). The evidence suggests that when education budgets are squeezed, personal emoluments or salaries are protected at the expense of supplies and equipment, almost certainly resulting in a deterioration of the educational standards attainable with the available resources. Capital expenditures also tend to be squeezed.

8.20   Current expenditures per pupil vary considerably from country to country, ranging from EC$1900 in Antigua and Barbuda to EC$600 in St. Vincent and the Grenadines (see Table 5.6 Statistical Appendix). They also differ by program, increasing by level of education. Total current educational expenditures per pupil as a percent of GDP per capita are remarkably similar across all countries, ranging from 18% in St. Kitts and Nevis to 26% in St. Lucia, indicating that differences in salaries, as reflected in differences in GDP per capita, are relevant in explaining differences in expenditure per pupil (see Table VIII.6 below).

TABLE VIII.6:   OECS - EDUCATIONAL EXPENDITURE PER PUPIL, 1986-87
(percentage of GDP per capita)

	Total Education	Primary Education	Secondary Education	Post-Secondary Education
Antigua and Barbuda	23.8	11.3	27.6	66.5
Dominica	23.1	20.2	34.6	132.6
Grenada	20.8	17.4	24.3	76.4
St. Kitts and Nevis	18.4	------- 16.4 -------		96.3
St. Lucia	26.1	19.6	52.3	147.1
St. Vincent and the Grenadines	23.5	19.6	23.5	141.5

Source: Bank staff estimates; Table 5.6 Statistical Appendix.

TABLE VIII.7:   OECS - EXPENDITURES ON TEXTBOOKS AND EQUIPMENT, 1986-88
(percent of current public expenditure on education)

	Primary Education	Secondary Education
Antigua and Barbuda (1986-87)	0.8	1.3
Dominica (1988-89)	0.7	2.5
Grenada (1987)	0.2	0.3
St. Kitts and Nevis (1987)	1.0	1.0
St. Lucia (1986)	4.0	3.0
St. Vincent and the Grenadines (1986-87)	1.4	2.0 (rural) 6.0 (urban)

Source: Bank staff estimates.

Quality of Education

8.21   Examination Results. Examination results vary by country and by
type of exam, but very few of the results are favorable (see Table VIII.8
below). Failure rates on the Common Entrance or 11-plus exam are 50% or
more. However, these rates reflect the lack of places in the secondary
system since the number of passing students is limited to the number of
available places. The G.C.E. and CXC examinations are such that all who
qualify will pass, since they are marked to an external standard. Success
rates are higher for the CXC exams, but taking into account that the
figures refer to single subjects and make no reference to grades, the
percentage of students who gain admission to the "A" level program is much
smaller. In St. Lucia, for example, this program requires five "O" level
passes with grades not lower than "C", or five passes of CXC exams with
grades not lower than 11. The examination results show that many students
are not successful in attaining their educational goals, a sign of wastage
in the system. Detailed statistics for St. Vincent and the Grenadines by
subject show that in 1986 only 12% of those writing obtained a pass in the
G.C.E. "O" level exam in Mathematics, and only 27% in English. These
percentages have been roughly constant during the 1980s, and indicate that
the situation is even more serious than shown in Table VIII.8.

TABLE VIII.8: ANTIGUA AND BARBUDA, DOMINICA, ST. KITTS AND NEVIS,
     ST. LUCIA, ST. VINCENT AND THE GRENADINES - EXAMINATION RESULTS

	Common Entrance		G.C.E. "O"		CXC General	
	Entries	Pass Rate (%)	Entries	Pass Rate (%)	Entries	Pass Rate (%)
Antigua and Barbuda - 1987	1053	44.6	1494	34.5	1174	49.4
Dominica - 1987	2062	25.9	1383	27.2	2115	73.6
St. Kitts and Nevis - 1985	-	-	1136	36.4	1271	59.0
St. Lucia - 1987	5003	27.7	418	40.4	2933	46.6
St. Vincent and the Grenadines - 1986	1508	50.0	3097	33.7	2526	48.0

Source: Educational Statistics and Statistical Year Books.

8.22   **Teaching Quality.** Student-teacher ratios are not high, but the formal qualifications of many teachers are low (see Table 5.7 Statistical Appendix). At the primary level, student-teacher ratios range from 23:1 to 31:1, and they are lower at the secondary level. However, percentages of trained teachers at the primary level range from 25% in St. Vincent and the Grenadines to 71% in St. Kitts and Nevis, most being under 50%. At the secondary level no more than 40% of teachers are classified at the "graduate" level, i.e. they hold a bachelor's degree.[64] Attrition among teachers is high: low salaries have led many to forego a teaching career or to view teaching as merely the first step to a career in government administration or the private sector. The supply of qualified teachers is also restricted by limited capacity in teaching colleges.

8.23   **Supplies, Equipment, Workshops and Buildings.** Budgetary provision for supplies and equipment is meager. Workshop and laboratory equipment is old and in short supply, and hinders the teaching of technical subjects in senior primary and secondary schools. Buildings are frequently in an unsatisfactory condition, particularly at primary levels.

8.24   **Curriculum Design.** A major failure of the educational system lies in the fact that curricula at the secondary level are designed to meet the requirements of examinations which emphasize the academic stream. Technical and vocational training is underdeveloped, despite the introduction of some "comprehensive" secondary schools in all countries which incorporate technical and vocational subjects in the curriculum. Workshops and teaching quality, however, are at low levels.[65]

E. Education and the Labor Market

8.25   In the early 1980s, almost all members of the labor force had at least a primary school education, but relatively few had an education beyond the primary level except in St. Kitts and Nevis, and only from 1% to 1.5% had a university education (see Table 5.8 Statistical Appendix). Economic growth based on competitive tourism and other service industries, manufacturing and agriculture will require a better educated labor force in the future. The school system needs to be geared to the goals of development at all levels. Scarcities of skilled labor currently exist in construction and in manufacturing as well as in tourism. In addition, tourism will require extensive facilities to promote management training as industry expands. Employment opportunities abroad attract trained and professional staff, such as technicians and nurses. The challenge to the educational system is to expand the proportion of students who attend

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[64] This problem is a long-standing one. See UNESCO, "Education Sector Survey: Analysis of the Existing System and Recommendations for its Development," (for all six OECS countries), Paris, 1982.

[65] Technical and vocational education is also available at the college level, and through various apprenticeship programs. However, few places are available in colleges, and apprenticeship programs lack trained personnel.

secondary schools and to ensure that the quality improves as measured by the cognitive achievement of students. This will not be easy to achieve, since educational systems have built-in inertia and are difficult to change.

8.26   There is no single educational response to the labor requirements in the OECS countries. The issues are complex, and could usefully be pursued at the regional level. For the system as a whole, the following suggestions should be carefully considered in the process of educational reform, recognizing that there are differences among countries:

(i)   ensure that more of those students who take the 11-plus exam find a place in secondary school, or abolish completely the 11-plus exam;

(ii)   reform the senior primary school so that it no longer plays the role of "parking" students until they reach the school-leaving age;

(iii)   at the tertiary level the integration of separate colleges under one school administration is a move in the right direction, and should be extended, since this integration will help to create economies of scale;

(iv)   the provision of apprenticeship opportunities should be formalized and become an integrated part of the formal education and training system, either through the creation of a specialized institution or by being placed under the administrative responsibility of existing institutions;

(v)   the issue of the quality of teachers at all levels, but particularly in specialized technical/vocational subjects, should be carefully studied. In view of rapid growth in the private sector, there is a high risk that good quality teachers will continue to be lost. The issue of teachers' formal qualifications and salaries requires reconsideration. The possibility of part-time work for teachers, particularly those in technical subjects, should be studied with a view to making the teaching of technical subjects at schools more attractive to specialists, who may wish to run their own business. Under the existing salary system, specialized teachers in technical subjects cannot be paid a satisfactory salary if they have no teacher training; and

(vi)   labor market information systems are inadequate to provide educational authorities with a base upon which long-term planning can proceed. Improvements are underway but they need to be accelerated.

8.27   Antigua and Barbuda has begun to expand its technicians program at the college level, and to improve science laboratories. Tourism developments will require secondary school graduates and commercial graduates at the college level. The Hotel and Catering School at present offers a one-year program, but consideration should be given to developing programs of different lengths to cover special needs, unencumbered by formal outside examination requirements.

8.28   Labor requirements are more difficult to project in Dominica than in the other OECS countries since tourism will not be the major growth industry. The country must diversify its agriculture and expand and diversify its manufacturing base, suggesting that educational policy should encourage the development of general skills so that graduates remain flexible to fit an unknown and changing environment. Students from Dominica have been relatively successful in the CXC examinations, which is a positive development. However, larger enrollments at the secondary level are required.

8.29   Grenada's economy will undergo further change with a continuing shift away from agriculture towards tourism and manufacturing. Technical and commercial programs need improvement and augmentation, and new programs in computing and business need to be established. The country is establishing a new vocational educational school at the secondary level for 200-300 pupils.

8.30   The education system in St. Kitts and Nevis is unique since the 11-plus exam has been abolished. As a result, there is a much higher proportion of students in secondary school than in other countries (see Table 6.3 Statistical Appendix). The country has a large loss of qualified teachers, which may be related to education's declining share of total current government expenditure. In general, the education system is well diversified, but business programs are not yet well developed.

8.31   St. Lucia's high birth rate results in relatively greater expenditures on education as a proportion of public current expenditure, but the quality of education is not better than in countries which spend relatively less. Population pressure appears to be continuing, making the reform of the educational system a difficult matter on the expenditure side. Poor qualifications of teachers and the large numbers of students in the senior primary sector are important problems.

8.32   St. Vincent and the Grenadines has a high birth rate and the same problems as St. Lucia. Senior primary education remains a problem. The curriculum is currently under review, but teaching quality and inadequate equipment and buildings are serious problems that can only be resolved by reallocation of resources to education.

F. Conclusions

8.33   Out-migration in the OECS countries has been a common feature for over 100 years, the timing and level of which has been dependent upon economic opportunities abroad and the prosperity of local agriculture. However, The Bahamas has developed an economy based on tourism which does not experience out-migration on a net basis, and it could be possible for the OECS countries to follow this pattern. Labor force projections suggest that the labor force in the OECS countries will grow at 2%-3% per year to the year 2000--relatively high rates which will require rapid and sustained economic growth if unemployment is to be lowered. At the same time family planning programs will need to be intensified in the OECS countries.

8.34   Education is the key to the provision of a flexible and adaptable labor force that can respond to the changing international economic environment and develop competitive tourism, manufacturing and agricultural industries. The current educational system is strongly rooted in the U.K. model inherited from the pre-independence period. Enrollment trends are stable or declining at the primary level, but expanding or stable at the secondary level. Many more females than males are enrolled in the secondary school system in all countries but St. Kitts and Nevis, which has abolished the 11-plus examination, an examination taken on or after a student's eleventh birthday to test for ability to proceed to secondary level education. However, because of the 11-plus system and a shortage of places, secondary level enrollments are low everywhere except in St. Kitts and Nevis. Tertiary education enrollments are also low. More resources need to be devoted to the secondary and tertiary school systems to increase the number of places, and technical and vocational education must be given equal priority with the academic stream in order to meet the labor requirements of the economy.

8.35   Current expenditures on education have not increased in proportion to GDP or total government current expenditures. Differences across the OECS countries in current expenditures on education are attributable to different age structures and different levels of GDP per capita: countries with young populations and low GDP per capita such as St. Vincent and the Grenadines tend to spend a high proportion of GDP on education. Expenditures per pupil as a percent of GDP per capita are, however, fairly similar. Expenditures on supplies and equipment are very low in all countries. In order to prevent a continuation of this problem, governments should give a substantially higher priority to expenditures in supplies and equipment in education budgets.

8.36   The quality of education is low: failure rates in the 11-plus exam are 50% or more; success rates in secondary school examinations are generally poor; most primary teachers are untrained; no more than 40% of secondary school teachers have degrees in their subject; teacher attrition is high; and equipment and buildings are inadequate. Teacher quality should be upgraded by improving conditions in the profession and by allowing technically skilled personnel to be drawn upon in technical and vocational training.

8.37   In short, the educational system should instill general knowledge and communication skills in order to ensure that the graduates will be able to adapt to a changing environment. There is no single response that will accomplish this: change is required in a number of areas, many of which could be pursued at the regional level. In particular, the primary curriculum should be made more accessible; more places are needed at the secondary level; separate colleges should be integrated at the tertiary level; apprenticeship opportunities need to be formalized; teacher quality requires up-grading; and labor market information systems need to be improved.

8.38   Individual countries have specific needs and pressures: in particular, St. Lucia and St. Vincent and the Grenadines have the difficult problem of undertaking expensive educational reform while their systems are expanding as a result of high birth rates, and will therefore have to increase even more the proportions of their budgets spent on education.

CHAPTER IX

LONG TERM PROSPECTS AND FOREIGN INDEBTEDNESS

A. Overview

9.01   In this chapter the results of the analysis in the preceding
chapters are brought together within the framework of a formal projection
model, in an attempt to identify the key strategic issues for future
development policies. After an overall review of common issues, prospects
for each country are examined, with major emphasis placed on the factors
that are projected to generate growth, followed by an analysis of the
projected balance of payments and the resulting debt service obligations.

B. Development Issues

9.02   The OECS countries as a group have experienced strong economic
growth in the 1980s, a result of prudent internal management and favorable
external circumstances, in particular high levels of grants and
concessionary loans, a boom in the market for bananas, strong growth in
world tourism and an increase in foreign direct investment in
manufacturing. Two of these external factors - the high levels of grants
and concessionary loans and the banana boom - may prove to be less
favorable in the 1990s. The development challenge is to surmount these
potential problems and to continue the growth of the economies through
efficient exploitation of the region's comparative advantage, especially in
tourism and manufacturing. Key ingredients in fostering these sectors are
public policies that encourage private investment in these areas, plus the
provision of suitable supporting public infrastructure. Domestic sources
of increased saving, both public and private, will be critical to ensuring
success, since there are clear dangers if the public sector accesses non-
concessional foreign and domestic borrowing to finance development.
Increasing external debt service ratios will pose a severe drain on real
resources and reduce government flexibility, and ultimately lead to falling
standards of living.

9.03   Private domestic saving in the OECS countries is affeced by many
factors, especially income growth, tax rates and the political and economic
stability of a country.[66] A competitive financial system that offers real
rates of interest will ensure that private domestic saving is allocated to
productive investment uses. Public domestic saving is reflected in the
current operating budget of the Government, and can be increased through
measures which decrease current expenditures and increase current revenue.
The OECS countries require a small but efficient public sector, with public
sector wages that are competitive with those in the private sector. It is

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[66] See World Development Report 1989 for an extensive discussion of
saving and finance in the context of economic development.

critical that civil service and public enterprise staffing levels be held
in check, and that public sector wage policy not set the pace for overall
wage determination in the economy.

9.04   Employment generation is an important consideration in all OECS
countries, especially so in those with high rates of unemployment. The
statistical evidence is scattered and not fully reliable, but current
levels of unemployment and underemployment appear to be high in Dominica,
St. Lucia, St. Vincent and the Grenadines and Grenada. In addition, St.
Lucia and St. Vincent and the Grenadines are experiencing rapid population
growth, implying rapid increases in labor force growth in the future.
Sound domestic policies which encourage economic growth are the only
solution to the employment problem.

9.05   Growth prospects for the OECS countries are highly dependent on
growth prospects in its major markets. Present projections for real growth
in the G-5 countries -- the U.S., Japan, the U.K., Germany and France --
are for a moderate slowing down in the 1990's, from 3% per year on average
in 1985-90 to 2.7% during 1990-2000. Japan is projected to grow at 3.8%
per year on average during the 1990s, the other four countries, which
constitute the major markets for tourism and the export of goods from the
OECS countries, at 2.5-2.6%. Canada's real growth rate is projected at
3.1% per year on average during the 1989-94 period. These growth rates, if
attained, would not pose a serious constraint on development in the OECS
countries. Similarly, during the 1990s inflation in terms of U.S. dollars
is projected to average about 4.4%, and the U.S. dollar is projected to
depreciate gradually in nominal terms, and neither of these trends would
seriously constrain OECS growth prospects. Were the U.S. dollar to
appreciate, growth rates in tourism and hence in the economies as a whole
would be moderated. More serious constraints could result from non-
economic factors such as adverse weather or a major oil spill in the
region: these cannot, however, be predicted, and are not included in the
projections which follow.

9.06   Prospects for tourism in the OECS, given sustained growth in
income in the areas from which most tourists originate, i.e. North America
and Europe, depend on the supply of local accommodations and of associated
infrastructure. The projections assume that financing for planned
expansions in hotels and tourist related infrastructure will be forthcoming
from private and official sources, including private direct investment from
abroad. Tourism will most likely be the main engine of growth in the 1990s
in all countries except Dominica. St. Kitts and Nevis and Grenada are
projected to experience exceptionally strong growth, albeit from a
relatively small base. Antigua and Barbuda is projected to develop the
sector further from an already strong base. St. Lucia and St. Vincent and
the Grenadines are projected to experience strong growth, building upon
existing strengths in concentrated areas. Dominica's tourism too is
projected to grow, but its existing base is so small and the absence of
white sand beaches so constraining that the contribution of the tourism
sector to overall growth is projected to be modest.

9.07   The terms of trade for agricultural commodities of importance to
the OECS countries are projected to decline in the 1990s: the prices of
bananas, sugar, nutmeg, coconut and cocoa in particular are expected to
increase at a rate that is below that of the standard manufacturing unit

value index. However, the differences are relatively small in most cases
and do not appear to indicate serious problems, exceptions being bananas
and sugar. For bananas, given possible developments in the European
Community in 1992, an example of a "banana shock" is projected for each
banana producing country in which the price of bananas falls by 50% in
1993. This banana shock is also assumed to reduce banana output by 50%.
The example illustrates that on these assumptions merchandise exports would
fall by 53% in Dominica, 47% in St. Lucia, 33% in St. Vincent and the
Grenadines and 11% in Grenada. For sugar, projections assume there is no
change in the nominal price, given the dependence of St. Kitts and Nevis on
the European Economic Community market and projected trends in the
Community's support price for sugar.

9.08   Imports for projection purposes are classified as food, other
consumer goods, petroleum, intermediate goods and capital goods. Food
imports are related to projections of personal consumption, capital goods
imports are related to projections of gross investment, and the other
categories of imports are related to projections of GDP. Elasticities of
imports with respect to GDP are high, typically 0.7 or more.

9.09   Domestic saving will not finance all of the investment that is
required if the OECS countries are to exploit fully their comparative
advantage in tourism and manufacturing, and some foreign borrowing will be
required. Infrastructure requirements for tourism and to maintain
environmental quality will be large, for example. In the scenarios which
follow for each country, foreign borrowing is assumed to take two forms,
private direct foreign investment and government long-term borrowing.
Major emphasis is placed on the debt service obligations incurred by
Government, but the servicing of private sector foreign investment must
also be considered in an overall assessment of a country's ability to
service debt.

Table IX.1: OECS - EXTERNAL DEBT SERVICE, 1988

	Debt Service (US$ million)	Exports[a]/ (US$ million)	Interest to GDP (percent)	Debt Service to Exports[b]/ (percent)	Debt Service to Government Revenue (percent)
Antigua and Barbuda	42.0	265.0	4.9	14.8	50.6
St. Kitts and Nevis	1.9	73.2	0.8	2.1	5.5
Dominica	6.2	67.9	0.9	8.6	12.4
St. Lucia	4.8	237.3	0.9	1.9	4.8
St. Vincent and the Grenadines	2.8	107.5	0.8	2.2	5.1
Grenada	8.6	83.6	1.9	8.5	16.0

a/Exports of goods and non-factor services.
b/Exports of goods, services and net private transfers.

Source: Bank staff estimates.

9.10   Most of the OECS countries to date have avoided heavy foreign
indebtedness and high debt service ratios, despite high ratios of
investment to GDP. Relatively low levels of government long-term borrowing
abroad, combined with highly concessional terms on a large proportion of
the debt that has been contracted, have resulted in low ratios of debt
service to exports of goods and non-factor services. The countries are
highly vulnerable to debt servicing problems if access to borrowing on
concessionary terms and to grants is restricted unduly.

9.11   The medium and long term external public and publicly guaranteed debt of the OECS countries increased from US$58 million in 1977 to US$551 million in 1987, an eight-fold increase (see Table 8.1 Statistical Appendix). Despite this rapid increase, debt service ratios for most countries were low or moderate in 1988. Debt service as a percent of exports of goods, non-factor services and net private transfers was about 2% in St. Kitts and Nevis, St. Lucia and St. Vincent and the Grenadines, and about 8% to 9% in Dominica and Grenada (see Table IX.1). Antigua and Barbuda's scheduled external debt service ratio was high, 15%, the result of excessive past borrowing on non-concessional terms. The country has been accumulating arrears on both interest and principal (see Table 8.1 Statistical Appendix).

9.12   The ratio of debt service to government revenue is a useful measure of the burden of debt, since the only way in the long run a government can honor its debt is through payment out of government revenues. A debt service to government ratio exceeding 10% introduces significant pressures on government finances and limits the capacity of governments to undertake needed investments. Debt service to government revenue ratios are below 10% for only three countries: St. Kitts and Nevis, St. Lucia and St. Vincent and the Grenadines. The ratios in Dominica and Grenada indicate that these countries have significant pressures on their financial position. In Antigua and Barbuda, the ratio of 51% indicates severe debt servicing problems and the need for rescheduling and/or sale of assets to the private sector (see Table IX.1).

9.13   Most of the external public and publicly guaranteed debt is on concessionary terms. Interest payments as a percent of external debt in 1988 were about 2% or less in Dominica, St. Kitts and Nevis, St. Vincent and the Grenadines and Grenada (without payment of arrears), and St. Lucia. The average interest rate payable by Antigua and Barbuda was 5%. It would have been a rate much closer to commercial terms had Antigua and Barbuda not built arrears on its interest payments. Amortization payments are also low because of grace periods and lengthy maturities. In addition to loans on concessionary terms, OECS governments receive grants on which no amortization or interest is due. The combined effect is valuable: using St. Vincent and the Grenadines as an example, if interest rates had been 10% in 1987 and the average maturity 15 years on both external debt and the US$31 million in grants received since 1978, debt service in 1987 would have cost about US$14 million rather than the US$3 million actually paid. In terms of the indicators in Table IX.1, the debt service to exports ratio would have been 20% rather than 2% and the debt service to government revenue ratio 30% rather than 5%, a radically altered and significantly severe debt burden which the country would not have been able to manage.

9.14   The projections which follow for each country are conservative. Real growth rates could turn out to be higher in the event of faster export growth, especially if private investment can be rapidly attracted to develop the countries' tourist potential, and if manufacturing activity can be quickly expanded through a concerted effort to access U.S. markets. Price projections are based on the Bank's commodity projections of long-term trends.

9.15   The growth strategy implicit in the projections requires timely policy action from governments if the projected outcomes are to be achieved. A critical component of the overall policy strategy is to ensure

that the public sector current accounts generate the level of surpluses that will contribute to the finance of gross investment required for growth, and that will allow for the honoring of existing and new debt commitments. Policies are also needed to attract private foreign investment by reducing and simplifying rules and regulations, and by providing the supporting infrastructure. Governments need to eliminate price controls and subsidies, simplify CARICOM tariff schedules, reduce restrictions on land ownership, and abandon government monopoly rights on imports and exports. Government divestment of hotels and other tourist accommodations should take place in a planned and timely manner.

9.16   The policy agenda for the OECS countries in many areas could best be carried out through common regulations and services. Many common services already exist, in areas such as the Central Bank, judicial services, drug purchasing, civil aviation, fishing, sports, agricultural diversification and export development. The most promising areas for further joint effort lie in the provision of common services (legal, economic, scientific); the development of common policies (foreign investment, financial institutions, migration, education curricula); and the undertaking of concerted actions in certain key economic areas (agricultural marketing, transportation, tourism). Specific possibilities in the short term include increased common overseas representation, coordination of customs and excise policy, a common police, and extension of common purchasing policies to public utilities. However, it is necessary to ensure that regional bodies do not proliferate unduly.

9.17   Even with effective domestic economic management and the exploitation of economies of scale at the regional level, the OECS countries as a group will need to rely on concessionary lending flows, including grants, at least for the medium term, in order to build up their capacity to generate self-sustaining growth. The effectiveness with which aid has been used in the past is a strong argument in favor of continued financial support. Governments must also be aware of the possibility of a banana shock following 1992. In the event that this were to happen, appropriate steps would be needed to reduce the shock to a minimum so that the ripple effect on the economy as a whole would be contained at manageable levels.

C. Antigua and Barbuda

9.18   Growth in the economy is projected to be driven by the projected growth in tourism, at a rate about 1 percentage point less than projected gross revenues from tourism. Manufacturing and agriculture as a share of GDP are projected to remain at low levels (about 3% each).[67] Thus, real GDP is projected to grow at 4.5% per year on average during 1989-94 and about 4% per year during 1995-2000 (see Table IX.2 below).

9.19   Gross investment as a percent of GDP is projected to decline gradually from 27% in 1989 to 23% in 2000 on the basis of a projected improvement in the efficiency of new investments. Domestic saving, on the other hand, is projected to rise as a percent of GDP, from 9% in 1989 to

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67/ Agriculture includes crops and livestock only in the projections.

31% in the year 2000, reflecting both the need and a change in government policy to rely on internally generated financial resources (see Table 8.3 Statistical Appendix). In the public sector, this will require increasing revenues as a percent of GDP and reducing expenditures, so that the public sector surplus increase from about 3% of GDP in 1988 to 5% in 1992 and reaching about 8% in 2000.

Table IX.2: ANTIGUA AND BARBUDA - ACTUAL AND PROJECTED MACROECONOMIC INDICATORS, 1988-2000

	Preliminary 1988	Projected 1989-94	Projected 1995-2000
Real Growth Rates			
Gross Domestic Product	4.9	4.5	3.7
Gross Domestic Income	4.4	4.5	3.2
Consumption	3.4	1.2	1.2
Public	6.5	2.3	1.6
Private	2.5	0.9	1.0
Fixed Domestic Investment	-23.1	2.5	2.4
Exports of GANFS	16.3	5.9	4.7
Imports of GANFS	2.4	2.5	2.5
Shares of GDP (%) [a]			
Gross Domestic Product	100.0	100.0	100.0
Gross Domestic Income	99.6	99.9	98.3
Consumption	93.0	83.6	70.0
Public	21.7	20.2	17.7
Private	71.3	63.4	52.3
Fixed Domestic Investment	27.8	26.0	23.5
Exports of GANFS	88.7	92.8	100.0
Imports of GANFS	109.5	102.4	93.6

[a] Constant prices.

Source: Tables 8.2-8.3, Statistical Appendix.

9.20   Real exports of goods and non-factor services are projected to grow at 6% per year on average during 1989-90 and 5% per year during 1995-2000, the projected growth rates in receipts from tourism, and are slightly higher than the projected growth of output. Real imports, on the other hand, are projected to grow by 2% per year on average during 1989-2000. The high level of public long term debt is projected to act as a constraint on imports and consumption, owing to the associated debt service levels. Antigua and Barbuda is relatively insensitive to changes in the terms of trade since tourism is the main generator of export revenue and price changes in tourism are projected to reflect general price changes in manufactured products.

9.21   The balance of payments is very sensitive to assumptions relating to debt service. The scenario projected in Table IX.3 above assumes some rescheduling of existing obligations, such that amortization payments average US$21 million per year during 1989-94, rising to US$50 million per year during 1995-2000. A formal rescheduling of bilateral and commercial debt on some terms is required to assist in resolving Antigua and Barbuda's current debt servicing problems. Assuming that private net direct foreign

investment averages about US$29 million per year during 1989-94, and the public external borrowing remains at a level of about US$31 million per year, the current account balance is projected to turn into surplus in 1995-2000. Total debt is projected to rise and then fall under this scenario, and the ratio of debt service to exports of goods, services and net private transfers stabilizes at around 11% (see Table IX.3). However, debt service as a proportion of government revenue is at very high levels throughout. The cost of debt service is reflected in consumption, which is projected to fall in per capita terms until 1998 (see Table 8.3 Statistical Appendix).

Table IX.3:   ANTIGUA AND BARBUDA - ACTUAL AND PROJECTED BALANCE OF PAYMENTS, 1988-2000a/
(US$ million)

	Preliminary 1988	Projected 1989-94	Projected 1995-2000
Resource Balance	-64	-38	33
Exports of G&NFS	265	381	657
Imports of G&NFS	329	419	623
Net Factor Payments	-19	-27	-32
of which: Interest on Public Debt	16	24	27
Private Transfers	19	24	30
Current Account Balance	-63	-42	31
Capital Account	53	42	-31
Net Direct Foreign Investment	16	29	11
Official Grants	2	2	2
Public Capital	-1	11	-44
Disbursements	23	31	6
Amortization	23	21	50
Other	-2	0	0
Changes in Reserves (Increase -)	10	0	0
Memorandum Item			
Total Debt (US$ million)	267.0	314.5	190.6
Total Debt/GDP	82.7	72.0	29.2
Debt Service (US$ million)	42.0	44.9	76.9
Debt Service/XGS b/	14.3	10.9	11.3
Debt Service/GDP	13.0	10.0	10.9
Debt Service/Government Revenues	50.6	36.8	36.5
Interest/GDP	4.9	5.4	3.9

a/ Total may not add due to rounding.
b/ Exports of goods, services and net private transfers.

Source: Tables 8.2-8.3, Statistical Appendix.

9.22   The policy implications of Antigua and Barbuda's debt situation are clear. The Government should cease from further direct investment in tourism and rely solely on private investment to develop the industry. Government borrowing implied in the scenario outlined above stems from the need to finance current levels of debt and does not reflect continued government investment in tourism. In order to constrain imports and consumption, and to generate sufficient internal resources to service its debt obligations, the Government will need to generate a surplus on its recurrent operations through increases in tax receipts and reductions in expenditures.

9.23   The projected scenario does not consider possible options open to Antigua and Barbuda to handle its debt problems, including more extensive rescheduling and/or sale of government assets to private investors. These options should not be discarded. However, it is important in assessing their possible impact to note that rescheduling is essentially a means to make the problem more manageable, and sales to private investors, if they are foreign, would switch the country's debt servicing problem from public to private hands. The Government reduces its debt servicing costs in terms of government revenue, but for the economy as a whole the debt would remain to be serviced through the balance of payments.

D. St. Kitts and Nevis

9.24   Projections of real GDP growth in St. Kitts and Nevis reflect the projected rapid growth in tourism, slow decline in the sugar industry, relative stagnation in the clothing segment of the manufacturing sector and expansion in electronics assembly. Private net foreign investment is assumed to finance developments in tourism, but government borrowing to support infrastructure requirements will also be required.

9.25   Overall real GDP growth is projected at 5% per year from 1989-94, falling to 4% per year during 1995-2000 (see Table IX.4 below). These high rates reflect a projected rapid increase in gross revenue from tourism of about 9% per annum, and associated levels of construction activity. Because of construction activity, real GDP growth is projected to be highest during 1989-91, over 5% per year on average. The economy as a whole is projected to undergo structural changes to the year 2000. Agriculture as a share of GDP is projected to fall from 8% in 1988 to 4% in the year 2000, owing to a projected phasing-out of sugar, and manufacturing as a share of GDP is also projected to fall, from 12% in 1988 to 6% in 2000 (sugar refining is included in manufacturing). The overall projected growth rate reflects these different prospects.

9.26   The projected tourism boom in St. Kitts and Nevis is estimated to generate high ratios of gross investment to GDP, over 28% to 1991 and declining to 23% by the year 2000 as major projects are completed. Domestic saving as a proportion of GDP is projected to be much lower in 1989 at 6%, but the ratio is projected to rise to 24% by the year 2000 (see Table 8.5 Statistical Appendix).

9.27   Rea 1 exports of goods and non-factor services are projected to grow at 7% per year on average during 1989-94, and 6% per year during 1995-2000; real import growth is projected at about 3% per year on average during 1984-94 and almost 3% per year during 1995-2000. Sugar exports are projected to remain constant to 1992, reflecting the offsetting factors of rising productivity through increased mechanization on the one hand and a falling real sugar price in the critical EEC market on the other. However, after 1992 sugar exports are projected to decline, slowly at first by 2% per year until 1996 and then 4% until the year 2000. Since sugar prices are assumed to be constant in nominal terms, these projected changes represent declines in real output and real exports. Manufacturing exports are projected to decline by 1% per year on average in real terms through 2000. The major expansion in export receipts is projected to come from tourism, with growth rates of 10% per year on average in the early years,

Table IX.4: ST. KITTS AND NEVIS - ACTUAL AND
PROJECTED MACROECONOMIC INDICATORS, 1988-2000

| | Preliminary | Projected | |
	1988	1989-94	1995-2000
Real Growth Rates			
Gross Domestic Product	5.9	5.0	4.2
Gross Domestic Income	8.7	5.1	3.9
Consumption	14.1	2.6	1.9
Public	11.2	3.8	2.1
Private	14.9	2.3	1.9
Fixed Domestic Investment	18.1	3.8	1.9
Exports of G&NFS	6.1	7.0	6.1
Imports of G&NFS	12.1	3.8	2.6
Shares of GDP (%) a/			
Gross Domestic Product	100.0	100.0	100.0
Gross Domestic Income	102.6	104.4	101.8
Consumption	101.2	93.2	91.0
Public	19.9	19.5	17.2
Private	81.3	73.7	63.8
Fixed Domestic Investment	29.0	28.6	24.7
Exports of G&NFS	59.4	63.2	71.0
Imports of G&NFS	89.6	85.0	76.7

a/ Constant prices.

Source: Tables 8.4-8.5, Statistical Appendix.

falling to 7% by the year 2000. Despite the projected falling real price of sugar, the overall impact of projected changes in the terms of trade is relatively small, the index falling from 123 in 1989 to 114 in the year 2000.

9.28   Despite the projected fast growth of exports relative to imports, projected capital requirements are such that the economy will be required to rely on foreign resources, particularly during the 1989-94 period. Private net foreign direct investment is projected to average US$9 million per year during 1989-94, falling to US$4 million per year on average during 1995-2000. Similarly, government borrowing is projected at US$6 million per year on average during 1989-94, falling to US$4 million per year during 1995-2000 (see Table IX.5 above). Grants to government are projected to decline, and be phased out by 1992, but private remittances from abroad are projected to remain at US$12 per year.

Table IX.5: ST. KITTS AND NEVIS - ACTUAL AND
PROJECTED BALANCE OF PAYMENTS, 1988-2000[a]/
(US$ million)

	Preliminary 1988	Projected 1989-94	Projected 1995-2000
Resource Balance	-33	-28	-10
Exports of G&NFS	73	110	199
Imports of G&NFS	106	138	209
Net Factor Payments	2	-1	-7
of which: Interest on Public Debt	1	2	8
Private Transfers	13	12	12
Current Account Balance	-1	-16	-6
Capital Account	18	16	6
Net Direct Foreign Investment	11	9	4
Official Grants	2	1	0
Public Capital	5	6	2
Disbursements	6	6	4
Amortization	1	0	2
Other	-1	0	0
Changes in Reserves	0	0	0
(increase -)			
Memorandum Item			
Total Debt (US$ million)	26.4	45.9	74.9
Total Debt/GDP	22.2	27.4	27.5
Debt Service (US$ million)	1.9	1.7	4.6
Debt Service/XGS b/	2.1	1.8	2.1
Debt Service/GDP	1.6	1.0	1.6
Debt Service/Government Revenues	5.5	3.4	5.9
Interest/GDP	0.8	0.9	1.1

a/ Totals may not add due to rounding.
b/ Exports of goods, services and net private transfers.

Source: Tables 8.4-8.5, Statistical Appendix.

9.29   Total long term external public and publicly guaranteed debt is
projected to increase from US$26 million in 1988 to a peak of US$78 million
in 1998 (see Table 8.5, Statistical Appendix). However, the debt service
ratio falls slowly, from 2% in 1988 to 1% in 1990-94, and then rises slowly
to 2% on average from 1995-2000 (see Table IX.5). Government borrowing is
assumed to take place on concessionary terms, i.e. 20 years at 4% with 5
years grace.

9.30   The economic prospects of St. Kitts and Nevis are favorable, assuming prudent government debt management policies. Availability of funding at concessionary terms will be required, plus reliance on private investment to finance tourism expansion. In addition, the Government will need to generate resources to service debt by restraining the growth of current expenditures and by increasing tax revenues, so that the current surplus is maintained at least at 5% of GDP to the year 2000.

E. Dominica

9.31   Growth in Dominica, unlike the other OECS countries, is not projected to be dominated by anticipated developments in tourism, because of the low existing base in the industry. Dominica's growth prospects reflect anticipated developments in agriculture, agro-processing and manufacturing. Dominica has undertaken an adjustment program with IMF and World Bank support. The program includes policy measures in the areas of trade liberalization, tax reform, and the management of the public sector. However, Dominica's long-term growth prospects hinge on the country being able to rapidly expand agricultural and manufacturing exports. For this reason the country will have to be doubly certain that its policies with respect to agriculture, agro-processing and manufacturing encourage both growth and flexibility in the 1990s, and that its public sector finances are kept in a sound position.

9.32   Overall real GDP growth is projected at 4% per year on average during 1989-94. It is projected to fall to about 3% per year on average during 1995-2000, assuming no banana shock (see Table IX.6 below). Agriculture's share of GDP is projected to increase from 24% in 1988 to 27% in the year 2000. Manufacturing's share of GDP is projected to remain roughly constant. Growth rates in tourism are projected at about 6% per year on average during 1989-94 and about 2% per year on average during 1995-2000 but the small scale of the domestic industry means that its rapid growth will have relatively little impact on overall development.

9.33   Investment as a percent of GDP is projected to fall gradually from 28% in 1989 to 25% in the year 2000 as major infrastructure projects are completed. Historically, public sector investment has averaged about 50% of gross investment, a ratio which is projected to fall to about 26% by the year 2000 as the private sector increasingly expands its investments in response to the improved incentive framework. Domestic saving as a proportion of GDP is projected to increase from 8% in 1989 to about 15% in 1990, and the public sector surplus is projected to decline from 8% of GDP in 1989 to 6% in 2000, reflecting increased local financing of public sector investment requirements (see Table 8.7 Statistical Appendix).

9.34   Real exports of goods and non-factor services are projected to grow at 5% per year on average during 1989-94, and to fall to 4% per year during 1995-2000. Real import growth is projected at 3% per year during 1989-94, and to 2% per year during 1995-2000. Dominica's key exports are bananas, soap and other coconut products, and other manufactured products. In the initial scenario, bananas are projected to grow at 6% per year in the first years, falling to 3% per year by the year 2000. Soap exports are projected at 5% annual growth, and other products at between 2% and 4%.

9.35 Net direct foreign investment is projected at US$6 million per year to the year 2000, a relatively small amount reflecting the absence of large tourism projects (see Table IX.7 below). Official grants are projected to remain at high levels and government borrowing on concessionary terms is projected to average US$6 million in 1989-94, falling to US$3 million in 1995-2000.

Table IX.6: DOMINICA - ACTUAL AND PROJECTED
MACROECONOMIC INDICATORS, 1988-2000

| | Preliminary 1988 | Projected | |
		1989-94	1995-2000
Real Growth Rates			
Gross Domestic Product	6.7	3.9	3.1
Gross Domestic Income	5.3	3.5	2.7
Consumption	8.4	3.0	2.6
Public	4.9	1.5	1.3
Private	9.8	3.5	3.0
Fixed Domestic Investment	32.7	3.0	1.8
Exports of G&NFS	11.8	5.3	3.7
Imports of G&NFS	24.5	3.3	2.3
Shares of GDP (%) a/			
Gross Domestic Product	100.0	100.0	100.0
Gross Domestic Income	98.7	96.2	94.8
Consumption	86.4	84.1	80.0
Public	24.7	22.9	20.1
Private	61.7	61.3	59.9
Fixed Domestic Investment	28.6	28.0	25.6
Exports of G&NFS	49.2	50.9	54.4
Imports of G&NFS	64.2	63.0	60.0

a/ Constant prices.

Source: Bank staff estimates and projections.

9.36 Total long-term external government debt is not projected to increase substantially, but debt service is projected at 10% of public sector current revenues during 1995-2000, a manageable ratio (see Table IX.7). To reduce this ratio further, the country would have to generate a current account surplus, implying faster export growth than that projected. This may be difficult to achieve, given Dominica's mix of exports and their growth potential.

9.37   The scenario outlined above assumes no banana shock as a result of events in the European Community in 1992. If a banana shock were to occur, the relatively favorable picture changes greatly.[68] The economy is

Table IX.7: DOMINICA - ACTUAL AND PROJECTED BALANCE OF PAYMENTS, 1988-2000[a]/

	Preliminary	Projected	
	1988	1989-94	1995-2000
Resource Balance	-23	-30	-32
Exports o' G&NFS	68	88	146
Imports of G&NFS	91	118	178
Net Factor Payments	-3	-5	-5
of which: Interest on Public Debt	2	3	4
Private Transfers	8	14	22
Current Account Balance	-18	-21	-15
Capital Account	18	22	15
Net Direct Foreign Investment	7	6	6
Official Grants	9	14	12
Public Capital	3	2	-3
Disbursements	5	6	3
Amortization	2	4	6
Other	-1	0	0
Changes in Reserves	0	-1	0
(increase -)			
Memorandum Item			
Total Debt (US$ million)	64.1	89.6	77.1
Total Debt/GDP	45.6	48.6	26.7
Debt Service (US$ million)	6.2	8.6	9.6
Debt Service/XGS b/	8.0	6.5	5.7
Debt Service/GDP	4.4	4.7	3.3
Debt Service/Government Revenues	12.4	14.9	16.7
Interest/GDP	0.9	1.6	1.3

a/ Total may not add due to rounding.
b/ Exports of goods, services and net private transfers.

Source: Bank staff estimates and projections.

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[68] The same shock is assumed to occur in all four banana producing countries in 1993: both the price and output of bananas fall to 50% of their previous value, respectively; agriculture's contribution to real GDP falls by one-half the fall in the output of bananas, as does real GDP; and imports fall by one-half the fall in exports, reflecting the import content of banana production.

projected to slow down significantly and would not be able to recover to pre-1992 real GDP growth levels. The projected current account deficit in 1993 falls from US$26 million in 1989 to US$23 million, and is projected to fall to US$19 million by the year 2000. Debt service as a proportion of exports of goods, services and net private transfers rises from 5% in the unshocked scenario in the year 2000 to 8% in the shocked scenario. In practice, the shock would reduce imports and living standards even more than projected, since the country could not sustain long-term current account deficits of this magnitude. In the longer-term, exports would also adjust to the changed circumstances, but there would undoubtedly be considerable short-term unemployment and underemployment.

F.   St. Lucia

9.38   St. Lucia's economy in 1988 reflected a diversified blend of strength in agriculture, manufacturing and tourism not found in such balance in any other OECS country. In the medium-term, growth prospects are strong in manufacturing and tourism, but over the longer-term, growth prospects will increasingly depend on developments in tourism. Private net foreign investment will be required to develop tourism, especially since capacity in the industry grew slowly in the 1980s and few new hotels were constructed.

Table IX.8: ST. LUCIA - ACTUAL AND PROJECTED
MACROECONOMIC INDICATORS, 1988-2000

	Preliminary 1988	Projected 1989-94	Projected 1995-2000
Real Growth Rates			
Gross Domestic Product	8.4	4.3	3.5
Gross Domestic Income	7.9	4.1	2.6
Consumption	1.6	3.1	3.2
Public	1.5	2.7	2.5
Private	1.7	3.3	3.5
Fixed Domestic Investment	7.6	1.0	1.8
Exports of G&NFS	25.1	4.5	3.4
Imports of G&NFS	17.2	2.6	2.7
Shares of GDP (%)[a]			
Gross Domestic Product	100.0	100.0	100.0
Gross Domestic Income	99.5	98.5	96.4
Consumption	72.7	69.1	67.2
Public	21.3	20.1	18.8
Private	51.4	49.0	48.3
Fixed Domestic Investment	37.7	37.1	28.5
Exports of G&NFS	102.2	102.7	103.3
Imports of G&NFS	112.6	108.8	99.0

a/ Constant prices.

Source: Bank staff estimates and projections.

9.39   Overall real growth is projected at about 4% per year during 1989-94, falling to 3.5% per year during 1995-2000 (see Table IX.8). Agriculture's share of GDP is projected to remain at about 13% of GDP

throughout 1989-2000, and manufacturing's share of GDP to be about 5% over the same period. Tourism, on the other hand, is projected to grow at 5% per year during 1989-94 and 3% per year during 1995-2000. Tourism and associated construction is projected to generate high levels of gross investment to GDP of over 30% in the early years of the 1990s, falling to 28% in the year 2000. Domestic saving as a proportion of GDP is projected to be roughly constant at around 29% (see Table 8.9 Statistical Appendix).

9.40   Overall, real export (goods and non-factor services) growth is projected at 4.5% per year on average during 1989-94 and 3% per year during 1985-2000. Individual export products are projected to experience different growth. Bananas are projected to grow at 4% in the initial years, falling to 3% in the year 2000. Coconut growth is projected at below 3%. Paper products are projected to experience a drop in the initial years owing to the new factory established in Dominica. Clothing exports are projected to grow to 1993, but then decline slowly. Overall, the export of goods is projected to rise by 50% between 1989 and 2000, but the export of services, mainly tourism, is projected to rise by 57% over the same period. Changes in the terms of trade are projected to be negative, but slightly so.

9.41   Net private direct foreign investment is projected to play a large role in St. Lucia, averaging US$13 million per year during 1989-94 and US$11 million during 1995-2000. Government borrowing to finance infrastructure projects is expected to be relatively high from 1989-94 at US$11 million per year, but net disbursements became slightly negative during 1995-2000 because of the need to repay loans previously contracted (see Table IX.9 below).

Table IX.9: ST. LUCIA - ACTUAL AND
PROJECTED BALANCE OF PAYMENTS, 1988-2000[a]/

	Preliminary 1988	Projected 1989-94	Projected 1995-2000
Resource Balance	-27	-32	-6
Exports of G&NFS	237	313	497
Imports of G&NFS	264	345	504
Net Factor Payments	-4	-15	-23
of which: Interest on Public Debt	2	3	3
Private Transfers	19	22	24
Current Account Balance	-13	-25	-5
Capital Account	24	25	5
Net Direct Foreign Investment	24	13	11
Official Grants	4	4	0
Public Capital	8	9	-6
Disbursements	10	11	-1
Amortization	3	2	6
Other	-12	0	0
Changes in Reserves (increase -)	11	0	0
Memorandum Item			
Total Debt (US$ million)	48.4	92.6	73.5
Total Debt/GDP	20.5	28.7	14.9
Debt Service (US$ million)	4.8	5.2	8.7
Debt Service/XGS b/	1.9	1.5	1.7
Debt Service/GDP	2.0	1.6	1.7
Debt Service/Government Revenues	4.8	4.4	4.9
Total Interest/GDP	0.9	1.0	0.6

a/ Total may not add due to rounding.
b/ Exports of goods, services and net private transfers.

Source: Bank staff estimates and projections.

9.42   Total long-term external public and publicly guaranteed debt is projected to rise sharply to US$105 million in 1993, but to decline to US$62 million in the year 2000. The debt to GDP ratio is projected to be lower in the year 2000 than in 1989 (see Table 8.9 Statistical Appendix). Government borrowing is assumed to take place at concessionary rates. The debt service to exports (goods, services and net private transfers) ratio is projected at about 2% during 1989-2000 (see Table IX.9).

9.43   Although St. Lucia has a diversified economy, a banana shock would have a major impact. In 1993 the GDP would decline 8% followed by a slow recovery to 4% in 2000, not yet reaching growth levels of the early 1990's. The current account deficit is 1993 would increase from a projected US$29 million in 1989 to US$36 million, and would decline to about US$9 million in the year 2000. Debt service as a proportion of exports would rise from 1% in 1989 and to 3% in 2000.

9.44   In the absence of a banana shock, St. Lucia's economic prospects are promising. In anticipation of a possible shock, and in order to take advantage of its comparative advantage, the country should continue to encourage private sector developments in tourism and manufacturing, and it should ensure that its public sector activities do not generate excessive debt burdens that would reduce flexibility in a time of uncertainty.

G. St. Vincent and the Grenadines

9.45   St. Vincent and the Grenadines has a tourist industry which is largely concentrated in the Grenadines. This pattern is projected to continue, with limited development on the mainland. Prospects in agriculture and manufacturing are good, but the overall growth rate is projected to be moderate.

9.46   Overall growth is projected at about 4% per year on average during 1989-94 and about 2.5% per year during 1995-2000 (see Table IX.10 below). Projected growth in tourism is 2% for 1989-94 and 1.5% for 1995-2000, slightly less than the projected overall growth rate. Manufacturing is projected to remain a strong component of GDP, its share at 8% throughout the period. Agriculture's share of GDP is projected to fall from 20% in 1988 to 16% in the year 2000. The ratio of gross investment to GDP is projected to fall from 38% in 1989 to 28% in the year 2000. Domestic saving as a percent of GDP is projected to remain roughly constant at around 17%. The public sector surplus, likewise, is projected to remain roughly constant at 8% of GDP on average.

9.47   Real exports of goods and non-factor services are projected to grow at about 4% per year during 1988-94 and 3% per year during 1995-2000. Growth prospects for individual exports vary considerably. Manufactured products produced by enclave industries and root crops have good prospects, but prospects for flour and arrowroot are less strong. Banana prospects are uncertain, as for other banana producers. The index of the terms of trade is projected to fall, from 100 in 1988 to 90 in the year 2000, implying a 2% reduction in income on this account in the latter year, the largest for any OECS country. The current account balance is projected to be in deficit by about US$15 million per year on average to the year 2000, financed by projected high levels of official grants plus private net direct foreign investment and government external borrowing (see Table

Table IX.18: ST. VINCENT AND THE GRENADINES - ACTUAL
AND PROJECTED MACROECONOMIC INDICATORS, 1988-2000

	Preliminary 1988	Projected 1989-94	Projected 1995-2000
Real Growth Rates			
Gross Domestic Product	5.8	3.8	2.5
Gross Domestic Income	6.1	3.1	2.0
Consumption	-2.2	2.2	2.1
Public	1.5	2.0	1.3
Private	-3.5	2.3	2.4
Fixed Domestic Investment	6.9	3.8	1.0
Exports of G&NFS	45.9	4.0	2.5
Imports of G&NFS	21.1	2.2	1.6
Shares of GDP (%) [a]			
Gross Domestic Product	100.0	100.0	100.0
Gross Domestic Income	100.3	96.8	95.0
Consumption	86.3	80.3	77.5
Public	24.3	22.9	21.0
Private	62.2	57.3	56.5
Fixed Domestic Investment	30.0	32.7	28.3
Exports of G&NFS	69.7	70.8	71.1
Imports of G&NFS	87.3	83.7	76.9

a/ Constant prices.

Source: Bank staff estimates and projections.

9.48   Total long term external government debt is projected to rise in absolute amount but to remain roughly constant as a share of GDP from 1989-2000 at approximately 20%, on average. Debt service as a percent of public sector current revenue declines from 5% in 1988 to 4% during 1989-94 and declines further to 2% between 1995-2000 (see Table IX.11).

9.49   The projected impact of a banana shock in St. Vincent and the Grenadines is projected to be less severe than in Dominica or St. Lucia but nevertheless of major concern. Economic growth is projected to slow down. The current account deficit in 1993 is projected to rise from US$12 million in 1992 to US$23 million, and debt service as a percent of exports (goods, services and transfers) is projected to rise from 1.5% in 1993 to about 3% in the year 2000.

Table IX.11: ST. VINCENT AND THE GRENADINES - ACTUAL AND
PROJECTED BALANCE OF PAYMENTS, 1988-2000[a]/

	Preliminary 1988	Projected 1989-94	Projected 1995-2000
Resource Balance	-27	-33	-34
Exports of GANFS	168	146	209
Imports of GANFS	134	173	243
Net Factor Payments	-3	-4	-7
of which: Interest on Public Debt	1	2	1
Private Transfers	17	22	27
Current Account Balance	-13	-16	-14
Capital Account	17	16	14
Net Direct Foreign Investment	3	5	7
Official Grants	16	11	18
Public Capital	9	1	-3
Disbursements	10	2	-2
Amortization	2	1	1
Other	-6	0	0
Changes in Reserves	-3	0	0
(Increase -)			
Memorendum Item			
Total Debt (US$ million)	46.0	57.1	38.5
Total Debt/GDP	29.4	27.8	12.4
Debt Service (US$ million)	2.8	2.4	1.8
Debt Service/XGS b/	2.2	1.5	0.8
Debt Service/GDP	1.8	1.2	0.6
Debt Service/Government Revenues	5.1	3.6	1.9
Interest/GDP	0.8	0.6	0.2

a/ Totals may not add due to rounding.
b/ Exports of goods, services and net private transfers.

Source: Bank staff estimates and projections.

9.50   The scenario projected above for St. Vincent and the Grenadines is
a conservative one based on an assessment of tourist potential in the
Grenadines and on the mainland. Given past performance, and the absence of
a banana shock, the country may be able to exceed these projections,
particularly if the environment can be made even more conducive to
developments in agriculture and manufacturing.

H. Grenada

9.51   Grenada's economy is projected to have excellent growth prospects.
Agriculture is already highly diversified and thus not dependent upon one
crop, and tourism and manufacturing have scope for considerable
development. Grenada's immediate policy problem is to stabilize its public
finances and to simplify its regulatory framework in order to provide an

environment conducive to growth. Overall real GDP growth in Grenada is
projected at about 4% per year on average during 1989-94 and 3% per year
during 1995-2000 (see Table IX.12 below). This overall rate reflects
projected growth in tourism of 7% for 1989-94 and 5% per year during
1995-2000. Manufacturing's share of GDP is projected to stay constant at
around 4% and agriculture's share is projected to remain at about 16%
throughout the period.

9.52   The ratio of gross investment to GDP is projected to rise from 31%
in 1989 to 29% in 1992, and then decreased to 25% by the year 2000.
Domestic saving as a percent of GDP is projected to rise, from 9% in 1989
to 20% by the year 2000. The public sector surplus is projected to rise
through a combinat' .1 of increases in revenue and constraints on
expenditures, to reach 8% of GDP by the year 2000 (see Table 8.13
Statistical Appendix).

Table IX.12: GRENADA - ACTUAL AND PROJECTED
MACROECONOMIC INDICATORS, 1988-2000

	Preliminary 1988	Projected 1989-94	Projected 1995-2000
Real Growth Rates			
Gross Domestic Product	6.8	3.7	3.0
Gross Domestic Income	6.5	3.6	3.0
Consumption	2.8	2.6	1.9
Public	-3.3	1.5	1.3
Private	4.6	2.9	2.0
Fixed Domestic Investment	0.9	1.3	1.1
Exports of G&NFS	3.0	5.1	4.5
Imports of G&NFS	-2.9	2.4	2.0
Shares of GDP (%)[a]			
Gross Domestic Product	100.0	100.0	100.0
Gross Domestic Income	99.7	99.2	99.1
Consumption	90.4	88.1	81.7
Public	19.2	17.6	15.9
Private	71.2	70.5	65.8
Fixed Domestic Investment	32.1	29.0	26.2
Exports of G&NFS	50.4	52.4	57.3
Imports of G&NFS	72.9	69.5	65.2

a/ Constant prices.

Source: Bank staff estimates and projections.

9.53   Real exports of goods and non-factor services are projected to
grow at 5% per year on average during 1989-94 and 4.5% per year during
1995-2000. Grenada's main exports are agricultural products: nutmeg and
mace, cocoa and bananas. Nutmeg sales have been buoyant in recent years.

However, a 1% annual growth is projected, as a result of potential competition from new nutmeg producers. Cocoa prospects are less strong, but initiatives to stimulate production are projected to generate output increases of about 3% per year. Banana prospects are uncertain, but in the absence of a banana shock Grenada in the short run is projected to achieve growth rates of 3% per year.

9.54   Net private direct foreign investment in Grenada is projected at US$9 million per year on average during 1989-2000, supplemented by government borrowing at concessionary rates of around US$3 million per year (see Table IX.13). Official grants are projected to remain at high levels, at about US$7 million per year.

9.55   Projections for Grenada indicate that total long-term external government debt will rise every year to 1993 to reach US$87 million and then decline to US$40 by the year 2000. However, the growth is moderate relative to the growth in the economy, and debt service as a percent of exports is projected to fall, from 6% in 1989-94 to 3% in 1995-2000. Debt service declines as a proportion of public sector current revenue (see Table IX.13).

Table IX.13: GRENADA - ACTUAL AND PROJECTED
BALANCE OF PAYMENTS, 1988-2000a/

	Preliminary 1988	Projected 1989-94	Projected 1995-2000
Resource Balance	-38	-39	-29
Exports of G&NFS	84	114	193
Imports of G&NFS	122	153	222
Net Factor Payments	-3	-1	0
of which: Interest on Public Debt	3	2	0
Private Transfers	15	19	24
Current Account Balance	-25	-21	-6
Capital Account	20	21	6
Net Direct Foreign Investment	17	11	7
Official Grants	5	9	5
Public Capital	6	1	-6
Disbursements	11	7	-1
Amortization	5	6	5
Other	-8	0	0
Changes in Reserves (Increase -)	5	0	0
Memorandum Item			
Total Debt (US$ million)	80.1	86.2	65.6
Total Debt/GDP	48.1	39.3	20.0
Debt Service (US$ million)	8.6	8.4	6.9
Debt Service/XGS b/	5.5	6.3	3.2
Debt Service/GDP	5.2	3.8	2.0
Debt Service/Government Revenues	16.0	12.3	6.8
Interest/GDP	1.9	1.1	0.6

a/ Totals may not add due to rounding.
b/ Exports of goods, services and net private transfers.

Source: Bank staff estimates and projections.

9.56   Because of its existing diversification in agriculture, a banana
shock is projected to have relatively little impact. Real GDP growth would
decline to 1% after a projected growth of about 4% per annum between 1989
and 1992. The debt service ratio as a percent of exports (goods, non-
factor services and net private transfers) is projected to decline from 3%
in 1993 to 2% in 2000.

9.57   While Grenada's growth prospects are promising, growth will not be
automatic. The economy has many restrictions and constraints that need to
be eliminated in the short term, and government policy must produce an
environment in which individuals can operate profitably in all areas:
agriculture, manufacturing and tourism. Because of the absence of a severe
threat from a banana shock, the government should be able to generate the
required framework and attract local and foreign entrepreneurs to take
advantage of the economic possibilities inherent in the country's current
situation.

I. Conclusions

9.58   Growth prospects for the OECS countries are highly dependent on
growth prospects in their major export markets, and on domestic policies
that will promote growth in tourism and in manufacturing. Present
projections for real growth in the major markets are favorable. However,
timely policy action from governments will be required if the projected
growth outcomes for the OECS countries are to be achieved. Key ingredients
include the generation of increased public sector current surpluses,
particularly restraint on the expenditure side. Policies are also needed
to attract foreign investment by simplifying and reducing rules and
regulations, and by providing the supporting infrastructure. Governments
need to eliminate price controls and subsidies, simplify CARICOM tariff
schedules, reduce restrictions on land ownership and abandon government
monopoly rights on imports and exports. Government divestment of hotels
and other tourism accommodations should take place in a planned and timely
manner. In addition, the OECS countries face a development challenge to
surmount potential problems in the form of a loss of preferential markets
in bananas and sugar and a reduction in the level of grants and
concessionary loans. The respective governments would need to strengthen
their long-term strategies, including the underpinning of policies
necessary for the continued economic growth of their countries. Donor
support in the implementation of these strategies would be required.

9.59   The impact of a possible banana shock in 1993 is projected to be
most severe in Dominica and St. Lucia. The impact in St. Vincent and the
Grenadines is projected to be less severe but still a matter of concern,
whereas the impact in Grenada is projected to be marginal. Assuming no
banana shock, growth prospects in all OECS countries are projected to be
favorable. Achievement of high growth in all cases will require the
adoption of favorable domestic policies, including regional initiatives
where appropriate.

9.60   In most countries, growth will require the utilization of foreign
sources of finance, both public and private. Overall, the OECS countries
had low debt service ratios in 1988. Projected scenarios to the year 2000
indicate that debt service ratios can remain manageable provided a blend of

hard and soft loans and grants is available and provided private foreign direct investment is forthcoming. However, caution will be required to ensure that countries avoid accessing commercial and suppliers credit sources of finance and that debt burdens do not increase disproportion- ately. Therefore, concessional financing from bilateral and multilateral sources as well as grants would be highly desirable to close the external financing gap oᵢ the respective countries.

9.61   Antigua and Barbuda has a strong economic base in tourism and has considerable opportunity for expansion in this area. Manufacturing and agriculture are not projected to be strong growth sectors. The key problem facing the country is to resolve the burden of the existing high level of public sector external debt, and to avoid undertaking new public sector external debt commitments on non-concessionary terms. Internal sources should be mobilized to finance the infrastructure improvements needed to support tourism, and the private sector should finance the expansion of accommodation facilities and related tourism requirements.

9.62   St. Kitts and Nevis in on the verge of becoming much more heavily oriented towards tourism. In the short to medium term, agriculture and manufacturing will provide some impetus to growth, but in the longer term tourism is projected to dominate as in Antigua and Barbuda. The sugar industry is projected to be phased-out over time owing to competitive pressures from other producers, and the garment sector of the clothing industry will probably be sharply reduced in size. The electronics sector is more favorably positioned to survive in the medium-term but long-term prospects are not strong, owing to anticipated competition from tourism for labor. The Government should ensure that public sector involvement in tourism development is limited to the provision of infrastructure in concessionary loan terms

9.63   Dominica's future growth hinges on the prospects for export expansion: tourism is not projected to be as strong a growth industry as in the other OECS countries, owing to the lack of white sand beaches, and bananas and agro-processing face uncertain futures. Agricultural exports to the other OECS countries, particularly to supply the increasing tourism, have a potential that needs to be pursued. Key public issues relate to the elimination of the anti-export bias imposed on agro-processing firms by the CARICOM trade regime, and to the encouragement of enclave industries by the continuing elimination of regulations which inhibit their development. A small tourism sector, catering to special segments of the market has some potential and should be fostered. Existing initiatives to improve the public sector's performance need to be continued and enhanced.

9.64   St. Lucia has the most balanced economy among the OECS countries, with considerable strength in agriculture, manufacturing and tourism. Agriculture is highly dependent on bananas. Manufacturing, however, is well diversified and geographically dispersed, and has displayed considerable strength in recent years on the export side. Tourist accommodation has been stagnant in terms of numbers of rooms, but projections are for considerable expansion in this area. Government support is required in the provision of infrastructure, especially road improvements and water supply, but the main responsibility on Government is to develop and maintain policies which encourage private sector initiatives, especially in manufacturing and tourism. The Government should continue to avoid public sector debt on non-concessionary terms.

9.65   St. Vincent and the Grenadines lags behind the other OECS
countries in terms of GDP per capita, but the country has considerable
prospects for growth in the longer-term. Agricultural diversification
programs appear to have had some success and manufacturing has shown some
strength in selected areas. Expansion of agro-processing industry is a
possibility, but expansion of enclave industries would appear to offer more
long term growth prospects. In tourism, growth possibilities are very
strong in the Grenadines, which have a broad appeal to a large section of
the market. Prospects for developments on the mainland are not nearly as
strong, but some expansion is probable.

9.66   Grenada has bright prospects in tourism and manufacturing, but the
country needs to surmount its administrative difficulties and develop
sound, effective policies that will be attractive to domestic and foreign
entrepreneurs. Some reform has been undertaken along these lines, but more
is required. Grenada has a highly diversified agricultural base, focussed
on bananas, nutmeg and cocoa, but the country has not been able to produce
a regulatory environment conducive to sustained development in the
agricultural sector. Central to public policy in Grenada is the attainment
of a sound fiscal policy, based on containment of expenditures and the
administration of an efficient tax system.

THE LONG TERM ECONOMIC PROSPECTS OF MONTSERRAT[1]

A. Overview

1.   This annex includes: (i) the identification of the Government of Montserrat's objectives; (ii) a discussion of the role of the five major sectors in the economy; and (iii) an analysis of key development issues. Some of the main features of Montserrat are as follows:

(a) high rates of growth of real GDP, which increased from 2% in 1984 to 12% in 1988, and which averaged 7% over this period;

(b) a small and relatively stable population size of 11,900, with rapid increases in per capita income over the last five years: per capita income jumped from US$2,913 in 1984 to US$4,554 in 1988;

(c) over the last four years, the rate of unemployment has declined to reach less than one percent in 1988;

(d) stable rates of domestic inflation average about 3.6% per year since 1984;

(e) the worsening of the visible trade deficit from US$14 million in 1984 to US$25 million in 1988, the result of an expansion in merchandise imports from US$18 million in 1984 to US$27 million in 1988 and a contraction of exports from US$5 million to US$2 million over the same period;

(f) public sector saving averaging one percent of GDP over the last five years; and

(g) economic activity dominated by tourism and construction.

B. Government Objectives

2.   Montserrat's tourist industry has not been exploited to its fullest for a number of reasons, foremost being the inadequacy of the external communications infrastructure. Tourism has been a significant contributor to growth, and assumes a central role in the long-term objective of sustained high levels of growth, with private investors assuming the lead role in developing the sector. Government's role in this

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1/ This appendix is derived from material prepared by the CDB.

framework is to create, through the provision of the necessary and supporting infrastructure, an environment conducive to the development of the sector. For example, the main components of the Public Sector Investment Program (1989-1994) are the realignment of the Blackburne Airport runway, the re-development of the Plymouth Port and the construction of a Safe Harbour at Carr's Bay.

3.   With the preoccupation on tourism development, other sectors have been overshadowed. There is a risk involved with dependence on one sector to generate economic growth, since the economy risks a downturn whenever the tourism sector declines. However, no other sector has the same potential to generate growth.

C. Role of the Major Sectors

4.   There are five leading sectors: tourism, construction, agriculture, manufacturing and finance.

Tourism

5.   This sector is the prime generator of economic activity in the economy. Some of the salient features over the last six years are: (i) the tourism sector is dominated by retirees, although there has been an upsurge in villa tourism over the past five years; (ii) by country of origin, 32%-33% of visitors to Montserrat originate in the CARICOM region, 40% in the United States, 10% in Canada and 11% in Europe; (iii) the average length of stay is 9 nights; (iv) the average annual hotel occupancy rate is approximately 45%; (v) tourism receipts have grown, on average, by 12.5% per annum with an average expenditure for the six-year period of US$479; (vi) tourism's contribution to real GDP has grown from 20.5% in 1984 to 23.4% in 1988; and (vii) the development of villa tourism is increasing the potential for greater intersectoral linkages.

6.   The future growth of the tourism sector depends on a number of factors:

> (i)   The implementation of three major infrastructural projects: (a) the Redevelopment of the Blackburne Airport, which will allow direct commuter flights to and from San Juan, and St. Maarten in 80-seater aircraft; (b) the Plymouth Port Extension, which will allow berthing of large cruise ships and cargo vessels; and (c) the construction of a Safe Harbour at Carr's Bay, which will facilitate a commercial marina.

> (ii) The successful promotion of Montserrat as a "luxury" destination, since economies of small size preclude mass tourism.

7.   The constraints to the future growth of the sector are as follows:

        (i) <u>Size of the labor force</u> - The shortage of both skilled and unskilled labor can severely restrict the implementation of major capital projects, scheduled to begin in 1989. The resultant labor force demands are likely to raise wage levels.

        (ii) <u>The high and expensive degree of marketing required</u> - Montserrat should maintain a high profile if it is to be recognized as an up-market destination. While it is expected that most of the marketing will be funded by private investors, the role of Government is also expected to increase in this area. The sector has shown strength in the past, and careful development should allow Montserrat to maintain its market share.

Construction

8.   The construction sector has been propelled by the growth of tourism. Given the retiree nature of the latter, villa and private home construction has been buoyant. Activity has also been high because of increased investment by Montserratians, residing abroad and desirous of returning home, in housing construction. During 1988 the public sector was also engaged in considerable construction activity. This level of activity is expected to increase labor market pressures, and there may be delays in the completion of proposed projects. However, Montserrat has increasingly been mobilizing labor from neighboring Caribbean countries to overcome labor shortages.

Manufacturing

9.   The manufacturing sector's contribution to real GDP has declined from 9.5% in 1984 to about 8% in 1988. The sector has been dominated by one electronics assembly plant whose exports accounted for approximately 65% of the sector's total exports between 1984 and 1987. The plant operates under an arrangement with a U.S. retailer. High trans-shipment costs for imported inputs and exports result because of the double handling costs associated with the use of Antigua and Barbuda as a stopover port. Wages are not competitive relative to those offered by the tourism and construction sectors, and migrant workers, particularly from Dominica, are used to forestall the closure of many firms.

10.   The options open to this sector are limited, and include the development of sectoral linkages, and diversification away from labor intensive to capital intensive production where a low wage level is not a major criterion in the investment decision. Any shift in policy in this direction will require foreign investors to play a key role, particularly in the acquisition of the required technology at the production and marketing levels.

Agriculture

11.   The salient features of the sector are:

    (i)   a decline in its contribution to real GDP from 4.7% in 1984 to 3.9% in 1988;

    (ii) steep land slopes which limit the scope for mechanization;

  (iii) extremely fertile soil;

   (iv) production, on a small scale, and for domestic consumption, of root crops such as yams, tannias, eddoes and white potatoes;

    (v) an agro-processing industry confined to the production, for domestic consumption, of jams and cordials;

   (vi) out-migration of labor because of the sector's low profitability, with the average age of farmers being 55; and

  (vii) inefficient management practices, unavailability of adequate financial resources and ravages from unregulated livestock on agricultural lands.

12.   Several projects currently underway are aimed at improving the island's agricultural base. The Caribbean Agricultural Research and Development Institute (CARDI) is currently involved in a program designed to increase the supply of white potatoes. Projects are also underway to improve livestock rearing and poultry production facilities, with the Caribbean Rural Development Advisory and Training Service (CARDATS) being instrumental in upgrading the stock of sheep. In spite of these projects, it is unlikely that agricultural exports will increase substantially. Instead, it is more likely that with judicious management of resources, Montserrat can become self-sufficient in the production of a number of crops, and to the extent that import substitution is possible, achieve a reduction in its food import bill.

Financial Services

13.   Up to December 1988, 246 offshore banks had licensed to operate in Montserrat, with more than 140 of these banks registered in 1988. The Government has recently decided to review its offshore legislation and to monitor the operations of existing and prospective applicants, in response to a growing concern over the legitimacy of a number of registered banks. The offshore banking sector is extremely competitive, with countries like the Bahamas and Cayman Islands already dominating a major segment of this market. Substantial growth impetus is not likely to come from this sector.

D. Development Issues

14.   Montserrat's future development will depend on the resolution of manpower shortages, the generation of sectoral linkages, and an increase in public sector savings.

Manpower Policy

15.   Montserrat's manpower problem has many facets, including the impact on planning machinery, the implications for immigration policy, and the role of the education system.

16.   Development strategy is predicted on the improvement of the existing port and airport infrastructure. These proposed investments are labor intensive, and given the island's small population size, the implementation of many of the proposed projects is expected to be delayed. To avoid such delays, there are few options, including a broader immigration policy which would allow labor mobility from OECS countries, enticing skilled Montserratians residing abroad to return, and the enforcement of criteria for project implementation that take into account the labor constraint. Strategies aimed at attracting Montserratians residing abroad revolve around the remuneration packages that can be offered.

17.   Another source of concern is the extent to which the education system satisfies the island's labor needs. The present system provides free primary and secondary education, and over the last four years, an average of 15% of government expenditure was on education. There are 11 nursery schools, 11 primary schools, 1 secondary school and a technical college, and in 1986, the secondary school curriculum was expanded to incorporate a broader range of technical and vocational skills. The technical college has expanded its program in the areas of data entry training, data processing and industrial sewing, and a training and data base center was established in 1988. There is a broad level of skills in the system, with scholarships available at the University of the West Indies. Teachers are sent to Barbados, St. Lucia and Antigua and Barbuda for training.

Sectoral Linkages

18.   The economy is devoid of significant sectoral linkages, but links between tourism and agriculture could be established through the promotion of locally grown fruits and their downstream uses, and the development of ornamental horticulture. A link between manufacturing, agriculture and tourism might be exploited through the promotion of indigenous manufactures, such as sea island cotton. The initial research impetus may have to be provided by the Government, but any substantial investment will have to come from the private sector.

Level of Public Sector Savings

19.   The success of the private sector led growth strategy will depend
on Government's ability to finance its own capital investment program.
Over the last few years, only marginal increases have been recorded in its
recurrent surplus, which averages 1% of GDP. Further gains depend on the
ability to increase the revenue base. Based on current trends, increases
in revenue will depend on the success of existing plans to develop tourism
and offshore banking services.

E. Conclusion

20.   Montserrat's future development depends on its ability to restrict
the negative impact of labor shortages and to develop some linkages between
sectors. Unless Government can resolve the constraints which the scarcity
of labor will place on the implementation of public and private sector
investment programs by opening up its labor market to the rest of the OECS,
plans to develop the tourism sector will be jeopardized.

21.   Government policies should promote the simultaneous development of
the agriculture and manufacturing sector where possible, which can benefit
from the derived demand effect of growth in the tourism sector, if sectoral
linkages can be developed.

THE MEASUREMENT OF THE FINANCING OF
PRIVATE AND PUBLIC DOMESTIC INVESTMENT

1.   This annex discusses the derivation of the estimates of public and private financing of investment analyzed in Chapter II, Section F. To assist comprehension, all data are expressed as a percent on an annual basis of the relevant period's GDP at market prices for the particular country. Gross domestic investment consists of public investment, private investment, and change in inventories. Inventory changes are arbitrarily classed as private investment in analyzing the distribution of investment. Conceptually, "gross domestic investment" is financed by "gross domestic saving" and by "net foreign borrowing", net foreign borrowing being estimated by the "resource gap." The resource gap is defined as the difference between exports and imports of goods and non-factor services.

2.   Given the data availability, gross domestic saving can be split into "Central Government saving" (the difference between current revenues and current expenditures) and "other gross domestic saving" (calculated as a residual). The resource gap can be financed in a number of ways:

    1) "Net private transfers from abroad", consistency of gifts, workers remittances, inheritance receipts, etc.

    2) Grants by foreign governments and others to the Central Government, generally termed "foreign grants to government."

    3) "Government borrowing abroad", measured as the change from December 31 to December 31 in the net external government debt outstanding.

    4) "Private investment", including the errors and omissions term.

    5) "Other non-current account transactions", calculated as a residual. This term includes transactions involving factor incomes apart from those included in net private transfers (i.e. it includes interest and dividend payments for example), commercial bank transactions, grants to other than Central Government agencies, and reserve transactions. Despite the number of items included, on a net basis this residual tends to be small. Where it is not, it is discussed.

3.   Given the methodology adopted to measure the variables discussed above, the total of sources of finance exactly matches the total of gross domestic investment. Gross domestic saving is calculated initially as a residual between gross domestic investment and the resource gap, and in the breakdown of sources of finance between domestic and foreign sources there is a residual balancing item for both gross domestic saving and foreign borrowing, as described above. (Rounding errors cause slight differences in practice).

4.   Private sources of finance are assumed to consist of "other gross domestic saving", "net private transfers" and "private investment (including errors and omissions)." Other sources are judged to be public sources. This classification is rough and ready but appears generally reasonable, given the small relative size of debatable items (such as saving by government other than the central government which is included in "other gross domestic saving", and net factor income flows and commercial bank transactions which are included in "other non-current account transactions").

5.   In summary, gross domestic investment (I) is financed by gross domestic saving (S_D) and net foreign borrowing (S_F). S_D consists of Central Government saving (S_{DG}) and other gross domestic saving (S_{DO}). S_F consists of net private transfers from abroad (S_{FT}), foreign grants to government (S_{FG}), government borrowing abroad (S_{FB}), private investment (S_{FP}) and other non-current account transactions (S_{FO}). Private sources of finance = $S_{DO} + S_{FT} + S_{FP}$. Public sources of finance = $S_{DG} + S_{FG} + S_{FB} + S_{FO}$. By definition, I = $S_D + S_F$. Table 2.8 in the Statistical Appendix contains the country-specific detail from which the other Tables are derived.

ESTIMATES OF THE REAL EXCHANGE RATE EQUATIONS

1.   In this annex results are presented of the impact on the real exchange rate of the OECS countries of changes in the resource gap, the real price of bananas and the real exchange rate between the US dollar and other major currencies, as discussed in Chapter III.

2.   The real exchange rate is defined as the ratio of a composite traded goods price index and the domestic consumer price index of each country.[1] The composite traded goods price index is a weighted average of the wholesale price indexes of the United States, the United Kingdom, West Germany, France and Japan expressed in U.S. dollars. The real price of bananas is the (nominal) export unit value of bananas deflated by the composite traded goods price index. The resource gap is the ratio of the difference between imports and exports of goods and non-factor services to GDP at current prices. The real exchange rate of the U.S. dollar against other major currencies is defined as the ratio of a weighted average of the wholesale price indexes of West Germany, France, Japan and the U.K. in U.S. dollars to the U.S. CPI.

3.   The real exchange rate equation is estimated by the method of ordinary least squares for all the countries. The equation is also estimated by the method of seemingly unrelated regression (SUR) for Dominica, Grenada, St. Lucia and St. Vincent and the Grenadines, taking into account the fact that the residuals are contemporaneously correlated among these countries. The SUR estimators are more efficient than the ordinary least squares estimators.[2] In the cases of Antigua and Barbuda, and St. Kitts and Nevis, the real exchange rate equation is also estimated by the method of instrumental variables. Given that tourism and construction have been booming in the recent past, the real exchange rate and the resource gap may be simultaneously determined. As long as tourism flows depend upon the real exchange rate, the excess of aggregate expenditure can also be a function of the real exchange rate. To avoid the simultaneity bias in the least squares estimators, a one period lag of the stayover arrivals is used as an instrumental variable for the resource gap.

1/   The exception is Antigua and Barbuda in which the GDP deflator was used instead of the CPI because of the lack of availability of the latter for the sampling period as a whole.

2/   This holds only asymptotically. In small samples, several studies show that the seemingly unrelated regression estimators are more efficient than least squares provided that the correlation among residuals is not too low.

Dominica, Grenada, St. Lucia and St. Vincent and the Grenadines

4.   The results of the estimations are presented in Tables 4.12 to
4.14 in the Statistical Appendix.[3]

5.   Dominica. Both the least squares and seemingly unrelated
regression estimates of all the coefficients are highly significant at the
usual levels. According to the estimates, a one percentage point increase
in the real price of bananas would cause a decline in the real exchange
rate (i.e. a real appreciation) of half of a percentage point. In
addition, an increase in the resource gap of one percentage point of GDP
would cause a decline in the real exchange rate of 0.3 percentage points.
Finally, a one percentage point devaluation of the U.S. real exchange rate
against other major currencies would result in an increase in the real
exchange rate of Dominica of almost 0.8 percentage points. The Box-Ljung
statistic to test the hypothesis of serial correlation of residuals
indicates that this hypothesis can be rejected.

6.   Grenada. Both the estimates of the coefficients of the resource
gap and the real exchange rate between the U.S. dollar and the other major
currencies are statistically significant. The estimate of the coefficient
of the real price of bananas is only marginally significant in the
estimation by the method of seemingly unrelated regressions. The estimates
indicate that an increase of one percentage point of GDP in the resource
gap produces a decline in the real exchange rate of Grenada of about 0.5
percentage points. In addition, a one percentage point devaluation of the
U.S. real exchange rate would produce an increase in the real exchange rate
of Grenada by about 0.8 percentage points. As in the case of Dominica, the
hypothesis of serially correlated residuals can be rejected.

7.   St. Lucia. The estimates of all the coefficients of the variables
are statistically significant at the usual levels. A one percentage point
increase in the price of bananas produces a reduction in the real exchange
rate of about 0.5 percentage points, as in the case of Dominica. In
addition, an increase of one percentage point of GDP in the resource gap
will produce a decline in the real exchange rate of about 0.4 percentage
points. Finally, a devaluation of the U.S. real exchange rate of one
percentage point will produce an increase in the real exchange rate of
St. Lucia of about 0.6 percentage points. Again, the hypothesis of serial
correlation of residuals can be rejected.

8.   St. Vincent and the Grenadines. All the estimates of the
coefficients, except the resource gap, are significant. However, when the
gross domestic product at constant prices is introduced as an additional

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3/   When an equation is estimated by instrumental variables for these
     countries, the results are close to the least squares estimates
     reported in the text (see Table 4.14).

regressor, the coefficient of the real price of bananas becomes statistically negligible. In addition, the coefficient of the resource gap becomes statistically significant when GDP at constant prices is included in the regression. The inclusion of GDP in the regression captures the effect of economic growth on the real exchange rate. When growth is biased toward the production of one good, then changes in relative prices should be expected to occur over time, since growth has effects on consumption of traded and non-traded goods. Thus, the effect of real GDP on the real exchange rate can be viewed as summarizing these underlying forces of supply and demand. The results indicate that an increase of one percentage point of GDP in the resource gap will reduce the real exchange rate by 0.2 percentage points. In addition, a devaluation of the real U.S. exchange rate by one percentage point will increase the real exchange rate by about 0.6 percentage points.

9.   In synthesis, for the four countries as a whole, both the resource gap variable and the U.S. real exchange rate are common determinants of their real exchange rates. The hypothesis that the coefficients of the resource gap are equal among countries was tested, and the hypothesis cannot be rejected at the 8% significance level.[4] In addition, the hypothesis of equality of the coefficients of the U.S. real exchange rate among countries cannot be rejected at the 40% level of significance.[5] Furthermore, the hypothesis that the coefficients of the real price of bananas are equal for Dominica, Grenada and St. Lucia cannot be rejected at the 80% level of significance.[6] These results are difficult to interpret because in 1986 only 13% of Grenada's exports were accounted for by bananas, compared to 32% in St. Vincent and the Grenadines. Even though bananas are more important for St. Vincent and the Grenadines than for Grenada, no effect of the real price of bananas is found in St. Vincent and the Grenadines.

Antigua and Barbuda and St. Kitts and Nevis

10.   The results of the estimations are presented in Tables 4.15 and 4.16 in the Statistical Appendix.

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4/ The calculated test statistic is (2.4618) and it is distributed as F(3, 24).

5/ The calculated test statistic is (0.9920) and it is distributed as F(3, 24).

6/ The value of the test statistic is (0.2205) and it is distributed as F(2, 24).

11.   Antigua and Barbuda. The trade gap variable is marginally
significant in the ordinary least squares estimates. However, when the
equation is estimated by the method of instrumental variables, the
coefficient of the trade gap is larger in absolute value and is significant
at 5% in a one-tailed test. The coefficient of the U.S. real exchange rate
is also highly significant and it indicates that an increase of one
percentage point in the U.S. real exchange rate will increase the real
exchange rate by 0.8 percentage points. There is no indication of serial
correlation of residuals.[7]

12.   St. Kitts and Nevis. Both the resource gap and the U.S. real
exchange rate are statistically significant in the estimation by least
squares and instrumental variables. As in the case of Antigua and Barbuda,
the coefficient of the resource gap is larger in absolute value when the
equation is estimated by the instrumental variables method. The
instrumental variables estimates indicate that an increase in one
percentage point of GDP in the trade gap will produce a decline of the real
exchange rate by 0.7 percentage points. On the other hand, an increase of
the U.S. real exchange rate by one percentage point will increase the real
exchange rate by 0.5 percentage points. As in the case of Antigua and
Barbuda, the hypothesis of serially correlated residuals is rejected by the
data.[8]

13.   These findings suggest that an excess of aggregate expenditure
results in domestic prices higher than otherwise. St. Kitts and Nevis is
now starting to develop tourism on a large scale. The increase in
expenditure because of the levels of investments required will make
St. Kitts and Nevis a place with a higher cost of living than otherwise.
This, in turn, will cause resources to move away from non-tourism traded
goods to increase production of non-traded goods. The resulting higher
price level will be financed through a surplus in the balance of payments,
given the monetary arrangement prevailing in the OECS countries. In this
sense, increases in the price level do not constitute a challenge to
external balance.

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[7] The resource gap is defined here as the ratio of imports minus exports
     of goods to GDP. When imports and exports of non-factor services are
     included, the coefficient is no longer statistically significant
     although its magnitude is very similar to that reported in the Tables.

[8] There is no attempt to estimate both equations jointly since the
     contemporaneous correlation of residuals across equations is on the low
     side (0.19).

ESTIMATES OF SUPPLY FUNCTIONS OF AGRICULTURAL COMMODITIES

1.   In this annex, supply functions for different agricultural commodities are estimated by ordinary least squares, using annual data. The main constraint on crop selection is data availability.[1] In some cases, dummy variables were introduced to capture the effect of some observation that seemed to be anomalous. In those cases, the dummies were chosen on the basis of a visual inspection of the time series. Different numbers of variables in each equation precluded the joint estimation of the equations through the method of seemingly unrelated regression.

Dominica

2.   Bananas. The logarithm of banana exports (in tons) is regressed against a constant, the log of the real price of bananas,[2] two dummy variables to capture the effect of hurricanes in 1979 and 1980, and a trend variable. The data covers the period 1977/86. The supply price elasticity was estimated at 1.59 and it is highly significant. (See Table A.4.1). The coefficients of the dummy variables are negative as expected and highly significant. The trend variable has a positive coefficient that is statistically significant. One interpretation of this coefficient is that during the period of the sample there were large investments in roads that had a positive effect on the production of bananas. The Box-Ljung statistic to test the hypothesis of serial correlation of residuals indicates that this hypothesis can be rejected at the 60% significance level.

3.   Coconuts. The logarithm of coconut production is regressed against a constant, the logarithm of the relative price of coconuts vis-a-vis the price of bananas and several dummy variables. The inclusion of these dummies captures the contemporaneous and lagged effect of the 1980 hurricane on production of coconuts. Thus, separate dummy variables for 1980, 1981 and 1982 are included in the regression. The results indicate that the supply price elasticity is 0.17 and is statistically significant. This indicates that coconuts and bananas are substitutes in production, which may more than nullify the borrowing constraint effect. Although the response of coconut production to its own relative price is inelastic, it is a short term elasticity since it takes several years for trees to be profitably exploited. The response of coconut tree planting to changes in

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1/ In St. Vincent and the Grenadines, for example, data on production of some non-banana crops are derived from trade data compiled by customs in Trinidad and Tobago (the main importer of non-banana crops from St. Vincent and the Grenadines). After 1984, it seems that imports of those commodities were overinvoiced to obtain addition foreign exchange. Hence, outputs of those commodities are overestimated.

2/ The export unit value of bananas is deflated by the Consumer Price Index.

relative prices has not been estimated because of the lack of data. The hypothesis of serial correlation of residuals can be rejected at the 42% significance level.

4.   Dasheens. The logarithm of output of dasheens is regressed against a constant, the logarithm of its relative price vis-a-vis the price of yams, the logarithm of the real exchange rate between Dominica and the U.S., and two dummy variables. The supply price elasticity is estimated at 0.45 and is statistically different from zero. In addition, the coefficient of the real exchange rate is negative and highly significant. That indicates that an appreciation of the real exchange rate operates as a tax on the production of commodities that are internationally traded. Again, the hypothesis of serial correlation of residuals can be rejected at the 75% significance level.

5.   Plantains. The logarithm of the production of plantains is regressed against a constant, the logarithm of its own real price, the logarithm of the real price of bananas and three dummy variables. The supply price elasticity is estimated to be 0.27 and is statistically significant. The cross-elasticity with respect to the real price of bananas is positive and significant, which indicates that they are either complements in production or that the borrowing constraint effect is highly significant, or both. The hypothesis of serially correlated residuals can be rejected at the 30% significance level.

6.   Tanias. The logarithm of the production of tanias is regressed against a constant, the logarithm of its own real price, the logarithm of the real price of yams, the logarithm of the real price of dasheens and two dummy variables. The elasticity with respect to its own price is estimated to be 0.62 and is statistically different from zero. In addition, the cross-elasticity with respect to the real price of yams is -.48 and is also statistically different from zero. The cross-elasticity with respect to the real price of dasheens is 0.57 and is highly significant. The Box-Ljung statistic indicates the rejection of the hypothesis of serial correlation of residuals at the 24% significance level.

Grenada

7.   Bananas. The logarithm of banana exports (in tons) is regressed against a constant, the logarithm of its own real price, the logarithm of the real price of cocoa and the logarithm of the real price of nutmegs. The own price elasticity is estimated to be 2.25 and is highly significant. (See Table A.4.2).[3] The cross-elasticity with respect to the real price of cocoa is 0.41 and is also highly significant. Finally, the cross-elasticity with respect to the real price of nutmegs is estimated to be -.48 and is statistically significant. These results indicate that bananas

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3/ Only estimates of supply functions of bananas and cocoa are presented. The attempts to estimate a supply function for nutmegs were not successful. This might be a result of the monopolistic position of Grenada in the world market, along with Indonesia.

and cocoa are complements in products; on the other hand, bananas and nutmegs are substitutes is production. The Box-Ljung statistic indicates that the hypothesis of serial correlation of residuals can be rejected at the 61% significance level.

TABLE A.4.1: DOMINICA -- SELECTED AGRICULTURAL SUPPLY FUNCTIONS

Banana Exports: 1977-86

$$\ln Q_B^x = 14.2948 + 1.5907 \ln\frac{PB}{CPI} - .7055 \; D1(79:1)$$
$$(6.5314) \quad (4.6465) \qquad (-6.2292)$$

$$-1.5052 \; D? \; (80:1) + .0600 \; Trend$$
$$(-13.2240) \qquad (4.3065)$$

$$R^2 = .9017 \qquad\qquad Q(5) = 3.6729$$
$$(.5974)$$

Coconuts: 1978-87

$$\ln Q_c^s = 7.8330 + .1716 \ln\frac{PC}{PB} - 1.2120 \; D1(80:1)$$
$$(175.3392) \quad (5.1490) \qquad (-24.6437)$$

$$-1.4903 \; D2(81:1) - 1.0439 \; D3(82:1)$$
$$(-25.1221) \qquad\quad (-19.8525)$$

$$R^2 = .9942 \qquad\qquad Q(5) = 4.9483$$
$$(.4222)$$

Dasheens: 1978-87

$$\ln Q_d^s = 9.8291 + .4520 \ln\frac{Pd}{Py} - .7599 \ln\frac{CPI^D}{WPI^{U.S.}}$$
$$(4.7531) \quad (2.7617) \qquad (-4.6517)$$

$$-.2069 \; D1(79:1) -.0962 \; D2(87:1)$$
$$(-3.5262) \qquad\quad (-1.7137)$$

$$R^2 = .8028 \qquad\qquad Q(5) = 2.6861$$
$$(.7482)$$

Plantains: 1978-87

$$\ln Q_p^s = 9.4967 + .2711 \ln\frac{Pp}{CPI} + .3746 \ln\frac{PB}{CPI}$$
$$(9.2683) \quad (2.6039) \qquad\quad (2.2070)$$

$$+.3807 \; D1(78:1) + .5285 \; D2(79:1) - .2668 \; D5(83:1)$$
$$(2.4475) \qquad\quad (3.8513) \qquad\quad (-2.114)$$

$$R^2 = .8181 \qquad\qquad Q(5) = 6.0858$$
$$(.2980)$$

Tanias: 1978-87

$$\ln Q_T^S = 12.5131 + .6171 \quad \ln\frac{PT}{CPI} \quad -.4834 \; \ln\frac{Py}{CPI}$$
$$(23.3899)(4.8055) \qquad \qquad (-2.5080)$$

$$+ .5743 \quad \ln\frac{Pd}{CPI} \quad -.4428 \; D1(85; 86; 87)$$
$$(3.1893) \qquad \qquad (-12.0717)$$

$$-.3025 \; D2(79:1)$$
$$(-5.5039)$$
$$R^2 = .9512 \qquad \qquad Q(5) = 6.7929$$
$$(.2365)$$

8.   **Cocoa.** The logarithm of cocoa exports (in tons) is regressed against a constant, the logarithm of its own real price, the logarithm of the real price of bananas, the logarithm of the real price of nutmegs and two dummies for 1980 and 1984. The estimated own price elasticity is .38 and is statistically significant. The cross elasticity with respect to the real price of bananas is estimated to be 1.70 and is statistically significant. The cross-elasticity with respect to the real price of nutmegs is estimated to be -.71 and is also highly significant. In addition, the hypothesis of serial correlation of residuals can be rejected at the 39% significance level.

TABLE A.4.2:   GRENADA - SELECTED AGRICULTURAL SUPPLY FUNCTIONS

Banana Exports: 1977-87

$$\ln Q_B^X = 10.3149 + 2.1114 \quad \ln\frac{PB}{CPI} + .3857 \quad \ln\frac{Pc}{CPI}$$
$$(287.6779) \; (3.9373) \qquad \qquad (5.1395)$$

$$-.4245 \quad \ln\frac{Pn}{CPI}$$
$$(-3.6040)$$

$$R^2 = .8977 \qquad \qquad Q(5) = 4.6595$$
$$(.4588)$$

Cocoa Exports: 1977-86

$$\ln Q_c^X = 4.8741 + .3755 \quad \ln\frac{Pc}{CPI} - .7080 \quad \ln\frac{Pn}{CPI} +$$
$$(108.6339)(3.7112) \qquad \qquad (-3.7313)$$

$$+1.7175 \quad \ln\frac{PB}{CPI} - .3846 \; D1(84:1)$$
$$(2.5533) \qquad \qquad (-3.1176)$$

$$-.2690 \; D2(80:1)$$
$$(-2.7211)$$

$$R^2 = .7097 \qquad \qquad Q(5) = 5.2233$$
$$(.3892)$$

St. Lucia

9.   Bananas. The logarithm of banana exports (in tons) is regressed against a constant, the logarithm of the real price of bananas and two dummy variables. These dummies attempt to capture the effects of the 1980 hurricane and bad weather conditions in 1987 on banana production. The results indicate that the price elasticity is 2.75 and is statistically significant. (See Table A.4.3). In addition, the value of the Box-Ljung statistic indicates the absence of serial correlation of residuals at the 62% significance level.

10.   Cocoa. A cocoa supply function is estimated with a constant, the logarithm of the relative price of cocoa vis-a-vis the price of bananas and several dummy variables as regressors. The results indicate that the supply price elasticity is 0.37 and is statistically different from zero. The hypothesis of serial correlation of residuals is rejected at the 61% significance level.

TABLE A.4.3:   ST. LUCIA - SELECTED AGRICULTURAL SUPPLY FUNCTIONS

Banana Exports: 1977-87

$$\ln Q_B^X = 18.1579 + 2.7517 \ln\frac{PB}{CPI} - .4531 \, D1(80{:}1)$$
$$(3.3197) \quad (2.3857) \quad\quad (-1.6303)$$

$$-.0956 \, D2(87{:}1)$$
$$(-.2732)$$

$$R^2 = .47 \quad\quad\quad Q(5) = 3.4863$$
$$(.6255)$$

$$\ln Q_B^X = 17.2387 + 2.5647 \ln\frac{PB}{CPI} - .4508 \, D1(80{:}1)$$
$$(4.2510) \quad (2.9810) \quad\quad (-1.7256)$$

$$R^2 = .53 \quad\quad\quad Q(5) = 3.5181$$
$$(.6207)$$

Cocoa: 1977-87

$$\ln Q_c^S = 3.4176 + .3742 \ln\frac{Pc}{PB} - .4624 \, D1(80{:}1)$$
$$(23.2174) \quad (4.7651) \quad\quad (-2.9446)$$

$$-1.1630 \, D2(80{:}1) + .3561 \, D3(78{:}1)$$
$$(-7.2102) \quad\quad\quad (2.1756)$$

$$R^2 = .92 \quad\quad\quad Q(5) = 3.5570$$
$$(.6148)$$

$$\ln Q_c^S = 5.2662 + .4055 \ln\frac{Pc}{CPI} - .4176 \, D1(81{:}1)$$
$$(23.7215) \quad (5.4903) \quad\quad (3.0036)$$

$$-1.1118 \; D2(80{:}1) \quad + \quad .3450 \; D3(78{:}1)$$
$$(-7.6060) \qquad\qquad (2.3609)$$

$$R^2 = .9402 \qquad\qquad Q(5) = 4.2156$$
$$(.5788)$$

St. Vincent and the Grenadines

11.   Arrowroot. The logarithm of the production of arrowroot is regressed against the logarithm of its own real price and the logarithm of the real price of bananas. The results indicate that the supply price elasticity is 1.44 and is statistically significant. (See Table A.4.4). In addition, the cross-elasticity with respect to the price of bananas is estimated to be -1.52 and is also highly significant. The negative sign of this elasticity indicates significant substitution effects between production of arrowroots and bananas. The value of the Box-Ljung statistics indicates that the hypothesis of residual auto-correlation can be rejected at the 18% significance level.

12.   Coconuts. The logarithm of the production of coconuts is regressed against a constant, a one period lag of the logarithm of the relative price of coconuts vis-a-vis the price of bananas and a dummy variable taking values of one in 1979 and zero elsewhere. The supply price elasticity is estimated to be 1.21 and is statistically different from zero. The hypothesis of serially correlated residuals can be rejected at the 77% significance level.

13.   Mangoes. The logarithm of the production of mangoes is regressed against a constant, the logarithm of its own real price, the logarithm of the real price of bananas and several dummy variables. The results indicate significant elastic response of the supply of mangoes to its own real price (1.45). In addition, strong substitution effects exist between the production of mangoes and bananas (-2.78). The Box-Ljung statistic indicates no serial correlation of residuals.

14.   Plantains. The logarithm of the production of plantains is regressed against a constant, the logarithm of its own real price, the logarithm of the real price of bananas, the logarithm of the real price of livestock and two dummy variables. The supply price elasticity is estimated to be 3.31 and highly significant. In addition, the cross-price elasticity with respect to the relative price of bananas is 2.33 and is also statistically different from zero. Furthermore, the cross-price elasticity with respect to the relative price of livestock is -4.70 and highly significant, indicating strong substitution effects between the production of livestock and plantains. The Box-Ljung statistics indicates absence of serial correlation of residuals.

15.   Sweet Potatoes. The logarithm of the production of sweet potatoes is regressed against a constant, the logarithm of its own real price and a

dummy variable taking values equal to one in 1985 and zero elsewhere.[4] The response of the supply of sweet potatoes to its relative price is estimated to be very elastic (2.33). The hypothesis of serial correlation of residuals can be rejected at the 54% significance level.

16. Yams. The logarithm of the production of yams is regressed against a constant, the logarithm of its own real price, the logarithm of the real price of bananas and two dummy variables.[5] The supply price elasticity is estimated to be 1.81 and the cross-elasticity with respect to the real price of bananas is -1.25. This indicates that the borrowing constraint effect of a change in the price of bananas has not been significant during the sampling period.

TABLE A.4.4: ST. VINCENT AND THE GRENADINES - SELECTED
AGRICULTURAL SUPPLY FUNCTIONS

Bananas: 1977-87

$$\ln Q_B^S = 21.7646 + 1.6813 \ln\frac{PB}{CPI} -.4642 D1(79:1)$$
$$\quad\quad (6.8580) \quad (3.3285) \quad\quad\quad (-3.6977)$$

$$\quad\quad -.5189 D2(80:1) \quad -1.1717 D3(87:1)$$
$$\quad\quad (-4.3606) \quad\quad\quad (-2.9934)$$

$$R^2 = .7817 \quad\quad\quad\quad Q(5) = 2.0948$$
$$\quad\quad\quad\quad\quad\quad\quad\quad (.8359)$$

Mangoes: 1977-87

$$\ln Q_m^S = -.7668 + 1.4528 \ln\frac{Pm}{CPI} -2.7751 \ln\frac{PB}{CPI}$$
$$\quad\quad (-.2501) \quad (2.3306) \quad\quad\quad (-3.4050)$$

$$\quad\quad -1.3611 D1(80:1) + 1.0137 D2(84:1)$$
$$\quad\quad (-10.9685) \quad\quad\quad (3.2052)$$

$$\quad\quad +.6486 D3(85:1) + 2.3248 D4(87:1)$$
$$\quad\quad (3.5315) \quad\quad\quad (3.6116)$$

$$R^2 = .9405 \quad\quad\quad\quad Q(5) = 2.9856$$
$$\quad\quad\quad\quad\quad\quad\quad\quad (.7022)$$

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[4] This dummy is included to capture the effects of overinvoicing of imports of sweet potatoes by Trinidad and Tobago after 1984. Only the dummy for 1985 is statistically significant. In addition, when the logarithm of the real price of bananas is included, its coefficient is not statistically significant.

[5] One of the dummy variables takes values equal to one during 1985/87 and zero elsewhere. As such, it attempts to capture the effect of the over-invoicing of imports by Trinidadians. The results indicate that its coefficient is positive and highly significant.

Sweet Potatoes: 1977-87

$$\ln Q_{SP}^S = 22.2813 + 2.3346 \ln\frac{PSP}{CPI} + 1.2316 \, D1(85{:}1)$$
$$\qquad\quad (7.1808) \quad\ (4.4930) \qquad\quad (3.1637)$$

$$R^2 = .7060 \qquad\qquad Q(5) = 4.0592$$
$$\qquad\qquad\qquad\qquad\qquad (.5409)$$

Arrowroot: 1977-87

$$\ln Q_A^S = 10.1168 + 1.4391 \ln\frac{PA}{CPI} - 1.5231 \ln\frac{PB}{CPI}$$
$$\qquad\quad (2.1707) \quad\ (3.0465) \qquad\ (-5.0036)$$

$$R^2 = .8669 \qquad\qquad Q(5) = 7.5925$$
$$\qquad\qquad\qquad\qquad\qquad (.1802)$$

Coconuts: 1977-87

$$\ln Q_c^S(t) = 8.9348 + 1.2029 \ln\frac{Pc}{PB}(t-r) + .5889 \, D1(79{:}1)$$
$$\qquad\qquad (106.5512) \quad (2.6589) \qquad\qquad (4.5603)$$

$$R^2 = .6804 \qquad\qquad Q(5) = 2.5622$$
$$\qquad\qquad\qquad\qquad\qquad (.7671)$$

$$\ln Q_c^S(t) = 8.9020 + 1.2129 \ln\frac{Pc}{PB}(t-r) + .6212 \, D1(79{:}1)$$
$$\qquad\qquad (120.2380) \quad (3.1245) \qquad\qquad (5.5403)$$

$$\qquad\qquad + .1397 \, D2(80, \, 81{:}1)$$
$$\qquad\qquad\quad (1.8732)$$

$$R^2 = .7647 \qquad\qquad Q(5) = 1.4067$$
$$\qquad\qquad\qquad\qquad\qquad (.9236)$$

Plantains: 1977-87

$$\ln Q_{sp} = 43.0874 + 3.3127 \ln\frac{Pp}{CPI} + 2.3274 \ln\frac{PB}{CPI}$$
$$\qquad\quad (3.9986) \quad\ (3.1056) \qquad\quad (2.0681)$$

$$\qquad -4.6981 \ln\frac{PL}{CPI} + .6432 \, D1(79; \, 80)$$
$$\qquad (-7.7280) \qquad\quad (3.0267)$$

$$\qquad -1.5970 \, D2(87{:}1)$$
$$\qquad\ (-1.8670)$$

$$R^2 = .8503 \qquad\qquad Q(5) = 2.9388$$
$$\qquad\qquad\qquad\qquad\qquad (.7094)$$

Yams: 1977-87

$$\ln Q_y = 8.8057 + 1.8056 \ln\frac{Py}{CPZ} - 1.2546 \ln\frac{PB}{CPZ} + 1.1907 \, D1 \, (85;86;87)-$$
$$\qquad\ (3.6296) \ (4.3177) \qquad\quad (-2.9288) \qquad\quad (6.1342)$$

$$\qquad - .6367 \, D2 \, (80{:}1)$$
$$\qquad\ (-2.6778)$$

$$R^2 = .8470 \qquad\qquad (Q/5) = 4.0404$$
$$\qquad\qquad\qquad\qquad\qquad (.5436)$$

AGGREGATE AGRICULTURAL SUPPLY FUNCTIONS

1.   In this annex, estimates are presented of the impact on agricultural output of an increase in the domestic price level vis-a-vis the price of agricultural output. These relative price changes would accompany an appreciation of the real exchange rate resulting from an increase in the resource gap.

2.   Aggregate agricultural supply functions are estimated for all the OECS countries except Grenada, for which data on aggregate agricultural production are not available. The supply functions are specified in log-linear form and agricultural production is regressed against a constant, the relative price of agriculture vis-a-vis the price of non-traded goods (i.e. the Consumer Price Index), the relative price of livestock, and several dummy variables designed to capture bad weather conditions. Agricultural production comes from the National Accounts and covers the period 1977/87. Prices are the Gross Domestic Production deflators for agriculture and livestock. The supply functions are estimated by ordinary least squares. (See Table A.4.5).

3.   _Antigua and Barbuda_. The logarithm of agricultural production is regressed against a constant, the logarithm of its relative price lagged one period and a dummy variable for 1978.[1] The supply price elasticity is estimated to be 0.59 and is statistically different from zero at the usual levels of significance. The Box-Ljung statistic indicates that the hypothesis of serial correlation of residuals can be rejected at the 70% significance level. The relative price of livestock is not statistically significant.

4.   _Dominica_. The supply price elasticity is estimated to be 1.18 and is statistically different from zero at the usual levels of significance. The relative price of livestock was not significant and was dropped from the equation. The Box-Ljung statistic indicates the rejection of serial correlation of the residuals at the 92% significance level.

5.   _St. Kitts and Nevis_. The logarithm of production of non-sugar crops is regressed against a constant, the logarithm of its own relative price lagged one period and several dummies. The response of non-sugar crops output to its relative price is 1.2 and is highly significant. Relative prices of several substitutes were included in the regression (prices of livestock and sugar) but they were not statistically different from zero. The Box-Ljung statistic indicates the rejection of the hypothesis of serially correlated residuals at the 37% significance level.

1/ The deflator of the price of agricultural output is the Gross Domestic Product deflator. Alternatively, the price of agricultural output was deflated by the implicit deflator of construction in GDP and the results were very similar.

6.   **St. Vincent and the Grenadines.** The logarithm of agricultural output is regressed against a constant, the logarithm of its own relative price, the logarithm of the relative price of livestock production and three dummy variables. The coefficients of the relative prices of agriculture and livestock production are both highly significant but with different signs.

7.   **St. Lucia.** The logarithm of agricultural production is regressed against a constant, the logarithm of its own relative price, the logarithm of the relative price of livestock and three dummy variables. The estimated supply price elasticity is 1.61 and is highly significant. The cross elasticity with respect to the price of livestock is statistically significant and is estimated to be -1.16. This indicates strong substitutability between agriculture and livestock production. Again, the hypothesis of serially correlated residuals can be rejected at the 57% significance level.

Table A.4.5: AGGREGATE AGRICULTURAL SUPPLY FUNCTIONS.

Antigua and Barbuda: 1978-87

$$\ln Q_A^{(t)} = .7906 + .5899 \ln \frac{PA}{CPI}(t-1) + .6204 \ D1(78:1)$$
$$\quad\quad (13.0246)(2.4498) \quad\quad\quad\quad (5.8028)$$

$$R^2 = .7801 \quad\quad\quad\quad Q(5) = 2.9778$$
$$\quad\quad\quad\quad\quad\quad (.7034)$$

$$\ln Q_A^{(t)} \quad .8366 + .6945 \ln \frac{PA}{Pc}(t-1) + .5744 \ D1(78:1)$$
$$\quad\quad (18.8974)(2.5133) \quad\quad\quad\quad (5.8852)$$

$$R^2 = .7853 \quad\quad\quad\quad Q(5) = 3.2821$$
$$\quad\quad\quad\quad\quad\quad (.6566)$$

Dominica: 1977-87

$$\ln Q_A^{(t)} = 2.5797 + 1.1757 \ln \frac{PA}{CPI}(t) - .6490 \ D1(79:1)$$
$$\quad\quad (9.8957) \ (2.3569) \quad\quad\quad\quad (-3.7273)$$

$$\quad\quad -.3754 \ D2(80:1)$$
$$\quad\quad (-2.6201)$$

$$R^2 = .5623 \quad\quad\quad\quad Q(5) = 1.3956$$
$$\quad\quad\quad\quad\quad\quad (.9248)$$

St. Kitts and Nevis: 1978-87

$$\ln Q_{ns}(t) = .8198 + 1.2110 \ln\frac{Pns}{CPI}(t-1) - .4097 \, D1(77{:}1)$$
$$\qquad (10.0826) \ (3.6161) \qquad\qquad (-2.9788)$$

$$\qquad\qquad -.3865 \, D2(83; \, 84)$$
$$\qquad\quad (-5.0701)$$

$$\qquad R^2 = .7869 \qquad\qquad\qquad Q(5) = 5.4007$$
$$\qquad\qquad\qquad\qquad\qquad\qquad\qquad (.3690)$$

St. Lucia: 1977-87

$$\ln Q_A(t) = 3.0512 + 1.6064 \ln\frac{PA}{CPI}(t) - 1.1640 \ln\frac{PL}{CPI}(t)$$
$$\qquad (40.7111) \ (3.6715) \qquad\qquad (-2.7852)$$

$$\qquad\qquad -.2939 \, D1(77{:}1) \ -.4604 \, D2(80{:}1) \ -.5608 \, D3(81{:}1)$$
$$\qquad\quad (-2.6592) \qquad\quad (-4.3762) \qquad\qquad (-5.4118)$$

$$\qquad R^2 = .8470 \qquad\qquad\qquad Q(5) = 3.8884$$
$$\qquad\qquad\qquad\qquad\qquad\qquad\qquad (.5656)$$

St. Vincent and the Grenadines: 1977-87

$$\ln Q_A(t) = 2.7019 + .5740 \ln\frac{PA}{CPI}(t) - .8385 \ln\frac{PL}{CPI}(t)$$
$$\qquad (61.5245)(6.0015) \qquad\qquad (-12.1570)$$

$$\qquad\qquad -.2078 \, D1(77{:}1) \ -.1578 \, D2($$
$$\qquad\quad (-6.1650) \qquad\quad (-4.9211)$$

$$\quad (79; \, 87) \ -.4811 \, D3(80{:}1)$$
$$\qquad\quad (-14.5778)$$

$$\qquad R^2 = .9867 \qquad\qquad\qquad Q(5) = 3.4869$$
$$\qquad\qquad\qquad\qquad\qquad\qquad\qquad (.6254)$$

PAST TRENDS AND PROJECTIONS OF TOURISM IN THE OECS COUNTRIES

A. Overview

1.   This annex contains detailed information on past trends in tourism
in the OECS countries and an analysis of projections for the sector to
1999. The importance of the sector to future growth prospects justifies
detailed examination. Traffic trends are analyzed by type of visitor and
by nationality, since these have important implications for revenue
generation. Employment estimates for the sector include those who work in
commercial establishments and in direct tourism activities such as local
transport, restaurants and water sports. Excluded are second-round
employment effects in agriculture and manufacturing, and employment in
construction activities related to tourism. Projections are made for 1994
and 1999 relating to visitors using commercial accommodations, other
visitors, expenditures by type of visitors and employment.

B. Tourism in Grenada

Traffic Trends

2.   Even though tourism has been a leading economic activity in
Grenada since the late-1960s, traffic trends have been discontinuous
because of various exogenous factors. Stayover visitor traffic,[1] after
peaking at about 38,000 in 1972, fell back to about 14,000 in 1974
following the 1973/74 oil shock and a period of local political and social
instability. Thereafter, traffic climbed steadily to over 32,000 in 1979
when the second oil shock, together with further local uncertainties,
constrained continued growth (see Table A.6.1). Stayover visitor arrivals
drifted downwards in the early-1980s, at a time of economic recession in
the U.S. and elsewhere, and reached 23,000 in 1982. The apparent recovery
to 32,458 in 1983 derives from the inclusion in official statistics for the
first time of visiting Grenadians resident abroad, amounting to 9,121 such
arrivals, the exclusion of which would show no increase over the previous
year. By 1985, total stayover traffic (including Grenadians) jumped 32% to
51,979 and traffic growth continued in 1986 to an annual total of just
under 60,000, an annual growth rate of about 14%. After a short pause in
1987, traffic growth in 1988 went ahead by 8% to reach an all-time high of
61,795. There is some evidence that accommodation capacity constraints in
the high season prevented even higher traffic growth.

1/ All arrivals staying overnight in the country.

Table A.6.1: GRENADA - STAYOVER VISITOR ARRIVALS, 1975-88

Year	Number	Percent Growth
1972	38,058	15.9
1973	32,192	(15.4)
1974	14,723	(54.3)
1975	21,059	43.0
1976	24,551	16.6
1977	28,536	16.2
1978	32,336	13.3
1979	32,252	(0.3)
1980	29,418	(8.8)
1981	25,072	(14.8)
1982	23,270	(7.2)
1983	32,458 [a/]	39.5
1984	39,503	21.7
1985	51,979	31.6
1986	59,360	14.2
1987	57,406	(3.3)
1988	61,795	7.6

[a/] Includes for the first time Grenadians resident abroad.

Source: Mission estimates.

3.   Within these totals, the distribution of arrivals by nationality
has been changing: before 1984, traffic was relatively evenly balanced
between North American, European (including British) and Caribbean. There-
after, arrivals from other Caribbean countries and of Grenadians resident
abroad shot up to 33,000 in 1987 but declined to 30,000 in 1988. Such
arrivals constituted 57% of the total in 1987 but declined sharply to under
50% in 1988 when non-regional traffic continued to increase (see Table
A.6.2).

4.   The share of Caribbean visitors and returning Grenadians in total
arrivals has significance because their demand patterns for goods and
services within Grenada usually vary from those of non-regional visitors
and these differences must be taken into account in the provision of
appropriate facilities. For example, of all visitors arriving at Point
Salines airport in 1987 and 1988, 55-60% were intending to stay in private
homes and the remaining 40-45% in hotels, guesthouses and yacht charters
(see Table A.6.3). Clearly, most of the Caribbean visitors and virtually
all the Grenadians resident abroad stay with friends and relatives and are
thus independent of the availability of commercial accommodations.

Table A.6.2: GRENADA - STAYOVER ARRIVALS BY NATIONALITY, 1987-88

Source	1987		1988	
	Number	% of Total	Number	% of Total
CARICOM	18,454	32.1	15,849	25.6
Grenadians Abroad	14,624	25.5	14,624	24.0
USA	10,296	18.0	12,640	20.5
UK	5,232	9.1	7,139	11.6
Europe	4,381	7.6	6,231	10.1
Canada	2,410	4.2	3,047	4.9
Medical Students	545	0.9	484	0.8
Venezuela	524	0.9	447	0.7
Others	940	1.6	1,113	1.8
Total	57,406	100.0	61,795	100.0

Source: Mission estimates.

5.   A significant phenomenon is the recent growth in arrivals from the
U.K. and Europe which in 1988 exceeded traffic from the U.S. Because the
average length of stay is longer, the total volume of the tourist trade
from U.K./Europe (as expressed in bednights) is about double the U.S.
figure. Also, more visitors from U.K./Europe come in the summer months
than from the U.S., thereby somewhat mitigating seasonality.

Table A.6.3: GRENADA - VISITOR ARRIVALS AT POINT SALINES AIRPORT
              BY INTENDED ACCOMMODATION, 1987-88

Intended Accommodation	1987		1988	
	Number	% of Total	Number	% of Total
Hotels	16,936	32.1	20,606	35.5
Guesthouses	2,182	4.1	2,342	4.0
Private Homes	31,964	60.5	32,020	56.2
Yacht Charters	1,743	3.5	2,487	4.3
Total	52,825	100.0	58,055	100.0

Source: Mission estimates.

6.   Stayover traffic to Grenada nevertheless remains highly seasonal.
The peak months for arrivals are July-August and December (see Table A.6.4)
coinciding with school holidays when Caribbean and Grenadians travel most.
Non-regional vacation arrivals, and thus the majority of those staying in
hotels, peak in the winter months from December to April which is the
preferred vacation period for most such visitors. However, there is a
continuing small flow of non-regional business visitors throughout the
year.

7.   Cruise passenger visits have throughout been an element in
Grenada's tourist trade. After recovering from the 1973-74 oil shock,
cruise passengers' visits totalled well over 100,000 annually from 1976
until 1980, increasing steadily each year (see Table A.6.5). Such visits
halved in 1981 and declined to 50,000 in 1983 and about 34,000 in 1984,
while cruise ship calls went down from a peak of 236 in 1980 to 65 in 1984.

Table A.6.4: GRENADA - STAYOVER ARRIVALS BY MONTH, 1987-88

| | 1987 | | 1988 | |
	Number	% of Total	Number	% of Total
January	4,633	8.1	,134	8.3
February	4,052	7.1	,275	8.5
March	4,610	8.0	,903	9.5
April	4,997	8.7	4,509	7.3
May	3,543	6.2	4,307	7.0
June	4,117	7.2	3,920	6.3
July	6,565	11.4	6,847	11.1
August	8,742	15.2	7,726	12.5
September	2,863	5.0	3,636	5.9
October	3,316	5.8	3,691	6.0
November	3,873	6.7	4,361	7.1
December	6,095	10.6	6,486	10.5
Total	57,406	100.0	61,795	100.0

Source: Mission estimates.

This downward trend was exacerbated by the military intervention in October
1983, which eliminated cruise ship calls during the fourth quarter of 1983
and severely reduced them in the first quarter of 1984, the two quarters
being the high season for cruise operations. However, cruise traffic has
rebounded rapidly in the last few years, virtually quadrupling to 135,980
passengers in 1988. Since this latter figure is still well below the peak
cruise passenger traffic of 145,594 in 1980, further increases in such
traffic are clearly possible.

Receipts and Employment

8.   Gross receipts from stayover visitors in 1988 are estimated at EC$69 million, or an average of EC$1,122 per visitor. Visitor expenditure surveys indicate that visitors staying in commercial accommodations spend nearly three times as much as those staying elsewhere; namely EC$1,683 per visit for the former and about EC$643 per visit for the latter. Cruise passengers spent ashore another EC$7 million or an average of EC$49. Thus, total receipts from all visitors in 1988 is estimated at EC$76 million, the highest amount ever recorded (see Table A.6.6).

Table A.6.5: GRENADA - CRUISE TRAFFIC, 1976-88

| Year | Ship Calls | Passengers Aboard[a] | |
		Number	% Change
1976	187	106,882	25.1
1977	184	108,465	1.5
1978	188	116,331	7.2
1979	200	138,654	19.2
1980	236	145,594	5.0
1981	131	77,596	(46.7)
1982	103	62,119	(19.9)
1983	80	50,217	(19.2)
1984	65	34,166	(32.0)
1985	173	90,701	165.5
1986	202	108,079	19.2
1987	260	127,214	17.7
1988	234	135,980	6.8

[a] Not all passengers necessarily go ashore.

Source: Mission estimates.

9.   Employment directly in the to ism sector in 1988 amounted to an estimated 1,526 of which 916 were in commercial accommodation establishments and 610 in other tourism activities such as local transport, restaurants, entertainment, handicrafts, water sports, etc. Additional employment created elsewhere in the economy by tourism demand was another 300-400 plus a fluctuating number in the construction industry working on tourism projects.

Table A.6.6: GRENADA - GROSS RECEIPTS FROM VISITORS, 1976-83

Year	Stayover (EC$ million)	Cruise (EC$ million)	Total (EC$ million)	Total percent growth
1976	14.4	2.1	16.5	5.8
1977	19.4	2.2	21.6	30.9
1978	33.6	5.8	39.4	82.4
1979	46.6	6.9	53.5	35.8
1980	49.2	5.1	54.3	1.5
1981	44.0	2.7	46.7	(14.0)
1982	44.4	2.2	46.6	(0.2)
1983	36.4	3.3	39.7	(14.8)
1984	44.3	2.2	46.5	17.1
1985	58.3	6.0	64.3	38.3
1986	64.3	7.5	71.8	11.7
1987	64.4	6.3	70.7	(2.5)
1988	69.3	6.7	76.0	7.5

Source: Mission estimates.

Projections to 1999

10.   In early 1989, there were hotel projects with a capacity of 526
rooms in various stages of development. These are expected to become
operational during the 1990-94 period. Extensions to existing hotels are
expected to be constructed and become available in the early part of the
period while a proposed 300-room hotel, and probably another 100-room
hotel, cannot be expected to become operational, and thus contribute to
increased traffic flows, until later in the period. The gestation period
for major hotel investments is 2 1/2 to 3 years, six months to one year for
preconstruction activities and about two years for actual construction,
equipment and furnishing. After 1994 the outlook for additional
accommodation capacity being installed is more uncertain. However, a
reasonable assumption is that about as much additional capacity would be
installed during the second half of the decade as the first. The scenario
for hotel development would thus be somewhat as follows: 763 rooms in
1989; 1289 in 1994 and 1815 in 1999 (see Table A.6.7).

11.   Assuming that hotel capacity increases in accordance with the
above scenario, the annual available bednights would increase from 560,000
bednights in 1989 to 940,000 in 1994 and 1,320,000 in 1999. In order to
achieve an equivalent increase in stayovers in commercial accommodations, a
major marketing effort and a number of other steps discussed below would be
required. If the 1988 average bed occupancy rate of 48.5% were maintained,
the total of rented bednights would increase from 240,000 in 1989 to
400,000 in 1994 and 560,000 in 1999. Arrivals staying in commercial
accommodations would increase from 28,000 in 1989 to 47,000 in 1994 and

Table A.6.7: GRENADA - PROJECTED TRAFFIC THROUGH COMMERCIAL
ACCOMMODATIONS, 1989-99

Year	Available Rooms (number)	Available Bednights ('000)	Rented Bednights ('000)	Arrivals[a] ('000)
1989	763	557	236	27.7
1994	1289	941	399	46.9
1999	1815	1325	562	66.1

[a] Average length of stay 8.5 days.

Source: Mission estimates and projections.

12. While the commercial accommodations sector has the greatest potential for future traffic growth and is the most remunerative, arrivals staying in private homes are expected to increase but at declining growth rates. Thus, such arrivals, which totalled 33,272 in 1989 are expected to increase by an annual average of 5% to reach nearly 35,000 in 1994 and nearly 37,000 in 1999 (see Table A.6.8).

13. About 2,700 visitors arrived by air in 1989 to join yacht charters in Grenada. These numbers are expected to increase in the future, particularly as the two marinas in Grenada are improving their facilities. Also, there are a number of stayover arrivals by sea (as distinct from cruise passengers) which totalled 2,974 in 1988. Most of this traffic is thought to be inter-island and such visitors stay primarily in private homes.

Table A.6.8: GRENADA - PROJECTED ARRIVALS, 1989-99
('000)

	Hotel Guests	Private Homes	Joining Charter Yachts	Total Number by Air	Cruiseship Passengers
1989	27.7	33.3	2.7	63.7	149.6
1994	46.9	34.9	3.3	85.1	181.8
1999	66.1	36.7	3.9	106.7	204.6

Source: Mission estimates and projections.

14.   Cruise ship visits, which rebounded back in 1985 and 1986 from a very low level in 1984, continued to increase in the years immediately thereafter and reached 135,980 passengers from 234 ship calls in 1988. Provided the facilities for shore visits (local transport, shopping opportunities, etc.) are maintained and improved, passenger numbers are expected to increase by 10% in 1989 to about 150,000, an all-time high. Conservative projections of growth rates thereafter show that 180,000 passengers will come ashore in 1994 and 200,000 in 1999.

15.   If visitor traffic increases as projected above, gross receipts from tourists and cruise passengers are projected to rise (in constant EC dollars) from EC$86 million in 1989 and EC$119 million in 1994 to about EC$154 million in 1999 (see Table A.6.9).

Table A.6.9: GRENADA - PROJECTED RECEIPTS FROM VISITORS AND TOURISM EMPLOYMENT, 1989-99
(receipts in constant EC$ million)

	Stayover Receipts	Cruise Receipts	Total Receipts	Employment In Accommodation	Employment In Related Tourism Services	Total Direct Employment
1989	78.7	7.4	86.1	916	610	1,526
1994	109.8	9.0	118.8	1,547	1,031	2,578
1999	143.7	10.1	153.8	2,178	1,452	3,630

Source: Mission estimates and projections.

16.   Employment directly in tourism in 1989 is projected at 1,526, of which 916 are in commercial accommodation facilities and another 610 in other tourism activities and services. In addition, tourism generates employment, in a variety of other economic activities (agriculture, fishing, banking, retail, postal, airport, etc.) Furthermore, investment in accommodation expansion creates employment in construction and contracting and should account for several hundred jobs in the coming years. On the basis of the development scenario, by 1994 direct employment is projected to reach 2,578 and, by 1999, it would reach 3,630.

C. Tourism in St. Vincent and the Grenadines

Traffic Trends

17.   Tourism to St. Vincent and the Grenadines has shown slow growth in recent years even though the Government has accorded the sector some priority. Stayover traffic, which provides some 96% of all tourism

receipts, grew at an annual average of only 3.5% during the 1982-88 period, rising from a low base of 37,000 visitors in 1982 to about 45,000 in 1988 (see Table A.6.10). However, air excursionist traffic -- visitors flying in from neighboring islands for the day, a phenomenon in the Caribbean which is duplicated in few other places -- has grown at an annual average of 11.4% during the same period and at 16,000 in 1988, represents 26.6% of all air arrivals.

Table A.6.10: ST. VINCENT AND THE GRENADINES - VISITOR
ARRIVALS BY AIR, 1982-88
(in thousands)

Year	Stayovers		Excursionists	
	No.	% Variation	No.	% Variation
1982	37.5	n.a.	9.8	n.a.
1983	37.7	0.5	9.7	1.0
1984	28.5	2.1	9.0	(7.2)
1985	42.1	9.3	10.6	17.8
1986	42.1	0.0	13.8	30.2
1987	46.1	9.5	13.5	(2.2)
1988[a]	45.5	1.3	16.5	29.6

[a]Mission estimates based on first 10 months.

Source: Tourist Board and mission estimates.

18.   As in other OECS countries, the largest single source of stayover traffic is from other Caribbean countries (see Table A.6.11). As usual, the preponderance of such traffic stays in private homes and does not constitute a significant demand for hotel and other commercial accommodations or other typical tourist facilities and services. The U.S. remains the largest single source of non-regional stayover traffic but its share has been declining as that of the U.K. and Europe has increased. In fact, by 1988 the U.K. alone provided roughly as many visitors as the U.S. while the U.K./Europe share in stayover traffic amounted to 40.3% of the total and the U.S./Canada to only 27.3%. This indicates that in St. Vincent and the Grenadines, as elsewhere in OECS countries, the favorable rate of exchange has stimulated travel demand in the U.K./Europe and that improved transatlantic air services even benefit destinations which are limited to feeder air services. In the case of traffic listed from France, there is the possibility that this partially includes residents of Martinique and Guadeloupe. Between 45% and 60% of all stayovers, according to the month of the year, stay in private homes (see Table A.6.12). The year-round average proportion staying in private homes is thought to be about 55%. These are primarily visitors from other Caribbean islands.

Table A.6.11: ST. VINCENT AND THE GRENADINES ·· STAYOVER
AIR ARRIVALS BY NATIONALITY, 1987-88
(in thousands)

Nationality	1987		1988[a]	
	No.	% Share	No.	% Share
U.S.	12.9	28.0	10.3	27.2
Canada	4.0	8.7	2.9	7.7
Caribbean	17.6	38.3	13.9	36.8
U.K.	5.6	12.2	5.2	13.8
France	2.3	5.0	2.1	5.5
W. Germany	1.0	2.2	0.9	2.4
Other Europe	1.7	3.7	1.6	4.0
Other	0.9	1.9	0.6	1.6
Total	46.0	100.0	37.8	100.0

[a] First 10 months.

Source: Tourist Board and mission estimates.

19.   The sources of air excursionist traffic show a predominance of
U.K. visitors (see Table A.6.13). In 1988, no less than 40% of all such
traffic was from the U.K. Most day excursionists visit the various
Grenadine islands rather than the main island of St. Vincent. The next
largest source of air excursionists is listed as France, followed by
Germany and other European countries. Caribbeans constituted 9.3% of air
excursionists in 1988, but it was thought that the majority are primarily
day shoppers rather than tourists.

Table A.6.12:   ST. VINCENT AND THE GRENADINES - STAYOVER ARRIVALS
BY PLACE OF STAY, JULY AND OCTOBER 1988

Place of Stay	July		October	
	No.	% Share	No.	% Share
Hotel	1,414	25.3	1,065	38.9
Apartment	179	3.2	84	3.1
Guest House	75	1.3	50	1.8
Other Paid	263	4.7	244	8.9
Private Home	3,393	60.7	1,231	45.1
Not Stated	266	4.8	60	2.2
Total	5,590	100.0	2,734	100.0

Source: Tourist Board and mission estimates.

Table A.6.13: ST. VINCENT AND THE GRENADINES - EXCURSIONIST AIR ARRIVALS,
BY NATIONALITY 1987 AND 1988

| Nationality | 1987 | | 1988[a] | |
	No.	% Share	No.	% Share
U.S.	969	7.4	630	4.3
Canada	447	3.2	319	2.1
Caribbean	670	5.2	1,328	9.3
U.K.	3,943	28.9	5,729	40.7
France	3,840	28.1	2,744	19.3
W. Germany	1,852	13.3	1,606	11.4
Other Europe	1,591	11.8	1,182	8.6
Other	160	1.2	461	3.6
Total	13,472	100.0	14,008	100.0

[a]/First 10 months.

Source: Tourist Board and mission estimates.

20.   Cruise ships call mainly at the various Grenadine islands. For
example, during the October 1987-May 1988 season, there were 268 cruise
ship calls of which only 16 were at Kingstown on the main island of
St. Vincent and 252 calls in the Grenadines. The number of cruise
passenger visits has varied considerably during the 1980's. After several
years of cruise passenger arrivals averaging in the range of 30,000 per
year, the total number of visits jumped to 64,000 in 1984 (see
Table A.6.14) when military action in Grenada diverted many ship calls to
St. Vincent. However, in 1985 the number of cruise passenger visits
dropped back to its previous levels. By 1987, when a new boom in cruise
traffic to the Caribbean occurred, cruise arrivals rose to a record 65,683.
A small decline for 1988 is indicated by the figures for the first ten
months of the year but, at about 62,000, was still double the 1982-86
annual average (excluding the unusual 1984 season).

21.   St. Vincent and the Grenadines is both an important base and port
of call for private yachts. Some 3000-4000 persons are recorded as landing
each year. However, the reliability of the figures is impaired by the
failure of some yachts to register and for some who do register to fail to
report all passengers and crews. Furthermore, many yachts are based in the
country whose passengers and crews arrive by air to join their yachts and
are thus listed in the air arrivals figures either as stayovers or
excursionists (according to whether they spend an initial night, or more,
ashore).

Table A.6.14: ST. VINCENT AND THE GRENADINES - CRUISE AND
YACHT PASSENGERS, 1982-88
(in thousands)

Year	Cruise		Yacht	
	No.	% Variation	No.	% Variation
1982	28.9	n.a.	3.1	n.a.
1983	34.4	19.0	4.5	45.2
1984	64.0	86.0	4.8	6.7
1985	34.0	(46.9)	3.7	(22.9)
1986	38.1	12.1	3.0	(18.9)
1987	65.7	72.4	2.6	(13.3)
1988[a]	62.5	(5.1)	n.a.	n.a.

[a] Mission estimate based on first 10 months.

Source: Tourist Board and mission estimates.

Receipts and Employment

22.   Gross receipts from stayover visitors in 1988 are estimated at
EC$127 million, or an average of EC$2794 per visitor. It is estimated that
the average length of stay is 11.5 days and average daily expenditures
about EC$243, both higher than in other OECS countries, presumably
reflecting the predominance of small hotels and other accommodations on
small islands and the incidence of luxury resorts.

23.   Receipts from stayover visitors constitute 96% of total receipts
(see Table A.6.15). Air excursionists spend an average of EC$68 each
during their one-day visit, which in 1988 amounted to EC$1 million. Cruise
passengers' expenditures during their day ashore averaged EC$35 per
visitor. This comparatively low spending by cruise passengers reflects the
poor shopping opportunities on the Grenadine islands at which most cruise
ships call. However, the shipping lines pay an EC$6 head tax for each
passenger carried; increasing this modest fee to EC$10 is planned for the
1989/90 season. Excluding the proceeds of the head tax, expenditures by
cruise passengers totalled EC$2 million. Yacht visitors are estimated to
spending ashore an average of EC$67.5 for a 1988 total of EC$2 million.
Thus, total receipts from all visitors in 1988 is estimated at EC$132
million, a small decline from the previous record year.

24.   Employment directly in the tourism sector in 1988 amounted to an estimated 1250 of which about 850 were in commercial accommodation establishments and about 400 in other tourism activities such as yachting services, water sport, local transport, restaurants, entertainment, handicrafts, etc. Additional employment created elsewhere in the economy by tourism demand was another 200-300.

Table A.6.15: ST. VINCENT AND THE GRENADINES - GROSS RECEIPTS
FROM TOURISTS, 1987 AND 1988
(in EC$ million)

Type of Visitor	1987	1988
Stayover[a/] [b/]	128.5	127.1
Av. Excursionist[c/]	0.8	1.1
Cruise[d/]	2.4	2.2
Yacht[a/] [c/]	1.9	1.6
Total	133.6	132.0

[a/]Average length of stay 11.5 nights.
[b/]Average daily expenditure EC$243.00.
[c/]Average daily expenditure EC$67.50.
[d/]Average expenditure ashore EC$35.00.

Source: Tourist Board and mission estimates.

Projections to 1999

25.   Except for a few special holidays, such as Christmas and Carnival, there is not yet a shortage of accommodations, as the very low occupancies demonstrate. However, to become viable, many of the small hotels need to be expanded with additional rooms. In addition, several new hotels are under construction or planned which will tap new market segments. An important hotel project is under consideration at Ottley Hall on the mainland on leased public land of 14 acres with a capacity of 100 rooms and equipped with a casino. Two smaller new hotels comprise 48 rooms and are scheduled for completion in 1990 and 1991 respectively. Expansion of two existing hotels by 16 rooms was also underway in 1989. A 25-room hotel on Bequia, which was destroyed by fire in June 1988, will be rebuilt. The Canouan Beach Hotel is being expanded by 15 rooms, bringing the total to 50 rooms; implementation was scheduled for April 1989 with completion in time for the 1989-90 winter season. In all, there is the prospect of 204 rooms being added to the country's hotel capacity by about 1993 (and available for operation in 1994).

26.   With occupancy rates rising to 42% and average length of stay remaining stable, the number of arrivals in commercial accommodations would total 30,400 in 1994 (see Table A.6.16). Furthermore, a reasonable target for 1999 would be to double additional room capacity during the decade thereby bring total available rooms to 1,344. On this basis, arrivals staying in hotels and other commercial accommodations would total about 35,800 in 1999.

27.   Total stayover arrivals (including both hotel guests and those staying in private homes) are forecast to total about 47,800 in 1989. Of these arrivals, some 25,000 are expected in hotels, while the remaining 22,000 would stay in private homes (see Table A.6.17). Thereafter, if the hotel market is forcefully promoted, to achieve the required occupancy of the augmented capacity, the number of total guests would increase by 21.6% during the first half of the 1990's and by 17.8% during the second half. At the same time, visitors to private homes would increase more moderately by 10% during each five-year period, reaching 25,100 in 1994 and 27,600 in 1999.

Table A.6.16: ST. VINCENT AND THE GRENADINES - PROJECTED TRAFFIC THROUGH COMMERCIAL ACCOMMODATIONS, 1989-1999

Year	Available Rooms (Number)	Available Bednights ('000)	Rented Bednights[a] ('000)	Arrivals[b] ('000)
1989	936	683	287	25.0
1994	1,140	832	349	30.4
1999	1,344	981	412	35.8

[a] At a 42% occupancy rate.
[b] Average length of stay 11.5 nights.

Source: Tourist Board and mission estimates and projections.

28.   The air excursionist traffic is a function of the proximity of various islands in the Caribbean. The country receives air traffic primarily from Barbados but also from St. Lucia, Martinique and Guadeloupe. This traffic, which is projected to reach about 17,300 in 1989, is expected to increase at about the rate that tourist volumes to the region grow, reaching 19,000 in 1984 and nearly 21,000 in 1999.

Table A.6.17: ST. VINCENT AND THE GRENADINES - PROJECTED ARRIVALS, 1989-99
(in thousands)

Type	1989	1994	1999
Hotel Guests	25.0	30.4	35.8
Private Homes	22.8	25.1	27.6
Air Excursionists	17.3	19.0	20.9
Cruises	65.6	72.2	79.4
Yachts	3.0	3.3	3.6

Source: Tourist Board and mission estimates and projections.

29.   Cruise passenger traffic, which reached 62,500 in 1988, is
expected to reach 65,600 in 1989. Past figures show that yearly totals are
volatile with trends difficult to discern. However, with passenger
arrivals now well above 60,000, a reasonable target for 1994 of 72,000 and
for 1999 of 80,000 would seem to be attainable.

30.   It is similarly difficult to project arrivals of visitors aboard
yachts because of doubts about existing data. However, a conservative
scenario would be to project 3,000 such arrivals in 1989 and modest
increases of 10% each five years to 3,300 in 1994 and 3,600 in 1999.

31.   If visitor traffic grows as projected above, gross receipts would
rise from EC$139 in 1989 to EC$161 million in 1994 to EC$177 million in
1999 (see Table A.6.18). The contribution to total receipts of the
stayover traffic remains at about 96% throughout the ten-year period. It
should be noted that, although cruise passengers are more numerous than
stayover visitors, they are projected to spend in toto only EC$2.7 million
in 1999. It is thus important to devise ways in which cruise passengers
can be induced to spend more during their few hours ashore, while
emphasizing the major source of receipts among stayover traffic.

32.   Employment directly in the tourism sector in 1989 is estimated to
total 1,310 of which 890 was in hotels and other visitor accommodation and
420 in other tourism activities and services such as local transport, yacht
services, water sports, restaurant, entertainment, etc. (Not included in
the foregoing figures is employment in other activities -- agriculture,
fishery, banking, postal, and rental -- generated by the tourist trade).
As the accommodations industry grows and, with it, related tourism
activities, further employment will be generated. Accordingly, total
direct employment in tourism is projected to grow to 1,520 in 1994 and
1,790 in 1999, with 1,035 and 1,220 respectively employed in the
accommodations industry[2] and 485 and 570 in related tourism activities.

2/ A 1987 CTRC survey indicated a ratio of 0.96 employees per room.

Table A.6.18: ST. VINCENT AND THE GRENADINES - PROJECTED RECEIPTS
FROM VISITORS AND TOURISM EMPLOYMENT, 1989-99
(receipts in constant EC$ million)

	1989	1994	1999
Visitor Receipts			
Stayover[a]/	133.5	155.1	170.6
Air Excursionist	1.2	1.3	1.4
Cruise	2.2	2.4	2.7
Yacht	1.6	1.8	2.4
Total Receipts	138.5	160.5	177.1
Direct Employment			
In Accommodations	890	1,035	1,220
In Other Tourist Activities	420	485	570
Total Employment	1,310	1,520	1,790

[a]/ Includes both guests in commercial accommodations and private homes.

Source: Tourist Board and mission estimates and projections.

D. Tourism in St. Lucia

Traffic Trends

33.   Tourism has been a dynamic sector in St. Lucia's economy
throughout the 1980's. Stayover traffic increased steadily during the
decade and reached more than 125,000 in 1988 (see Table A.6.19), some 45%
more than five years earlier. St. Lucia, the largest island in the OECS in
population, is endowed with numerous white sandy beaches, spectacular
scenery and several historical attractions. Air access has been constantly
improving, both internationally by scheduled and chartered flights and
regionally.

34.   In addition to stayover traffic, St. Lucia increasingly benefits
from air excursionist one-day visits by tourists staying on neighboring
islands, primarily Barbados and Martinique and Guadaloupe. At 9,500
arrivals, traffic in 1988 was more than four times as great as five years
previously. In 1987, traffic increased by 136.4% over the previous year,
mainly because Air Martinique initiated a daily service.

Table A.6.19:   ST. LUCIA - VISITOR ARRIVALS BY TYPE, 1984-88
(in thousands)

Year	Stayover		Air Excursionist		Cruise Passengers	
	No.	% Variation	No.	% Variation	No.	% Variation
1984	87.0	12.8	2.3	21.0	38.7	16.2
1985	93.2	7.1	2.6	13.0	55.0	42.1
1986	107.3	15.1	3.3	26.7	58.8	6.9
1987	111.6	4.0	7.8	136.4	83.4	41.8
1988	125.3	12.3	9.5	21.8	79.5	(4.7)

Source: Tourism Board.

35.   The U.S. is the major source of arrivals by air to St. Lucia with 29.5% of all such visitors in 1988 (see Table A.6.20). Arrivals from the UK at 22.2% were the next largest source in that year. Traffic is also growing from various European countries so that the combined UK/Europe traffic, at 36.4%, was greater than the U.S. traffic, reflecting once more the favorable rate of exchange, improved international air services, a growing propensity to travel long distances and successful market promotion programs. Caribbean visitors constituted 13.3% of all traffic in 1988 which, although sizeable, is a smaller proportion than for some neighboring islands, indicating that international tourism from the developed countries now dominates the trade. Canadian traffic constituted 11.4% of the total volume, impressive in terms of population differences as compared with the U.S. Finally, the appearance of the French West Indies as a separate category in the statistics underlines the growth of excursion traffic from there.

36.   St. Lucia has participated in the boom in cruiseship traffic which has taken place during the 1980's in the OECS countries as well as in the Caribbean region as a whole. After a steady growth in passenger arrivals, there was a slight setback in 1988 when such arrivals declined by 4.7% (see Table A.8.1). This decline resulted from a decline in the number of ship calls from 235 in 1987 to 218 in 1988. With the opening of the two cruiseship berths at Pointe Seraphine, within Castries Harbor, together with elaborate terminal facilities, it is expected that more cruiseships will call at St. Lucia in the future.

Table A.6.20: ST. LUCIA - ARRIVALS BY AIR BY COUNTRY OF RESIDENCE,
1987-88
(in thousands)

Country	1987		1988	
	No.	% Share	No.	% Share
U.S.	39.6	32.0	39.2	29.5
Canada	13.9	11.8	15.2	11.4
U.K.	24.5	20.8	29.6	22.2
France	2.1	1.8	2.7	2.0
W. Germany	7.0	5.9	9.0	6.8
Other Europe	6.1	5.2	7.2	5.4
Caribbean	15.5	13.2	17.7	13.3
French West Indies	7.3	6.2	8.6	6.5
Other	3.6	3.1	3.7	2.8
Total	117.6	100.0	133.0	100.0

Source: Tourism Board.

Receipts and Employment

37.   Gross receipts from stayover visitors (see Table A.6.21) in 1988
amounted to EC$231 million, or an average of EC$1,644. Visitor expenditure
surveys indicate that visitors staying in commercial accommodations spend
about seven times as much as those staying in private homes, namely
EC$1,727 per visit for the former and EC$230 per visit for the latter. Air
excursionists spent an average of EC$68 during their one-day visit for a
total of EC$0.5 million, a very small amount compared with receipts from
stayover visitors. Cruise passengers spent during their hours ashore an
average of EC$65 for a total of EC$5.1 million. Thus, total receipts from
all visitors in 1988 came to EC$236 million, the highest amount yet
recorded and 11.7% higher than in the previous year. The entire increase
in 1988 visitor receipts resulted from the increase in stayover traffic,
particularly to hotels and other commercial accommodations.

Table A.6.21: ST. LUCIA - GROSS RECEIPTS FROM VISITORS, 1984-89
(in EC$ million)

Year	Stayover	Air Excursionist	Cruise	Total ECS million	% Annual Change
1984	160.4	0.1	2.5	162.0	12.2
1985	171.7	0.3	3.1	175.1	8.1
1986	197.9	0.3	3.8	201.0	14.8
1987	205.7	0.5	5.4	211.6	5.3
1988	230.8	0.5	5.1	236.4	11.7

Source: Tourism Board.

38.   Employment in tourism rose steadily during the 1980's as traffic
volumes increased and hotel capacity grew. By 1988, employment in tourism
exceeded 4,000 for the first time (see Table A.6.22). Of this total,
nearly 2,500 were on average working in accommodation establishments during
the year.[3] The annual average employment per room in St. Lucia was 1.27,
the second highest in the OECS countries, indicating a relatively greater
proportion of large and luxurious hotels. Employment in enterprises other
than in accommodation but which deal directly with tourists was estimated
at more than 1,500 in 1988. Further employment is generated throughout the
economy in providing goods and service to those who, in turn, deal directly
with tourists. By the end of 1988, well over 1,000 workers were employed
in construction of hotels and other tourism projects. Given the new
projects in the pipeline, there is every prospect that employment generated
in the construction industry will rise steadily during the early 1990's.

Table A.6.22: ST. LUCIA - EMPLOYMENT IN TOURISM, 1986-88

Year	In Accommodation Establishments	In Related Tourism Services	Total
1986	1,853	1,166	3,017
1987	2,414	1,520	3,934
1988	2,484	1,565	4,049

Source: Tourism Board.

Projections to 1999

39.   In response to the room shortage, a number of new hotel projects
are underway, either under construction or in an advanced planning stage.
While the gestation period is from two to three years, depending on the
nature of the project and the organizational and financial skills of the
developers, projects already in the pipeline and under construction should
add 160 new rooms to accommodation capacity in 1989. One of these
projects, which opened 100 rooms in February 1989, expects to add a further
80 rooms in 1990. Another project will open with 60 rooms in late 1989 and
a further 38 rooms thereafter. Other projects, less advanced but regarded
as firm, total some 658 rooms, all of which should be constructed by 1993
and fully operational by 1994.

3/ The rates of employment to rooms is higher in the winter than in the
    summer, when occupancy rates are lower.

40.   In 1989, there were 2,116 rooms in operation in all types of
commercial accommodations. Thus, available bednights during the year total
1.5 million (see Table A.6.23). With continuing market efforts and
expected improvements in air services, maintenance of the 1988 occupancy
rate of 77% is a reasonably attainable target and would produce 1.2 million
rented bednights. Maintaining an average length of stay of 11 nights
should also be attainable, particularly since the UK/Europe market is
expected to remain strong, so that some 108,000 arrivals would stay in
accommodation establishments in 1989.

41.   An additional 658 rooms are expected to be operational in 1994 for
a total of 2,774 in that year. To maintain an occupancy rate of 77% and
assuming the average length of stay remains at 11 nights, about 142,000
arrivals in accommodations establishments could be expected. Construction
of new hotels in the second half of the decade is difficult to project but,
for the purpose of this scenario, an additional 450 rooms are assumed and
the total number of rooms available in 1999 is projected at 3,224,
requiring about 165,000 arrivals to maintain occupancy and average length
of stay.

Table A.6.23:   ST. LUCIA - PROJECTED TRAFFIC THROUGH
                COMMERCIAL ACCOMMODATIONS, 1989-99

Year	Available Rooms (Number)	Available Bednights ('000)	Rented Bednights[a] ('000)	Arrivals[b] ('000)
1989	2,116	1,545	1,190	108.1
1994	2,774	2,025	1,559	141.7
1999	3,224	2,353	1,812	164.7

a/ 77% occupancy rate.
b/ 11 nights average length of stay.

Source: Tourism Board and mission estimates and projections.

42.   Stayover arrivals in private homes are expected to constitute 22%
of total stayover arrivals in 1989 (a proportion similar to 1988) and then
constitute a declining share of stayover traffic, although increasing
slowly in absolute numbers. Thus, stayover arrivals would increase from
under 30,000 in 1989 to over 32,000 in 1999 (see Table A.6.24).

43.   Total stayover traffic, in both hotels and private homes are
projected to rise from 137.5 thousand in 1989, to 172.6 thousand in 1994
and to 197.1 thousand in 1999. These are regarded as relatively modest
marketing targets since the average annual increase in traffic declines
from 9.7% in 1989 to 5.1 during the five-year period to 1994 and to 2.8% in
the following five-year period until 1999.

Table A.6.24:   ST. LUCIA - PROJECTED ARRIVALS, 1989-99
('000)

Year	Hotel	Private Homes	Total Number of Stayovers	Air Excursionists	Cruiseship Passengers
1989	108.1	29.4	137.5	10.5	83.5
1994	141.7	30.9	172.6	13.4	96.8
1999	164.7	32.4	197.1	15.5	106.9

Source: Tourism Board and mission estimates and projections.

44.   Air excursions - one-day visits from neighboring islands - are now a well-established feature of the travel picture. Traffic is expected to reach 10.5 thousands in 1989, an annual in_rease of about 10%. Thereafter, the average annual increase should decline first to 5% by 1994 and then to 3% by 1999, so that air excursion arrivals would reach 13.4 thousands in 1994 and 1".5 thousands in 1999.

45.   Cruise passenger traffic, which declined slightly in 1988, is expected to return to the 1987 level of 83.4 thousand in 1989, an annual increase of about 5%. The long term outlook is for a steady but modest increase during the 1990's as the trend to larger cruiseships compensates for a decline in the number of ship calls. The new cruiseship terminal at Pointe Seraphine can accommodate two of the largest ships at the same time. Thus, a reasonably attainable target would entail an average annual passenger traffic increase of 3% in the first five years to reach 96.8 thousand in 1994 and of 2% thereafter to reach 106.9 thousand in 1999.

46.   If visitor traffic were to grow as projected above, gross receipts (in constant prices) would rise from EC$260 million in 1989, an annual increase of 9.8%, to EC$325 million in 1994, an average annual increase of 5.1%, and to EC$371 million in 1999, an average annual increase of 2.8% (see Table A.6.25). Stayover receipts constitute, as elsewhere, the major source of income. Increasing the day's average expenditure by cruise passengers would be a contribution to generating an adequate rate of return on the heavy investment in cruise terminal facilities at Pointe Seraphine.

Table A.6.25:   ST. LUCIA - PROJECTED RECEIPTS FROM VISITORS, TOURISM EMPLOYMENT 1989-99
(receipts in constant EC$ million)

Year	Stayover Receipts	Air Excursionist Receipts	Cruise Receipts	Total Receipts	Employment In Accommodation	Employment In Other Tourism Activities	Total Direct Employment
1989	253.5	0.7	5.4	259.6	2,687	1,693	4,380
1994	318.2	0.9	6.3	325.4	3,523	2,219	5,742
1999	363.0	1.1	6.9	371.0	4,094	2,579	6,673

Source: Tourism Board, mission estimates and projections.

47.   Employment directly in the tourism sector in 1989 is calculated at
4,380, 2,687 of whom were employed in accommodation establishments and
1,693 in other tourism activities.[4] In addition, employment generated by
servicing the tourism sector, particularly in construction and agriculture,
is considerable and, with further linkages with the rest of the economy,
will develop further. Employment directly in the tourism sector will
continue to increase and traffic and receipts grow. Accordingly, total
direct employment is projected to reach 5,742 in 1994 and 6,873 in 1999.

E.   Tourism in Dominica

Traffic and Trends

48.   The tourism sector in Dominica is relatively small and under-
developed. Stayover visitors in 1988 numbered only 26,700 (see
Table A.6.26), or about 0.3% of the Caribbean region's total traffic and
some 5.0% of the total OECS market. Dominica's tourism potential is
limited by the lack of the white sand beaches which the predominance of the
international market expect and seek. Even though the country is well
endowed with spectacular scenery and lush tropical vegetation, together
with beautiful rivers, lakes and waterfalls -- all powerful attractions to
naturalists, bikers, climbers and campers -- these markets are miniscule as
compared with the sun, sand and sea devotees. Thus, mass tourism to
Dominica is out of the question but specialized tourism could be promoted
on a modest scale.

Table A.6.26: DOMINICA - VISITOR ARRIVALS BY TYPE, 1984-88
(in thousands)

	Stayover	Cruise	Excursionists
1984	22.2	3.2	1.6
1985	21.5	6.6	0.5
1986	24.5	11.5	0.4
1987	26.7	12.1	1.4
1988[a/]	26.7	14.3	3.5

[a/]Provisional estimates.

Source: Tourism Board.

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[4] It is assumed that the employee/room ratio will remain unchanged at
     1.27 in accommodations and at 0.8 for other tourism enterprises.

49.   Cruiseship traffic is the lowest by far of all OECS countries, totalling an estimated 14,000 passengers in 1988 (compared with over 60,000 to St. Vincent and 135,000 to Grenada). Dominica lacks satisfactory facilities for the cruiseships and for the reception of passengers ashore. Some ship calls have replaced Roseau, the capital, with Portsmouth, a northern town with an excellent protected anchorage and with a variety of nearby sightseeing opportunities. Thus, the slight upward trend in cruiseship passenger traffic may be expected to continue.

50.   Air excursion traffic--one-day visits by either scheduled flights or air taxis--has been very modest as compared with other islands but rose to 3,500 in 1988. Most of the excursion traffic is from Guadeloupe and Martinique (reflecting the strength of the franc against the dollar) and the excursionist traffic to Dominica is a function of the total tourist traffic that the French islands can generate. The objective for Dominica is to convert as many one-day visits as possible to longer stays as part of multi-island tours.

51.   Proximity to the French islands already results in more residents of those islands visiting Dominica than from any other country, some 22.0% of total arrivals in 1987 (see Table A.6.27). Arrivals from the rest of the Caribbean amounted to 21.0% of the 1987 total. That 43% of all arrivals come from the region has consequences for investment--the majority of these visitors stay in private homes and therefore do not generate investment nor employment in commercial accommodation establishments--and for receipts--average daily expenditures for those staying in private homes is EC$25 as compared with EC$125 for those staying in hotels. Of the international travellers, some 17.7% of all arrivals are from the U.S. and 23.1% from UK/Europe.

Table A.6.27: DOMINICA - VISITOR ARRIVALS BY COUNTRY OF RESIDENCE, 1986-87

	1986		1987	
	No.	% Share	No.	% Share
U.S.	5,104	20.5	4,968	17.7
Canada	1,540	5.6	1,541	5.3
French West Indies	5,285	21.3	6,165	22.0
Other Caribbean	5,567	22.5	5,877	21.0
U.K.	2,346	9.2	2,824	10.0
Europe	2,813	11.2	3,660	13.1
Other	2,223	8.8	3,119	11.0
Total	24,878	100.0	28,154	100.0

Source: Tourism Board and mission estimates.

52.   More arrivals stay in private homes than in hotels and other
commercial accommodations (see Table A.6.28) and, of the latter, in 1987
about half were on vacation and half on business. Thus, those on vacation
in hotels--the target market segment with the greatest growth potential-
-amounted to only 6,567 visitors in 1987, a very low base. Business travel
may be expected to increase with economic development but more slowly than
vacation travel. Finally, stayover traffic to private homes may also
increase but with modest economic results.

Table A.6.28: DOMINICA - STAYOVER VISITORS BY TYPE OF ACCOMMODATION, 1987

	No.	% Share
In Hotels:		
Vacationers	6,567	24.7
Business and Other	5,896	22.1
In Private Homes:	14,250	53.2
Total	26,713	100.0

Source: Tourism Board and mission estimates.

Receipts and Employment

53.   Gross receipts from stayover visitors in 1986 (see Table A.6.29)
amounted to EC$32 million, accounting for 97% of receipts from all
visitors. Cruise passengers during their few hours each ashore spent about
EC$700,000 while air excursionists during their day in the country together
spent about EC$400,000. Thus, gross receipts from all tourists during 1988
came to EC$33 million, virtually the same amount as during the previous
year.

Table A.6.29: DOMINICA - GROSS RECEIPTS FROM TOURISTS, 1984-88
(in EC$ million)

Year	Stayover	Cruise	Excursionists	Total EC$ million	% Change
1984	26.4	0.2	0.2	26.8	n.a.
1985	25.6	0.3	0.1	26.0	(3.0)
1986	29.1	0.6	0.1	29.8	14.7
1987	31.7	0.6	0.2	32.5	9.4
1988[a]	31.7	0.7	0.4	32.8	0.9

[a] Provisional estimates.

Source: Tourism Board and mission estimates.

54.   Expenditures per stayover visitor amounted to EC$1,189, an average of daily expenditures by vacationers in hotels of EC$173, by businessmen in hotels of EC$208 and by those staying in private homes of EC$25, together with average length of stays of 6.7 nights for vacationers in hotels, 5.6 nights of businessmen in hotels and 12.7 nights for those staying in private homes.[5]

55.   Employment in tourism in 1988 is estimated at just under 700 (see Table A.6.30), comprising 360 workers in commercial accommodations and 333 workers in related tourism activities such as local transport, restaurants, handicrafts, sports and leisure activities. In addition, further employment was generated in supplying goods and services to those operating the tourism industry, such as construction, wholesalers, repair and maintenance, agriculture and fisheries.

Table A.6.30: DOMINICA - EMPLOYMENT IN TOURISM, 1984-88

Year	In Accommodation	In Related Tourism Activities	Total
1984	309	274	583
1985	364	324	688
1986	318	284	602
1987	367	326	693
1988[a]	360	333	693

[a] Provisional estimates.

Source: Tourism Board.

Projections to 1999

56.   The hotel destroyed by fire has been reopened with 33 rooms, so that 1989 accommodation capacity reached 440 rooms. There were also an additional 116 rooms planned, either as extensions to existing hotels or as new accommodation establishments. When these additions are completed,

[5] These data are derived from sporadic surveys with limited sampling reliability. However, they indicate rough order of magnitudes and underline the point that expenditures by hotel guests are considerably greater than those by visitors to private homes.

total capacity will amount to 556 rooms. Given the existing low occupancy rates, market promotion will be challenged to generate enough traffic to avoid driving occupancy rates even lower.

57.   Dominica is unlikely to become a major tourism destination in the next few years. However, with effective market promotion of the country's tourism assets--the endowments of nature--steady development of tourism can be projected for the next decade. The most dynamic growth prospects are with respect to vacation traffic staying in commercial accommodations. As this market expands regionally, Dominica should be able to attract its share, particularly by participating in multi-destination tours based primarily on the neighboring French islands but also on other nearby islands. Business travel will increase with economic development but at a relatively slow rate.

58.   A scenario for the 1990s would take into account the prospective supply of rooms while projecting reasonably attainable traffic volumes flowing through them. In 1989, there were 440 available rooms and 116 additional rooms in the pipeline. Assuming all 116 additional rooms will be in operation by 1994 and about the same number during the following five-year period, there would be 556 available rooms in 1994 and 672 in 1999 (see Table A.6.31). Maintaining the 1988 average annual occupancy rate of 35% and an average length of stay of 8.5 bednights would require 13,200 visitors staying in hotels in 1989, 16,700 in 1994 and 20,200 in 1999.

Table A.6.31: DOMINICA - PROJECTED TRAFFIC THROUGH COMMERCIAL
ACCOMMODATIONS, 1989-99

Year	Available Rooms (No.)	Available Bednights ('000)	Rented Bednights[a] ('000)	Total Arrivals[b] ('000)
1989	440	321	1,12	13.2
1994	556	406	142	16.7
1999	672	491	172	20.2

[a]/Average annual occupancy 35%.
[b]/Average length of stay 8.5 nights.

Source: Tourism Board, mission estimates and projections.

59.   The number of visitors staying in private homes is expected to increase at a declining rate. Thus, with a 3% annual increase in 1989, followed by a 2% average annual increase during the five-year period until 1994 and a 1% average annual increase thereafter, those staying in private homes will total 14,600 in 1989, 16,100 in 1994 and 16,900 in 1999 (see Table A.6.32). By 1994, those staying in hotels will outnumber those staying in private homes, thereby emphasizing the increasing commercialized aspect of the visitor trade.

60.   In all, stayover arrivals, which totalled 26,700 in 1988, are
expected to increase to 27,800 in 1989 and to 32,800 in 1994 and 37,100 in
1999. These numbers represent reasonably attainable marketing targets
(from a relatively low base) of average annual traffic increases of
initially 4.3% in 1989, declining to 3.6% during the five-year period until
1994 and to 2.6% in the following five-year period until 1999.

Table A.6.32:   DOMINICA - PROJECTED STAYOVER TRAFFIC, 1989-99
(in thousands)

Year	Hotels	Private Homes	Total
1989	13.2	14.6	27.8
1994	16.7	16.1	32.8
1999	20.2	16.9	37.1

Source: Tourism Board, mission estimates and projections.

61.   Gross receipts from stayover visitors are ex,,ected to amount to
EC$33 million in 1989 (see Table A.6.33), an average per visitor of EC$1189
in constant 1987 prices. To this must be added about EC$1 million in
receipts both from cruise passengers and one-day air excursionists, an
amount about the same in both 1988 and 1989. Total receipts in 1989 are
projected at EC$34 million, about 4.3% more than in 1988.

Table A.6.33: DOMINICA - PROJECTED RECEIPTS FROM VISITORS AND TOURISM EMPLOYMENT 1989-99
(receipts in constant EC$ million)

Year	Stayover Receipts	Cruise Receipts	Excursionists Receipts	EC$ Million Total Receipts	Employment In Accommodation	Employment In Other Tourism Activities	Total Direct Employment
1989	33.1	0.7	0.4	34.2	396	352	748
1994	39.0	0.8	0.5	40.3	500	445	945
1999	44.1	0.9	0.6	45.6	605	538	1,143

Source: Tourism Board, mission estimates and projections.

62.   Given the increase in stayover traffic by 1994, gross receipts are
expected to rise to EC$39 million in that year. With a moderate increase
in the number of cruiseship passengers and of air excursionists, receipts
may be expected to rise to EC$1 million. Thus, total receipts from all
types of visitors would reach EC$40 million in 1994, representing an
average annual increase during the five-year period of 3.6%.

63.   In this scenario, by 1999 receipts from stayover visitors would rise to EC$44 million and from cruiseship passengers and air excursionists to EC$2 million for total receipts from all visitors of EC$46 million, an average annual increase during the second half of the 1990s of 2.6%.

64.   Direct employment in tourism in 1989 will amount to about 750. Of this total, an average of nearly 400 will work in commercial accommodations. (Staffing varies during the year according to seasons and occupancies). A further 350 will by working in providing services directly to tourists but outside the hotels and other commercial accommodation. By 1994, direct employment in tourism could increase to nearby 1,000, and, by 1999, to 1,100-1,200. Employment indirectly generated by the tourism sector in supplying goods and services to the various tourism enterprises will vary both according to the extent of demands on the construction industry and to the success in creating linkages to the rest of the economy.

F.   Tourism in Antigua and Barbuda

Traffic Trends

65.   Tourism, the predominant sector in the economy of Antigua and Barbuda, constitutes more than 35% of the total tourist trade of all OECS countries. Well endowed with many of the best beaches in the Caribbean, Antigua got an early start in tapping the international tourist market because it already had a major international airport during the Second World War which was easily upgraded in the years thereafter when mass tourism was rapidly developing. (In the 1930's, Antigua was served by Pan Am flying-boats which landed in St. John's harbor). Once a number of hotels were constructed in the 1960's and 1970's, Antigua was able to develop a market base of recognition and credibility on which further development has been based.

66.   Tourism has grown substantially in the last five years. Stayover visitors arriving by air have the greatest economic impact and their numbers increased from 129,000 in 1984 to nearly 177,000 in 1988, an average annual growth rate of 12.2% (see Table A.6.34). After very rapid growth in the mid-1980's, the rate of increase slowed somewhat in 1986 and 1987, possibly constrained by the available supply of accommodations, particularly in the high season (December 15 - April 15). In late 1987, a new 350-room hotel came into operation, together with a scattering of extensions to existing hotels and the stayover traffic in 1988 increased by 11.1%.

67.   Stayover arrivals by sea are mainly on pleasure yachts and do not constitute a demand for accommodations although otherwise expenditures ashore can be substantial, both on individual tourist requirements and on marine services. About 14,000 such visitors were recorded in 1987 and again in 1988, which is above previous levels.

Table A.6.34: ANTIGUA AND BARBUDA - STAYOVER ARRIVALS BY
AIR AND SEA, 1984-88
(in thousands)

Year	Air		Sea[a]		Total	
	No.	% Change	No.	% Change	No.	% Change
1984	129.1	27.7	9.8	(21.4)	138.9	22.9
1985	139.8	8.3	9.2	(6.1)	149.0	7.3
1986	149.3	6.8	9.4	2.2	158.7	6.5
1987	159.2	6.6	14.0	48.9	173.2	9.1
1988	176.9	11.1	14.0	0.0	190.9	10.2

[a]/Mainly yacht passengers.

Source: Department of Tourism and mission estimates.

68.   The number of cruiseships calls and passengers arriving increased
spectacularly during the five years, 1984-88, from 67,000 to 199,000, a
three-fold growth (see Table A.6.35). Antigua has participated
competitively in the expanding Caribbean cruise market, particularly that
based on San Juan, Puerto Rico, which has grown rapidly as fly-cruise
arrangements became popular with access to the destination ports relatively
close by. Antigua's position in the northern tier of Caribbean islands
assists in inducing the cruise lines to include Antigua as a port of call
for the majority of their itineraries based on San Juan. The development
of two berths at St. John, together with terminal facilities and duty-free
shopping, have enhanced Antigua's attractions as a port of call.[6]

Table A.6.35: ANTIGUA AND BARBUDA - CRUISE TRAFFIC, 1984-88

Year	No. of Calls	Passengers	
		No. (in '000)	% Change
1984	118	66.8	28.5
1985	184	100.8	50.9
1986	239	122.6	21.6
1987	268	153.5	25.1
1988	274	198.6	29.5

Source: Department of Tourism.

6/ A few cruise operations are now based in Antigua itself.

69.   The tourist trade of Antigua, although seasonal, is less so than
in other OECS countries. In 1988, there were seven months when stayover
arrivals were above average (see Table A.6.36). Six months now constitute
the winter season, which previously comprised only four months. To this
extent, efforts have been successful in spreading the season to the
"shoulder" months by scheduling special events and reducing hotel rates.
There is also an upturn in traffic in July which is the peak month for
arrivals of residents of other Caribbean countries and coincides with
school vacations.

70.   The U.S. is the main source of stayover visitors with 84.4
thousands such visitors in 1988 (see Table A.6.37). However, visitors from
the U.K. increased by an annual average during the five years 1984-88 of
12.9% to reach 23.5 thousands in 1988 while European traffic increased very
rapidly by an annual average of 35.8% to reach 24.0 thousand. Marketing
policy thus continues to emphasize the traditional markets in the U.S. and
Canada but there is also renewed interest in U.K. (which doubled traffic in
five years) and a more recent interest in the continental European market.
This market was first tapped via BA air services through London, but BWIA
now also has services from Zurich through Frankfurt and then nonstop to
Antigua while Lufthansa also has two nonstops weekly from Frankfurt. Other
Europeans connect with either the London or Frankfurt flights. The U.S.
market is tapped primarily through the New York and Miami air gateways both
by U.S. airlines and BWIA.

Table A.6.36: ANTIGUA AND BARBUDA - MONTHLY ARRIVALS BY AIR OF STAYOVERS,
1988

Month	No.	%	Proportion of Average Month
January	17,196	9.7	117
February	18,182	10.3	124
March	16,586	9.4	113
April	15,537	8.8	106
May	11,827	6.7	81
June	10,274	5.8	70
July	16,493	9.3	112
August	13,864	7.9	95
September	10,260	5.8	70
October	13,736	7.7	93
November	15,587	8.8	106
December	17,351	9.8	118
Total	176,893	100.0	-

Source: Department of Tourism and mission estimates.

Table A.6.37: ANTIGUA AND BARBUDA - STAYOVER ARRIVALS,
BY COUNTRY OF RESIDENCE, 1984-88
(in thousands)

Country	1984	1985	1986	1987	1988	% Annual Average Change
U.S.	68.3	73.1	79.2	84.2	84.4	5.5
Canada	12.8	14.8	13.6	13.0	13.1	2.3
U.K.	14.3	15.9	19.4	18.3	23.5	12.9
Europe	8.6	12.0	11.1	15.6	24.0	35.8
OECS	11.1	11.7	13.2	14.7	16.8	10.3
Other Caribbean	10.6	10.8	10.6	11.1	12.3	3.2
All Other	3.5	2.3	2.2	2.4	2.7	(4.6)
Total	129.1	139.8	149.3	159.2	176.9	7.4

Source: Department of Tourism and mission estimates.

71.   The regional traffic from other OECS countries and other Caribbean
countries together accounted for 29.1 thousand stayover visitors in 1988,
the majority of whom are thought to stay in private homes. They consist-
ently represent 16-17% of total arrivals (see Table A.6.38).

Table A.6.38: ANTIGUA AND BARBUDA - DISTRIBUTION OF STAYOVER AIR ARRIVALS
BY COUNTRY OF RESIDENCE, 1984-88
(in percent)

Country	1984	1985	1986	1987	1988
U.S.	52.9	52.3	53.0	52.9	47.7
Canada	9.9	10.6	9.1	8.2	7.4
U.K.	11.1	11.4	13.0	11.5	13.3
Europe	6.7	8.6	7.4	9.2	9.5
OECS	8.6	8.4	8.8	9.2	9.5
Other Caribbean	8.2	7.7	7.1	7.0	7.0
All Other	2.7	1.6	2.1	1.5	1.5
Total	100.0	100.0	100.0	100.0	100.0

Source: Department of Tourism and mission estimates.

Receipts and Employment

72.   Gross receipts from visitors in 1988 totalled EC$359 million, the highest ever recorded in Antigua, and 16% above the previous year (see Table A.6.39). Receipts from stayover visitors amounted to EC$336 million, thus averaging EC$1,760 per visitor. Higher than other OECS countries, per capita expenditure reflects the higher average costs of most destination charges (hotels, restaurants, local transport, etc.) in Antigua. The average receipts from stayover visitors includes those staying in commercial accommodations, in private homes and on yachts. Receipts from those staying in commercial establishments in 1988 averaged EC$340 per day, or EC$2,643 for an average stay of 7.8 days.

Table A.6.39: ANTIGUA AND BARBUDA - GROSS RECEIPTS FROM VISITORS, 1984-88
(in EC$ million)

Year	Stayovers	Cruise Passengers	Total No.	% Change
1984	205.5	6.2	211.7	n.a.
1985	230.8	9.7	240.5	13.6
1986	257.0	12.7	269.7	12.1
1987	292.7	16.5	309.2	14.6
1988	336.1	22.4	358.5	15.9

Source: Department of Tourism and mission estimates.

73.   Receipts from cruiseship passengers ashore were also a record in 1988, amounting to EC$22 million and reflecting the increase in cruise traffic and the rise in average expenditures ashore per passengers from EC$92 in 1984 to EC$113 in 1988. The improvements in the terminal facilities and the related development of duty-free shopping in St. Johns are intended to increase further average expenditures per passenger and at the same time encourage continuing growth in cruise traffic.

Table A.6.40: ANTIGUA AND BARBUDA - EMPLOYMENT IN TOURISM, 1984-88

Year	In Accommodation	In Other Tourism Enterprise	Total
1984	2,761	1,545	4,306
1985	2,787	1,560	4,347
1986	3,428	1,918	5,346
1987	3,935	2,202	6,137
1988	4,117	2,303	6,420

Source: Department of Tourism.

74.   By 1988, direct employment in tourism reached 6,420 of which 4,117
were in hotels and other accommodations and 2,303 in other tourism
enterprises (see Table A.6.40). Indirectly, employment was also generated
in activities supplying the tourism sector. With expansion of additional
capacity underway, the construction industry is thought to generate more
than 1,000 jobs during the year. There has been a shortage of skilled
construction workers which was partially filled during the construction of
the 350-room hotel at Deep Bay, and also at the redevelopment of the harbor
and downtown St. John's, by Italian workers. Availability of labor is
becoming a general constraint on the pace of tourism growth. Furthermore,
linkages with agriculture, fisheries and light manufacturing are weak,
largely because of wage pressures generated by tourism but spreading to the
other sectors of the economy.

Projections to 1999

75.   At the outset of 1989, there were 2,879 available rooms and
another 472 rooms under construction. Since few additional rooms are
expected to become operational before the 1989/90 winter season, any
increase in traffic in 1989 will result in an increase in occupancy rates,
possibly attaining 60%, a rate at which most hotels would be profitable.
Thereafter, accommodation capacity in 1994 is expected to be double the
1985/86 capacity.

76.   Assuming 12% of the rooms under construction become available in
1989, there would be a total of 2.1 million bednights available during the
year (see Table A.6.41). With continuing improvements in air access and
renewed market promotion efforts, attaining a 60% occupancy rate is a
reasonably attainable target, so that nearly 1.3 million bednights would be
rented. At an average length of stay of 7.8 bednights, 165,000 visitors
would arrive by air and stay in hotels. The Government has had a long-
standing target of doubling 1986 room capacity by
the early 1990's. Thus, there would be 3,898 rooms in operation by 1994
and, assuming the maintenance of current occupancy rates and average length
of stay, 218.9 thousand visitors would arrive by air and stay in the hotels
projected to be in operation in that year. Assuming that the five-year
increase in hotel investment were maintained for a second five-year period
until 1999, there would be in operation 4,858 rooms which, given similar
occupancy rates and average length of stay, would accommodate 272.8
thousand.

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Table A.6.41: ANTIGUA AND BARBUDA - PROJECTED TRAFFIC THROUGH
COMMERCIAL ACCOMMODATIONS, 1989-99

Year	Available Rooms (Number)	Available Bednights ('000)	Rented Bednights[a] ('000)	Arrivals[b] ('000)
1989	2,938	2,145	1,287	165.0
1994	3,898	2,845	1,707	218.9
1999	4,858	3,546	2,128	272.8

[a] Assumes 60% occupancy.
[b] Assumes 7.8 nights average length of stay.

Source: Department of Tourism, mission estimates and projections.

77.   Visitors arriving by air and staying in private homes are expected
to continue to constitute about 20% of all stayovers. Thus, total stayover
air arrivals are expected to reach 206.2 thousands in 1989, 273.6 thousand
in 1994 and 341.0 thousand in 1999 (see Table A.6.42). After a double
digit percentage increase in visitor air arrivals in 1989, such traffic
increases are expected to moderate over the following ten years and average
6.5 percent annually during the first five years until 1994 and 4.9% during
the second five years until 1999. Stayover arrivals by sea average about
14 thousand in 1987 and 1988 and are expected to increase slowly from 14.7
thousand in 1989, to 15.4 thousand in 1994 and 16.2 thousand in 1999.
Thus, total stayovers arriving by air and sea would rise from 220.9
thousand in 1989 to 289.0 thousand in 1994 and 357.2 thousand in 1999.

Table A.6.42: ANTIGUA AND BARBUDA - PROJECTED ARRIVALS, 1989-99
('000)

Year	Hotels	Private Homes	Total Stayovers by Air	Stayovers by Sea	Cruiseship Passengers
1989	165.0	41.2	206.2	14.7	218.5
1994	218.9	54.7	273.6	15.4	273.2
1999	272.8	88.2	341.0	16.2	314.0

Source: Department of Tourism, mission estimates and projections.

78.   Cruise traffic had such a remarkable surge each year from 1985
through 1988, that it is difficult to forecast how long such growth rates
can be maintained. Early indications were that there was some softening in
the cruise market in 1989 and the volume of passenger traffic would
increase by about 10% (as compared with 29.5% in 1988). Prudence would
suggest that, for planning purposes, reduced average annual increases
should be projected. Nevertheless, the number of cruise passengers
visiting Antigua would rise from 218.5 thousand in 1989 to 273.2 thousand
in 1994 and 314.0 thousand in 1999, by far the greatest cruise passenger
traffic of any OECS country.

79.   If visitor traffic increases as projected in this scenario, gross
receipts from tourism in constant prices would amount to EC$414 million in
1989 and would rise to EC$540 million in 1994 and to EC$664 million in 1999
(see Table A.6.43). Receipts from stayover visitors would continue to
provide about 94% of all receipts. However, with cruise receipts at about
EC$25 million in 1989 and rising to EC$31 million in 1994 and to EC$36
million in 1999, additional investment in cruise facilities may be
justified.

Table A.6.43: ANTIGUA AND BARBUDA - PROJECTED RECEIPTS FROM VISITORS
AND TOURISM EMPLOYMENT, 1989-99
(receipts in constant EC$ million)

Year	Stayovers Receipts	Cruise Passengers Receipts	Total Receipts	Employment In Accommodation	Employment In Other Tourism Activities	Total Direct Employment
1989	388.4	24.8	413.7	4,200	2,350	6,550
1994	508.7	31.0	539.7	5,574	3,118	8,692
1999	628.8	35.6	664.4	6,947	3,886	10,833

Source: Department of Tourism, mission estimates and projections.

80.   Availability of labor could be a major constraint to the
implementation of a tourism growth scenario such as here postulated.
Currently, there were in early 1989 an average of 6,550 workers employed
directly in the tourism sector, either in commercial accommodation
establishments or in other tourism enterprises. In addition, there were at
least another 2,000 jobs generated by the tourist industry elsewhere in the
economy. If investments in the accommodations sector and in other tourism
enterprises were to grow in accordance with the projected scenario, direct
employment in tourism would top 10,000 by the end of the century.

G. Tourism in St. Kitts and Nevis

Traffic Trends

81.   Tourism in St. Kitts and Nevis has expanded rapidly in the last
five years, albeit from a relatively low base. Stayover traffic has
increased at an annual average of 15.2% to an estimated 69.2 thousand in

1988 (see Table A.6.44). Some slow-down in the growth rate experienced in 1988 is an indication of capacity constraint, at least for certain market segments and at peak periods. Cruise traffic trends are somewhat more erratic but passenger arrivals virtually doubled in 1988 to reach 62.4 thousand.

Table A.6.44: ST. KITTS AND NEVIS - VISITOR ARRIVALS BY TYPE, 1984-88
(in thousands)

| Year | Stayover | | Cruise Passenger | |
	No.	% Change	No.	% Change
1984	39.9	16.3	34.1	49.6
1985	47.5	19.0	31.5	(7.6)
1986	56.8	19.6	27.0	(14.3)
1987	66.5	17.1	31.4	16.3
1988	69.2	4.2	62.4	98.7

Source: Statistical Office, Planning Unit.

82.   Despite these good results, the country's visitor volume remains quite small compared with a number of other Caribbean islands and some in the OECS. Stayover visitors in 1988 represented about 0.7% of the nearly 10 million such arrivals in the Caribbean region, while cruise passengers amount to about 1.0% of the 6 million passengers on cruise ships plying the region. These very small market shares suggest that proportionately substantial traffic increases could be attained without inducing severe competitive reactions.

83.   An increasing proportion of stayover visitors are U.S. residents. About one-third of all such visitors came from the U.S. in 1986 while about 45% so originated in 1988 (see Table A.6.45). This mainly reflects a change in marketing policy at the 268-room Jack Tar Village, the largest hotel operation in the country, which switched much of its air charter services from Canada to the U.S. Thus, while the U.S. share of the St. Kitts traffic was rising, the Canadian share declined from 18.9% in 1986 to 10.9% in 1988. The UK/Europe share remained steady at below 8%; many of these visitors, particularly those from the U.K., are thought to be on business, thus affecting type and location of accommodations expected, average length of stay (shorter than for those on vacation) and average daily expenditure (higher than for those on vacation). Visitors from CARICOM and other Caribbean countries have held steady at about a 25% share of total traffic, but this share is expected to decline if arrivals increase fairly rapidly since most of such an increase would be derived from the international vacation trade.

Table A.6.45: ST. KITTS AND NEVIS - DISTRIBUTION OF STAYOVER ARRIVALS
ACCORDING TO USUAL RESIDENCE, 1986-88
(in percent)

Residence	1986	1987	1988
U.S.	34.5	41.7	44.9
Canada	18.9	15.9	10.9
UK/Europe	7.6	7.7	7.8
CARICOM	11.7	11.3	10.9
Other Caribbean	14.9	13.7	13.0
All Other	12.4	9.6	12.5
Total	100.0	100.0	100.0

Source: Statistical Office, Planning Unit.

84.   As in other Caribbean countries, stayover traffic in St. Kitts and
Nevis is seasonal, with above-average arrivals in the four winter months
and in July (see Table A.6.46). As the international vacation traffic
increases further, seasonality is likely to become more acute, although
efforts to extend the "shoulder" seasons through price differentials,
conventions and other special events can do much to mitigate this trend.

Table A.6.46: ST. KITTS AND NEVIS - STAYOVER ARRIVALS BY MONTH, 1986-88
(in percent)

Month	1986	1987	1988
January	8.1	9.6	9.2
February	8.6	9.3	9.4
March	9.1	9.8	9.5
April	7.4	10.2	7.8
May	6.5	7.4	6.8
June	6.7	6.8	6.8
July	9.1	8.4	10.1
August	9.9	6.9	7.8
September	6.0	5.3	6.1
October	6.2	6.5	6.7
November	8.3	7.4	7.1
December	13.7	12.2	12.7
Total	100.0	100.0	100.0

Source: Statistical Office, Planning Unit.

Receipts and Employment

85.   Gross receipts from visitors reached EC$87 million in 1988 (see
Table A.6.47). Such receipts grew more rapidly than the increase in
visitor arrivals, indicating a steady increase in unit prices. By 1988,
average daily expenditure by hotel visitors on vacation were EC$243 and by
hotel visitors on business EC$257. Stayover visitors in private homes
averaged EC$47 per day. Excursionists (yacht visitors and one-day visitors
arriving by air) spent an average of EC$89 during their visit. Cruise
passengers during their hours ashore spent an average of EC$54 per
passenger.

Table A.6.47: ST. KITTS AND NEVIS - GROSS RECEIPTS FROM VISITORS, 1984-88
(in EC$ million)

Year	Stayover	Excursionist	Cruise	Total EC$ Million	% Change
1984	39.31	0.11	1.62	41.04	46.7
1985	52.33	0.14	1.70	54.17	32.0
1986	67.36	0.16	1.46	68.98	27.3
1987	82.19	0.16	1.70	84.05	21.8
1988	83.38	0.17	3.37	86.92	3.4

Source: Statistical Office, Planning Unit.

86.   As elsewhere, receipts from stayovers dwarf those from cruise
passengers and excursionists. For example, in 1988, when cruise passenger
traffic almost doubled, receipts from this traffic amounted to only EC$3
million as compared with receipts of EC$83 million from stayover arrivals.

87.   Employment in tourism, both in accommodation establishments and in
other tourism enterprises, totalled 1,440 in 1988, about 40% higher than
five years previously (see Table A.6.48). Employment elsewhere in the
economy but generated by the tourism sector has been considerable,
particularly in the construction industry. In fact, there has been a
shortage of skilled labor in the country. The construction of the South
East Peninsula Road, for example, required more than 100 workers, about 60%
of the work force, to be brought in from Puerto Rico. There is also a
shortage of hotel workers many of whom receive ad hoc on-the-job training
which would be inadequate if there were a rapid expansion in large resort
hotels. There is thus an urgent need to strengthen the hotel training
system. The Hotel Training School, part of the Technical College, now has
its own separate building together with suitable equipment but may have to
expand its facilities and throughput of students if the take-off in hotel
development is to eventuate.

Table A.6.48: ST. KITTS AND NEVIS - EMPLOYMENT IN TOURISM, 1984-88

Year	In Accommodations	In Other Tourism Enterprises	Total
1984	559	438	997
1985	542	429	971
1986	615	482	1,097
1987	726	570	1,296
1988	807	633	1,440

Source: Statistical Office, Planning Unit.

Projections to 1999

88.   St. Kitts and Nevis may well be on the brink of an explosive
takeoff in the development of its tourist trade. The South-East Peninsular
Road is due to open late in 1989 and will open up tourism sites abutting 12
sandy beaches, hitherto inaccessible except by boat, beaches of a quality
superior to all others on St. Kitts and stretching in toto for 8.4 km. The
South-East Peninsula is said to have a saturation of physical capacity of
3,000 rooms, although the land-use plan, taking into account the physical
and social environment, envisages the optimum developmental level at about
1,500 rooms.

89.   A number of small hotel extensions, at Frigate Bay and on Nevis,
added 73 new rooms to bring 1989 total capacity to 864 (see Table A.6.49).
Thereafter, a 196-room resort hotel on Nevis, now under construction, will
become operational in the early '90s, and a number of projects, either new
hotels and condominiums or extensions, at Frigate Bay are expected to be
completed in the next three or four years. Finally, the first two major
resorts on the South-East Peninsula are expected to start construction as
soon as the road becomes available and be completed two to three years
later. In all, some 1,187 additional rooms can be projected during the
five-years, 1990-1994, so that 2,051 rooms would be in operation by 1994.
Developments in the second half of the decade are speculative but a
reasonable scenario would suggest that, provided developments in the first
half of the decade were encouraging, another 1,075 rooms would be built on
the Peninsula to bring the total there to 1,500 rooms, and a further 176
rooms to complete the latter stages of projects elsewhere. Thus, 3,302
rooms would be available in 1999.

90.   Assuming that average annual occupancy improves slightly in 1989
to about 50% and the average length of stay remains at 6.5 nights, some
48.5 thousands visitors would stay in hotels in that year. Given the large
in hotel capacity during the next five years, a decline in average
occupancy in 1994 to 48% is a reasonable assumption while the average

Table A.6.49: ST. KITTS AND NEVIS - PROJECTED TRAFFIC THROUGH
ACCOMMODATIONS, 1989-99

Year	Available Rooms (Number)	Available Bednights ('000)	Rented Bednights ('000)	Arrivals ('000)
1989	864	630.7	315.4	48.5
1994	2,051	1,497.2	718.7	102.7
1999	3,302	2,410.5	1,108.8	158.4

Source: Statistical Office, Planning Unit and mission estimates and
projections.

length of stay would increase to 7 nights because, within an augmented
total traffic, those on vacation constitute an increasing proportion over
those on business. Thus, the target for all arrivals in hotels would be
102.7 thousand in 1994. Likewise, in 1999 occupancy rates could be
projected to decline further to 46% while average length of stay would
remain at 7 nights so that a target for total hotel traffic of 158.4
thousand should be reasonably attainable.

91.   As the room capacity and total traffic increases, the percentage
of those staying in private homes will decrease (although absolute numbers
will continue to rise). Thus, while some 40% of all stayover arrivals in
1989 are expected to stay in private homes, that proportion is forecast to
decline to 30% in 1994 and 25% in 1999. The combined total for stayover
arrivals both in hotels and private homes would rise from 80.8 thousand in
1989, to 146.7 thousand in 1994 and to 211.2 thousand in 1999 (see
Table A.6.50). The annual increase of 16.8% should be about maintained in
the next five years but traffic growth would moderate in the late '90s
while still maintaining an adequate and profitable occupancy rate.

Table A.6.50: ST. KITTS AND NEVIS - PROJECTED ARRIVALS, 1989-99
(in '000)

Year	Hotels	Private Homes	Total
1989	48.5	32.3	80.8
1994	102.7	44.0	146.7
1999	158.4	52.8	211.2

Source: Statistical Office, Planning Unit and mission estimates and
projections.

92.   According to this scenario, gross receipts in constant prices from visitors would rise from EC$101 million in 1989, t' "C$196 million in 1994 and to EC$313 million in 1999 (see Table A.6.51). Receipts would thus triple in 10 years to become the leading economic sector in the economy. Receipts from stayovers will continue to constitute nearly 98% of total receipts, rising from EC$97 million in 1989, to EC$191 million and to EC$307 million. By contrast, receipts from cruise passengers, although increasing, will by 1999 only reach EC$6 million.

Table A.6.51: ST. KITTS AND NEVIS - PROJECTED RECEIPTS FROM VISITORS AND TOURISM EMPLOYMENT,
1989-99
(receipts in constant EC$ million)

Year	Stayover Receipts	Excursionists Receipts	Cruise Passengers Receipts	Total Receipts	Employment in Accommodations	Employment in Other Tourism Enterprises	Total Direct Employment
1989	97.39	0.28	3.54	101.21	881	691	1,572
1994	191.05	0.35	4.42	195.82	2,461	1,641	4,102
1999	306.58	0.44	5.53	312.55	3,632	2,642	6,274

Source: Statistical Office, Planning Unit and mission estimates and projections.

93.   To attain the targets for investment, traffic and receipts in the forgoing scenario, sufficient and qualified labor will be required. On the basis of a room/employee ratio of 1.02, some 880 workers would be employed in accommodations establishments in 1989 (see Table V.34). Together with employment in other tourism enterprises amounting to about 690, total employment in tourism would total about 1,570. As more "up market" hotels come into operation, the room/employee ratio will rise possibly to 1.2 in 1994, when hotel employment would total about 2,460, and employment in other tourism enterprises about 1,640. Direct employment in tourism in 1999 would comprise 3,600 in accommodations, 2,640 in other tourism enterprises for a total of about 6,270.

94.   This level of employment generation is likely to constrain development unless a liberal immigration policy is inaugurated while local training schemes are expanded. In particular, the construction industry will require augmentation of the local labor force, at least during the implementation of major works.

THE BANANA INDUSTRY

1.   This annex contains historical and institutional detail on the banana industry in the Windward Islands to place the discussion in the text within a broader context. Production, shipping, marketing and pricing arrangements are discussed, and the pattern of export prices since 1961 relative to other countries is examined.

2.   Bananas grow quickly, they provide a year round crop, and they can be grown on flat or hilly terrain. While subject to wind damage, the 9 month period from planting to harvesting makes them much more flexible than tree crops with gestation periods measured in years rather than months. They are produced with labor intensive techniques, especially at harvest time when they are cut and packed in cardboard boxes for transport to the shipping line. They generate a year round demand for labor and a year round cash income. In recent years, the high real price of bananas combined with marketing improvements and tax concessions to growers have extended their margin of cultivation to include steep slopes where environmental damage is raising concerns, especially in St. Lucia.

3.   Almost all bananas produced in the Windward Islands are shipped to the UK on regularly scheduled Geest boats. These boats carry other crops on occasion, but bananas make up by far their largest cargo. Banana growers truck their produce directly to buying depots or to the dock, where it is inspected and, if acceptable, loaded almost immediately. If more bananas are delivered than can be placed on the vessel, they are left behind but the growers receive payment as if they were sold. There is a brief period during which bananas can be kept after harvesting: if they do not reach the consumer in time, they are of no value. Alternative uses for bananas in addition to the fresh fruit market are extremely limited, despite considerable research effort: banana chips and flavoring are examples, but they use very little fruit.

4.   Bananas are marketed in the UK by Geest, one of the major banana wholesalers in the country. The UK government controls the import of bananas from non-Caribbean sources with a view to maintaining the internal price. Limited imports of so-called dollar bananas are authorized on a month to month basis to allow the market price to reach a level deemed appropriate. This level is considerably above the price of bananas in Germany, for example, where imports are not controlled and where supplies come from Central America.

5.   The price received by the banana grower in the Windward Islands is related in a complex manner to the price paid by the banana consumer in the UK. The St. Lucia situation will be used to illustrate. The UK retail price is a mark-up of the wholesale price, known as the Green Wholesale Price. This price increased each year over the period 1982-86, and fell slightly in 1987, measured in terms of pounds sterling (see Table A.7.1 below). However, since the EC dollar appreciated against the pound up to 1985 and then depreciated, in terms of EC dollars the Green Wholesale Price was virtually constant from 1982-85, but increased sharply in 1986 and

slightly in 1987: the exchange rate movements offset the increases in the Green Wholesale Price to 1985 and thereafter accentuated them, measured in terms of EC dollars. Included in the Green Wholesale Price are payments to Geest for transportation and ripening of the fruit. The price paid by Geest for bananas is the f.o.b. export price.

Table A.7.1: ST. LUCIA - AVERAGE BANANA PRICES, 1982-87

	1982	1983	1984	1985	1986	1987
In pounds sterling per pound of bananas						
Green Wholesale Price	0.164	0.189	0.195	0.221	0.227	0.205
In pounds sterling per EC dollar						
Exchange Rate	0.212	0.244	0.277	0.286	0.252	0.226
In EC dollars per pound of bananas						
Green Wholesale Price	0.77	0.77	0.70	0.77	0.90	0.91
Export Price (f.o.b.)	0.43	0.45	0.43	0.47	0.52	0.61
Gross Price Paid to Growers	0.21	0.22	0.21	0.25	0.33	0.34
In percent						
Ratio of Export Price to Green Wholesale Price in EC Dollars	55.8	58.4	61.4	61.0	57.8	67.0
Ratio of Gross Price to Growers to Export Price	48.8	48.9	48.8	53.2	63.5	55.7

Source: Bank staff estimates.

6.   The export price accrues not to the grower directly but to the Banana Growers Association. This Association provides goods and services to banana growers in three different ways, each paid for differently. Administrative services of the Association are paid for by a cess deducted from the export price. Boxes and other packaging material are distributed to the industry at large, involving some waste and some use for non-banana purposes. Costs are recovered through a deduction from the export price, currently about 10 cents EC per pound. Deducting the administrative cess and the packaging costs from the export price gives the "gross price to growers." From this is deducted a charge which includes, among other items, the cost of inputs of fertilizers, herbicides and insecticides provided by the Association to the growers, to arrive at the "net price to growers." This deduction varies with the price of bananas and is currently about 8 cents EC per pound.

7.   Statistically, the recent increase in the gross price paid to growers has been the result of interaction among these various factors. From 1985-87, the Green Wholesale Price in pounds declined slightly (7%), but this was more than offset by the appreciation of the pound against the EC dollar (21%), an increase in the ratio of the export price to the Green Wholesale Price in dollars (from 61% to 67%), and an increase in the ratio of the gross price to growers to the export price (from 53% to 56%). Squeezing the margins between the producer price and the wholesale price has been effective in raising returns to growers in the 1980's, but this may not prove to be an effective long-term strategy since it is easier to squeeze these margins in good times than in bad ones. The long-term future of the banana industry rests on the Green Wholesale Price in the UK.

8.   The export price received by Windward Island banana growers associations is much higher than the export price received by Central American exporters of bananas. In 1986, the average Windward Island export price was 2.5 times that received by Ecuador and about twice that received by Guatemala, Honduras and Costa Rica. Windward Island bananas have not always received such a preferential price, however. From 1961-72, the export price of Windward Island and Ecuador bananas on average was virtually identical. The prices began to diverge sharply in 1973: from 1973-83, Windward Island export prices averaged about double those of Ecuador, and from 1984-86 almost 2.5 times those of Ecuador.

STATISTICAL APPENDIX

List of Tables

Table 1.1: OECS - POPULATION, 1843-1980

('000 persons)

	Antigua and Barbuda	Dominica	Grenada	Montserrat	St. Kitts and Nevis	St. Lucia	St. Vincent and the Grenadines
1843	36.7	22.2	29.7	-	32.7	26.7	27.2
1881	35.8	28.2	42.4	10.1	-	38.6	40.5
1891	36.8	26.8	53.2	11.8	44.8	42.2	41.8
1901	35.8	28.9	63.4	12.2	42.6	49.9	-
1911	32.3	33.9	66.8	12.2	39.2	48.6	41.0
1921	29.8	37.1	66.3	12.1	34.8	51.5	44.4
1946	41.8	47.6	72.4	14.3	41.2	70.1	61.6
1950	46.3	51.9	75.0	-	43.0	80.0	66.0
1960	54.2	59.9	88.7	12.2	51.3	87.4	79.9
1970	64.8	69.5	92.8	11.5	44.9	100.9	86.3
1980	75.2	72.8	89.1 ('81)	11.6	43.3	120.3	97.8

Sources: L. F. Bouvier, PRB Occasional Series: The Caribbean, (Individual Country Reports - mid-1980's).

J. P. Guengant, Caribbean Population Dynamics, Conference of Caribbean Parliamentarians on Population and Development, Haywoods, Barbados, June 1985.

West Indian Census, 1946, Volume II.

Table 1.2: OECS - POPULATION STATISTICS, 1980-88

		Total Population[1]	Population Growth Rates	Births	Deaths	Net Migration
Antigua and Barbuda	1980	72944	0.95	1238	387	-276
	1981	73519	0.79	1177	377	-271
	1982	74048	0.72	1152	394	-244
	1983	74562	0.69	1174	404	-265
	1984	75067	0.68	1126	386	-177
	1985	75630	0.75	1190	405	-119
	1986	75296	0.88	1130	383	+50
	1987	77093	1.04	1102	393	+166
	1988	77902	1.05			
Dominica	1980	73795[2]				
	1981	73923	0.02	1955	437	-231
	1982	75672	2.37	1922	355	-14
	1983	77225	2.05	2062	390	-343
	1984	78564	1.73	1924	539	-275
	1985	79774	1.54	1769	428	-287
	1986	80828	1.32	1733	373	-1603
	1987	81185	0.44	1548	457	-1064
	1988	81212	0.03	1440	405	
Grenada	1980	89088				
	1983	92322	1.21			
	1986	97000	1.69			
St. Kitts and Nevis	1980	43309		1108	489	
	1983	45680	1.82	1115	512	-1488
	1984	44800	-1.93	1079	479	-1400
	1985	44000	-1.79	1025	440	-885
	1986	43700	-0.68	1005	459	
St. Lucia	1980	123772[3]		3789	843	-449
	1981	126270	2.02	3860	843	-470
	1982	128817	2.02	4045	845	-602
	1983	131415	2.02	4067	795	-621
	1984	134066	2.02	4159	740	-533
	1985	136952	2.15	4223	824	-822
	1986	139529	1.88	4036	848	-375
	1987	142342	2.02	3838	934	
St.Vincent and the Grenadines	1980	102803[4]				
	1981	103972	1.14			
	1982	105463	1.43	3352	745	-1126
	1983	106944	1.40	3295	779	-1271
	1984	108189	1.16	2831	703	-916
	1985	109407	1.13	2910	651	-924
	1986	110742	1.22	2708	655	-966
	1987	111835	0.99	2650	644	-613
	1988[2]	113228	1.24			

(1) Mid-year Estimates
(2) End of Year
(3) The Census figure is 113,409.
(4) The Census figure is 97,845.

Source: National Statistical Year Books; 1980-81 Population Census of Grenada, Vol. I; 1986-1988 Development Plan, St. Vincent and the Grenadines; World Bank, Caribbean Region: Current Situation, Issues and Prospects (1988).

Table 1.3: OECS - POPULATION AGE STRUCTURE, 1980-81

	0-14	15-24	25-64	65 and over
Antigua*	32.7			
Dominica	39.9	22.2	30.4	7.5
Grenada	38.6	23.6	30.4	7.4
St. Kitts	35.2	23.7	29.3	1.8
St. Lucia	44.4	21.6	28.3	5.7
St. Vincent	43.7	22.8	27.6	5.9

*Estimates.

Source: 1980-81 Census of Population.

Table 1.4: OECS - BIRTH RATES, 1980-88

(per 1000)

	1980-82	1987-88	Fall
Antigua	17	14	3
Dominica	26	18	8
St. Kitts	27	23	4
St. Lucia	31	29	2
St. Vincent	32	24	8

Source: Table 1.2 Statistical Appendix.

Table 2.1: ANTIGUA AND BARBUDA - SECTORAL DISTRIBUTION OF GDP
AT FACTOR COST, 1960-88

(yearly averages in percent)

	1960-64	1966-69	1970-74
Agriculture	18.8	3.3	3.6
Construction	16.3	27.2	10.5 (includes mining '72-'74)
Manufacturing	2.4	5.5	6.8
Rent of Dwellings	6.9	5.7	7.6
Government	19.6	14.8	15.4
Transportation	3.9	4.6	6.9 (includes communications '72-'74)
Hotels	8.9 ('62-'64)	15.5	13.1 (includes entertainment '72-'74)
Distribution & Finance	19.1	18.5	27.9
Other	4.1	4.9	8.2

	1977-79	1980-84	1985-88
Agriculture, Forestry, Fishing, Mining	10.1	6.1	5.8
Crops	1.8	1.2	1.0
Livestock	3.1	2.6	1.6
Fishing	4.7	1.7	1.0
Manufacturing	4.9	6.5	5.6
Construction, Electricity, Water	10.4	10.2	12.9
Wholesale and Retail Trade	10.9	10.2	9.4
Hotels and Restaurants	12.6	14.0	16.7
Transport & Communications	17.7	20.6	21.2
Air Transport	5.4	5.4	5.8
Government Services	12.1	11.9	10.3
Real Estate and Housing	11.6	10.6	9.1
Other (banks & ins., other services, less imputed service charge)	9.6	9.9	8.9
Total	99.9	100.0	99.9

Source: For 1960-74, Chernick, Commonwealth Caribbean. GDP is in current dollars. For 1977-88, estimates are from OECS/EAS, available as of February 1989. Data for 1988 are provisional for all OECS countries. Constant dollar GDP estimates are used.

Table 2.2: ST. KITTS AND NEVIS - SECTORAL DISTRIBUTION OF
GDP AT FACTOR COST, 1960-88

(yearly averages in percent)

	1961-64	1965-69	1970-73
Agriculture	42.6	38.4	24.9
Export Agriculture	31.5	23.5	13.0
Other Agriculture	11.1	14.9	11.9
Construction	9.7	9.5	18.1
Manufacturing	1.6	2.3	2.6
Rent of Dwellings	6.2	5.2	4.8 ('70-'71)
Government	18.1	18.6	21.8
Transportation	1.6	2.8	3.5
Hotels	1/	1.9	2.9
Distribution and Finance	13.8	15.5	15.8 ('70-'71)
Other	6.4	5.8	5.6

1/Included in "other".

	1977-79	1980-84	1985-88
Agriculture, Forestry, Fishing and Mining	19.4	15.1	10.9
Sugar Cane	11.9	8.6	5.6
Other Crops	2.3	1.9	1.4
Livestock	3.3	2.6	1.8
Fishing	1.5	1.7	1.7
Manufacturing (Sugar)	11.6	7.8	5.0
Manufacturing (Other)	6.3	6.7	6.8
Construction, Electricity & Water	9.0	11.2	11.6
Wholesale and Retail Trade	10.6	11.8	13.6
Hotels and Restaurants	2.9	3.2	5.9
Transport & Communications	8.4	10.4	12.2
Air Transport	0.9	0.9	1.0
Government Services	18.2	20.7	21.5
Real Estate and Housing	7.3	6.4	5.6
Other (banks & ins., other services, less imputed service charge)	6.2	6.7	6.9
Total	99.9	100.0	100.0

Source: For 1960-74, Chernick, Commonwealth Caribbean. GDP is in current dollars. For 1977-88, estimates are from OECS/EAS available as of February 1989. Data for 1988 are provisional for all OECS countries. Constant dollar GDP estimates are used.

Table 2.3: DOMINICA - SECTORAL DISTRIBUTION OF
GDP AT FACTOR COST, 1960-88

(yearly averages in percent)

	1961-64	1965-69	1970-73
Agriculture	37.4	31.9	29.8
Export Agriculture	20.3	16.4	16.0
Other Agriculture	17.1	15.5	13.8
Construction	9.4	9.3	12.5
Manufacturing	7.1	8.1	7.7
Rent of Dwellings	12.4	12.4	11.7 ('70-'71)
Government	15.3	18.9	20.8
Transportation	3.1	3.8	3.8
Hotels	1/	1/	1/
Distribution and Finance	9.7	9.6	9.5
Other	5.6	6.0	4.2

1/ Included in "other".

	1977-79	1980-84	1985-88
Agriculture, Forestry, Fishing and Mining	36.4	29.4	31.0
Crops	29.9	20.7	22.0
Livestock	1.4	2.2	2.9
Fishing	2.3	3.3	3.4
Manufacturing	5.8	7.7	7.9
Construction, Electricity and Water	8.8	12.0	10.3
Wholesale and Retail Trade	11.3	11.8	12.4
Hotels and Restaurants	1.3	1.0	1.1
Transport and Communications	6.5	6.7	9.0
Air Transport	0.3	0.2	0.2
Government Services	21.7	22.3	20.3
Real Estate and Housing	5.3	5.7	5.0
Other (banks and ins., other services, less imputed service charge)	2.8	3.3	3.1
Total	99.9	99.9	100.1

Source: For 1960-74, Chernick, Commonwealth Caribbean. GDP is in current
dollars. For 1977-88, estimates are from OECS/EAS available as of
February 1989. Data for 1988 are provisional for all OECS
countries. Constant dollar GDP estimates are used.

Table 2.4: ST. LUCIA - SECTORAL DISTRIBUTION OF GDP AT FACTOR COST, 1960-87

(yearly avearages in percent)

	1963-64	1969	1970-73
Agriculture	33.9	28.1	20.2
Export Agriculture	22.6	21.5	13.9
Other Agriculture	11.3	6.6	6.3
Construction	8.5	14.1	14.8
Manufacturing	5.2	3.8	3.7 (includes mining '72-'73)
Rent of Dwellings	6.9	5.8	4.8 ('70-'71)
Government	17.0	15.3	18.8
Transportation	2.8	3.0	3.4
Hotels	1/	2.8	4.4
Distribution and Finance	18.1	19.6	21.5
Other	7.6	6.9	8.4

1/Included in "other".

	1977-79	1980-84	1985-87[a]
Agriculture, Forestry Fishing and Mining	16.7	14.0	16.6
Crops	13.0	9.7	12.3
Livestock	1.6	1.9	2.4
Fishing	0.6	0.6	0.7
Manufacturing	8.4	8.9	8.5
Construction, Electricity and Water	11.6	11.2	9.8
Wholesale and Retail Trade	17.5	16.1	14.9
Hotels and Restaurants	7.8	7.5	7.5
Transport and Communications	11.2	10.6	11.6
Air Transport	0.6	0.6	0.4
Government Services	16.6	20.8	20.4
Real Estate and Housing	4.9	4.8	4.3
Other (banks and ins., other services, less imputed service charge)	5.4	6.3	6.3
Total	100.1	100.2	99.9

[a]Data for 1988 not available for St. Lucia.

Source: For 1960-74, Chernick, Commonwealth Caribbean. GDP is in current dollars. For 1977-88, estimates are from OECS/EAS available as of February 1989. Data for 1988 are provisional for all OECS countries. Constant dollar GDP estimates are used.

Table 2.5: ST. VINCENT AND THE GRENADINES - SECTORAL DISTRIBUTION
OF GDP AT FACTOR COST, 1960-88

(yearly averages in percent)

	1961	1965-69	1970-73
Agriculture	35.6	29.3	24.2
Export Agriculture	18.6	16.0	12.5
Other Agriculture	17.0	13.3	11.7
Construction	5.8	6.5	9.7
Manufacturing	2.6	4.0	3.4 (including mining '72-73)
Rent of Dwellings	10.4	10.2	9.1 ('70-'71)
Government	16.9	20.8	18.0
Transportation	2.7	3.0	3.1 ('70-'71)
Hotels	1.3 ('63-64)	1.8	3.6 ('70-'71)
Distribution and Finance	19.0	19.8	21.7
Other	5.7	4.6	7.2

	1977-79	1980-84	1985-88
Agriculture, Forestry, Fishing, and Mining	17.6	16.5	17.5
Crops	13.1	13.0	13.6
Livestock	2.0	1.4	1.6
Fishing	1.5	1.5	1.7
Manufacturing	9.4	10.8	10.1
Construction, Electricity and Water	14.0	13.6	13.6
Wholesale and Retail Trade	12.6	11.2	11.8
Hotels and Restaurants	2.7	3.1	3.0
Transport and Communications	18.1	21.1	23.0
Air Transport	0.8	0.9	0.8
Government Services	17.4	15.8	13.7
Real Estate and Housing	4.7	4.1	3.4
Other (banks and ins., other services, less imputed service charge)	3.4	3.9	3.9
Total	99.9	100.1	100.0

Source: For 1960-74, Chernick, Commonwealth Caribbean. GDP is in current
dollars. For 1977-88, estimates are from OECS/EAS available as of
February 1989. Data for 1988 are provisional for all OECS countries.
Constant dollar GDP estimates are used.

Table 2.6: GRENADA - SECTORAL DISTRIBUTION OF
GDP AT FACTOR COST, 1960-88

(yearly averages in percent)

	1960-64		1965-69	1970-74
Agriculture	35.6	('60-'64)	34.2	23.1
Export Agriculture	18.8	('61-'64)	20.3	12.5
Other Agriculture	17.4	('61-'64)	13.9	10.6
Construction	10.3		8.3	10.4
Manufacturing	3.1		3.1	4.4
Rent of Dwellings	7.7		7.4	8.5
Government	16.2		16.8	20.0
Transportation	3.2	('61-'64)	3.4	5.3 (includes communication)
Hotels	0.6	('64)	4.3	3.1
Distribution and Finance	16.2	('61-'64)	17.5	21.3 (includes insurance)
Other	7.1		5.0	3.9

	1977-79	1980-84	1985-88
Agriculture, Forestry, Fishing, Mining		20.3	17.6
Crops		16.5	14.1
Livestock		1.1	1.0
Fishing		2.3	2.1
Manufacturing		5.1	5.3
Construction, Electricity and Water		11.2	11.6
Wholesale and Retail Trade		13.8	13.3
Hotels and Restaurants		4.8	6.3
Transport and Communications		13.3	13.5
Air Transport		0.7	0.9
Government Services		18.5	21.0
Real Estate and Housing		7.4	6.5
Other (banks and ins., other services, less imputed service charge)		5.6	4.9
Total		100.0	100.0

Source: For 1960-74, Chernick, Commonwealth Caribbean. GDP is in current dollars. For 1977-88, estimates are from OECS/EAS available as of February 1989. Data for 1988 provisional for all OECS countries. Constant dollar GDP estimates are used.

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Table 2.7: MONTSERRAT - SECTORAL DISTRIBUTION OF
GDP AT FACTOR COST, 1960-87

(yearly averages in percent)

	1962-64	1965-69	1970-73
Agriculture			
Export Agriculture	5.3	1.9	0.3
Other Agriculture	29.7	16.5	14.2
Construction	15.7	18.8	23.1
Manufacturing	2.0	1.5	1.8
Rent of Dwellings	6.5	6.5	in other
Government	24.6	21.7	20.8
Transportation	1.0	1.4	in other
Hotels	3.6	5.0	in other
Distribution and Finance	11.6	21.9	in other
Other	0	4.7	39.8
Total	100.0	99.9	100.0

	1977-79	1980-84	1985-87[a]
Agriculture, Forestry,			
Fishing, Mining	5.8	5.5	5.2
Crops	2.3	2.1	1.8
Livestock	1.5	1.3	1.4
Fishing	0.4	0.4	0.4
Manufacturing	7.8	9.4	8.5
Construction, Electricity,			
Water	13.6	13.3	15.3
Wholesale and Retail Trade	18.1	18.3	19.0
Hotels and Restaurants	3.4	3.2	3.2
Transport and Communications	7.9	8.3	8.8
Air Transport	2.6	2.4	2.1
Government Services	9.5	9.3	9.8
Real Estate and Housing	19.9	17.3	16.2
Other (banks and ins. other services, less imputed service charge)	13.9	15.3	14.1
Total	99.9	99.9	100.1

[a] Data for 1988 not available for Montserrat.

Source: For 1960-74, Chernick, Commonwealth Caribbean. GDP is in current dollars. For 1977-88, estimates are from OECS/EAS available as of February 1989. Data for 1988 are provisional for all OECS countries. Constant dollar GDP estimates are used.

Table 2.8: OECS COUNTRIES - DOMESTIC EXPORTS BY SELECTED
SITC CATEGORIES, 1960-85

(yearly averages)

All OECS EC$ million	SITC Categories	1960-64	1965-69	1970-74	1985
	0	37.7	44.6	45.8	348.9
	6-8	0.1	0.?	7.4	90.9
	Other	3.7	4.(:	7.0	46.7
	Total	41.4	49.4	60.2	486.5
Percent Distribution	0	90.9	90.1	76.1	71.7
	6-8	0.3	0.5	12.3	18.7
	Other	8.8	9.4	11.6	9.6
	Total	100.0	100.0	100.0	100.0
Antigua and Barbuda, St. Kitts and Nevis, St. Lucia EC$ million	0			17.9	116.1
	6-8			7.2	63.6
	Other			3.7	17.4
	Total			28.7	197.1
Percent Distribution	0			62.3	58.9
	6-8			24.9	32.3
	Other			12.8	8.8
	Total			100.0	100.0
Dominica, Grenada, St. Vincent and the Grenadines EC$ million	0			27.9	232.8
	6-8			0.2	27.3
	Other			3.3	29.3
	Total			31.5	289.4
Percent Distribution	0			88.7	80.4
	6-8			0.7	9.4
	Other			10.6	10.1
	Total			100.0	99.9

Note: All figures exclude Montserrat.

Source: 1960-74 from Chernick, Commonwealth Caribbean. Figures are for
domestic exports. Coverage by year varies slightly for different
countries. For Antigua and Barbuda, SITC exports in category 3 are
omitted as presumed re-exports of fuel. 1985: Figures from country
statistical office sources except Antigua and Barbuda, which are from
World Bank. St. Kitts and Nevis and Grenada figures are for 1983.

Table 2.9: ANTIGUA AND BARBUDA - GROSS DOMESTIC INVESTMENT AND ITS FINANCING, 1978-86

GROSS INVESTMENT AS % OF GDP[1]/				SOURCES OF FINANCING AS % OF GDP[1]/		
	1978-79	1980-84	1985-86		1978-79	1980-84	1985-86
Public	16.9	8.2	N.A.	Central Gov't Saving	-2.1	-2.4	N.A.
Private	19.9	18.3	N.A.	Other Gross Domestic Saving	16.6	9.6	N.A.
Inventory Change				Net Private Transfers	6.1	5.7	6.1
				Foreign Grants to Government	2.2	1.7	0.8
Total	36.8	26.5	N.A.	Government Borrowing Abroad	7.1	3.4	28.5
				Priv. Invest. (incl. errors)	9.5	8.6	8.2
				Other Foreign (net-residual)	-1.6	0.0	-3.4
				Total	36.8	26.6	N.A.
				Private Sources	31.2	23.9	14.3[2]/
				Public Sources	6.6	2.7	25.9[2]/

PERCENTAGE DISTRIBUTION OF GROSS INVESTMENT				PERCENTAGE DISTRIBUTION OF SOURCES OF FINANCING		
	1978-79	1980-84	1985-86		1978-79	1980-84	1985-86
Public	45.9	30.9	N.A.	Public	15.2	10.2	64.4[2]/
Private	54.1	69.1	N.A.	Private	84.8	89.8	35.6[2]/
Total	100.0	100.0	N.A.	Total	100.0	100.0	100.0

[1]/At market prices.
[2]/Foreign sources only.
N.A.: Not available.

Source: World Bank.

Table 2.10: ST. KITTS AND NEVIS - GROSS DOMESTIC INVESTMENT AND ITS FINANCING, 1978-86

GROSS INVESTMENT AS % OF GDP[1]/				SOURCES OF FINANCING AS % OF GDP[1]/		
	1977-79	1980-84	1987 only		1977-79	1980-84	1985-87
Public	} 31.4	11.7	5.2	Central Gov't Saving	3.5	-2.9	1.3
Private	}	5.4	20.0	Other Gross Domestic Saving	5.3	-9.5	N.A.
Inventory Change				Net Private Transfers	22.5	13.4	12.5
				Foreign Grants to Government	7.5	4.1	2.8
Total	31.4	17.1	25.2	Government Borrowing Abroad	1.9	3.3	2.9
				Priv. Invest. (incl. errors)	-3.9	8.1	19.8
				Other Foreign (net-residual)	-5.5	0.6	-7.2
				Total	31.3	17.1	N.A.
				Private Sources	23.9	12.0	32.3[2]/
				Public Sources	7.4	5.1	-1.5[2]/

PERCENTAGE DISTRIBUTION OF GROSS INVESTMENT				PERCENTAGE DISTRIBUTION OF SOURCES OF FINANCING		
	1977-79	1980-84	1987 only		1977-79	1980-84	1985-87
Public	N.A.	68.4	20.6	Public	23.6	29.8	-4.9[2]/
Private	N.A.	31.6	79.4	Private	76.4	70.2	104.9[2]/
Total	N.A.	100.0	100.0	Total	100.0	100.0	100.0

[1]/At market prices.
[2]/Foreign sources only.
N.A.: Not available.

Source: World Bank.

Table 2.11: DOMINICA - GROSS DOMESTIC INVESTMENT AND ITS FINANCING, 1977-86

GROSS INVESTMENT AS % OF GDP[1]/				SOURCES OF FINANCING AS % OF GDP[1]/			
	1977-79	1980-84	1985-86		1977-79	1980-84	1985-86
Public	12.5	16.0	N.A.	Central Government Saving	-13.1	-2.7	-2.4
Private	10.9	16.4	N.A.	Other Gross Domestic Saving	9.3	6.3	N.A.
Inventory Change	2.9	1.0	N.A.	Net Private Transfers	9.6	11.3	N.A.
				Foreign Grants to Government	23.8	13.8	8.5
Total	26.3	33.4	N.A.	Government Borrowing Abroad	3.5	7.7	6.0
				Priv. Invest. (incl. errors)	-.2	4.2	N.A.
				Other Foreign (not-residual)	-6.6	-1.2	N.A.
				Total	26.3	33.4	N.A.
				Private Sources	18.7	15.8	N.A.
				Public Sources	7.6	17.6	N.A.

PERCENTAGE DISTRIBUTION OF GROSS INVESTMENT				PERCENTAGE DISTRIBUTION OF SOURCES OF FINANCING			
	1977-79	1980-84	1985-86		1977-79	1980-84	1985-86
Public	47.5	47.9	N.A.	Public	28.9	52.7	N.A.
Private[2]/	52.5	52.1	N.A.	Private	71.1	47.3	N.A.
Total	100.0	100.0	N.A.	Total	100.0	100.0	N.A.

[1]/At market prices.
[2]/Includes inventory change.
N.A.: Not available.

Source: World Bank.

Table 2.12: ST. LUCIA - GROSS DOMESTIC INVESTMENT AND ITS FINANCING, 1977-87

GROSS INVESTMENT AS % OF GDP[1]/				SOURCES OF FINANCING AS % OF GDP[1]/			
	1977-79	1980-84	1985-87		1977-79	1980-84	1985-87
Public	9.1	9.4	13.0	Central Government Saving	1.8	-1.5	3.3
Private	49.2	35.6	26.3	Other Gross Domestic Saving	16.9	13.3	20.6
Inventory Change				Net Private Transfers	9.8	9.8	8.0
				Foreign Grants to Government	3.3	3.3	4.1
Total	58.3	45.0	39.3	Government Borrowing Abroad	4.8	1.4	2.0
				Priv. Invest. (incl. errors)	25.3	17.4	11.1
				Other Foreign (net-residual)	-2.1	1.2	-9.8
				Total	58.3	44.9	39.3
				Private Sources	51.5	40.5	39.7
				Public Sources	6.8	4.4	-0.4

PERCENTAGE DISTRIBUTION OF GROSS INVESTMENT				PERCENTAGE DISTRIBUTION OF SOURCES OF FINANCING			
	1977-79	1980-84	1985-87		1977-79	1980-84	1985-87
Public	15.6	20.9	33.1	Public	11.7	9.8	-1.0
Private	84.4	79.1	66.9	Private	88.3	90.2	101.0
Total	100.0	100.0	100.0	Total	100.0	100.0	100.0

[1]/At market prices.

Source: World Bank.

Table 2.13: ST. VINCENT AND THE GRENADINES - GROSS DOMESTIC INVESTMENT AND ITS FINANCING, 1977-86

GROSS INVESTMENT AS % OF GDP[1]/				SOURCES OF FINANCING AS % OF GDP[1]/			
	1977-79	1980-84	1985-86		1977-79	1980-84	1985-86
Public	16.6	11.1	10.0	Central Gov't Saving	2.4	8.6	5.4
Private	16.0	16.5	18.4	Other Gross Domestic Saving	-4.6	4.1	16.9
Inventory Change	2.5	2.7	3.1	Net Private Transfers	23.9	16.3	12.2
				Foreign Grants to Government	3.6	4.3	3.2
Total	31.1	30.3	31.5	Government Borrowing Abroad	1.4	4.2	3.0
				Priv. Invest. (incl. errors)	0.9	2.6	3.8
				Other Foreign (net-residual)	3.5	-1.9	-13.0
				Total	31.1	30.2	31.5
				Private Sources	20.2	23.0	32.9
				Public Sources	10.9	7.2	-1.4

PERCENTAGE DISTRIBUTION OF GROSS INVESTMENT				PERCENTAGE DISTRIBUTION OF SOURCES OF FINANCING			
	1977-79	1980-84	1985-86		1977-79	1980-84	1985-86
Public	34.1	36.6	31.7	Public	35.0	23.8	-4.4
Private[1]/	65.9	63.4	68.3	Private	65.0	76.2	104.4
Total	100.0	100.0	100.0	Total	100.0	100.0	100.0

[1]/At market prices.
[2]/Includes inventory change.

Source: World Bank.

Table 2.14: GRENADA - GROSS DOMESTIC INVESTMENT AND ITS FINANCING, 1978-85

GROSS INVESTMENT AS % OF GDP[1]/				SOURCES OF FINANCING AS % OF GDP[1]/			
	1978-79	1980-84	1985		1978-79	1980-84	1985
Public	8.2	34.6	29.5	Central Gov't Saving	-0.8	0.7	0.7
Private	4.2	5.9	5.4	Other Gross Domestic Saving	-1.9	6.4	3.1
Inventory Change		0.8		Net Private Transfers	10.8	13.7	3.5
				Foreign Grants to Government	5.1	20.7	31.1
Total	12.4	41.3	34.9	Government Borrowing Abroad	2.0	9.1	1.3
				Priv. Invest. (incl. errors)	-1.8	2.1	0.6
				Other Foreign (net-residual)	-1.0	-5.4	-5.4
				Total	12.4	41.3	34.9
				Private Sources	7.1	16.2	7.2
				Public Sources	5.3	25.1	27.7

PERCENTAGE DISTRIBUTION OF GROSS INVESTMENT				PERCENTAGE DISTRIBUTION OF SOURCES OF FINANCING			
	1978-79	1980-84	1985		1978-79	1980-84	1985
Public	66.1	83.8	84.5	Public	42.7	60.8	79.4
Private[1]	33.9	16.2	15.5	Private	57.3	39.2	20.6
Total	100.0	100.0	100.0	Total	100.0	100.0	100.0

[1]/At market prices.
[2]/Includes inventory change.

Source: World Bank.

Table 2.15: OECS COUNTRIES - SOURCES OF PRIVATE SECTOR FINANCE, 1977-87

(yearly averages; percent of GDP; percentage distribution in brackets)

	1977-79	1980-84	1985-87
Antigua and Barbuda	('78-79)		
Total Private Sector Finance	31.2 [100]	23.9 [100]	14.3[1]/
Domestic	16.6 [53]	9.6 [40]	
Foreign	14.6 [47]	14.3 [60]	14.3[1]/
Net Private Transfers	5.1 [16]	5.7 [24]	6.1[1]/
Net Private Investment	9.5 [31]	8.6 [36]	8.2[1]/
St. Kitts and Nevis			
Total Private Sector	23.9 [100]	12.0 [100]	32.3[1]/
Domestic	5.3 [22]	-9.5 [-80]	
Foreign	18.6 [78]	21.5 [180]	32.3[1]/
Net Private Transfers	22.5 [94]	13.4 [112]	12.5[1]/
Net Private Investment	-3.9 [-16]	8.1 [68]	19.8[1]/
Dominica			
Total Private Sector	18.7 [100]	15.8 [100]	N.A.
Domestic	9.3 [50]	0.3 [2]	N.A.
Foreign	9.4 [50]	15.5 [98]	N.A.
Net Private Transfers	9.? [51]	11.3 [72]	N.A.
Net Private Investment	-0.。 [-1]	4.2 [26]	N.A.
St. Lucia			
Total Private Sector	51.5 [100]	40.5 [100]	39.7 [100]
Domestic	16.9 [33]	13.3 [33]	20.6 [52]
Foreign	34.6 [67]	27.2 [67]	19.1 [48]
Net Private Transfers	9.3 [18]	9.8 [24]	8.0 [20]
Net Private Investment	25.3 [49]	17.4 [43]	11.1 [28]
St. Vincent and the Grenadines			('85-86)
Total Private Sector	20.2 [100]	23.0 [100]	32.9 [100]
Domestic	-4.6 [-23]	4.1 [18]	16.9 [51]
Foreign	24.8 [123]	18.9 [82]	16.0 [49]
Net Private Transfers	23.9 [118]	16.3 [71]	12.2 [37]
Net Private Investment	0.9 [5]	2.6 [11]	3.8 [12]
Grenada	('78-79)		('85 only)
Total Private Sector	7.1 [100]	16.2 [100]	7.2 [100]
Domestic	-1.9 [-27]	0.4 [2]	3.1 [43]
Foreign	9.0 [127]	15.8 [98]	4.1 [57]
Net Private Transfer	10.8 [152]	13.7 [84]	3.5 [49]
Net Private Investment	-1.8 [-25]	2.1 [14]	0.6 [8]
Average for OECS Countries (Unweighted)			
Total Private Sector	25.4 [100]	21.9 [100]	26.6 [100]
Domestic	6.9 [27]	3.0 [14]	13.5 [51]
Foreign	18.5 [73]	18.9 [86]	13.1 [49]
Net Private Transfers	13.5 [53]	11.7 [53]	7.9 [30]
Net Private Investment	5.0 [20]	7.2 [33]	5.2 [19]

[1]/Resource Gap only.
N.A.: Not available.

Source: Table 2.9-2.14.

Table 2.16: OECS COUNTRIES - SOURCES OF PUBLIC SECTOR FINANCE, 1977-87

(yearly averages; percent of GDP; percentage distribution in brackets)

	1977-79	1980-84	1985-87
Antigua and Barbuda			
	('78-79)		
Total Public Sector Finance	5.6 [100]	2.7 [100]	25.9[1]/
Domestic	-2.1	-2.4	N.A.
Foreign	7.7	5.1	N.A.
Foreign Grants	2.2 [39]	1.7 [63]	0.8[1]/
Government Borrowing	7.1 [127]	3.4 [126]	28.5[1]/
Other Foreign	-1.6	0.0	-3.4[1]/
St. Kitts and Nevis			
Total Public Sector	7.4 [100]	5.1 [100]	-0.2
Domestic	3.5	-2.9	1.3
Foreign	3.9	8.0	-1.5
Foreign Grants	7.5 [101]	4.1 [80]	2.8
Government Borrowing	1.9 [26]	3.3 [65]	2.9
Other foreign	-5.5	0.6	-7.2
Dominica			
Total Public Sector	7.6 [100]	17.6 [100]	N.A.
Domestic	-13.1	-2.7	-2.4
Foreign	20.7	20.3	N.A.
Foreign Grants	23.8 [313]	13.8 [78]	8.5
Government Borrowing	3.5 [46]	7.7 [44]	6.0
Other Foreign	-6.6	-1.2	N.A.
St. Lucia			
Total Public Sector	6.8 [100]	4.4 [100]	-0.4
Domestic	1.3	-1.5	3.3
Foreign	5.5	5.9	-3.7
Foreign Grants	3.3 [49]	3.3 [75]	4.1
Government Borrowing	4.3 [63]	1.4 [32]	2.0
Other Foreign	-2.1	1.2	-9.8
St. Vincent and the Grenadines			
Total Public Sector	10.9 [100]	7.2 [100]	-1.4
Domestic	2.4	0.6	5.4
Foreign	8.5	6.6	-6.8
Foreign Grants	3.6 [33]	4.3 [60]	3.2
Government Borrowing	1.4 [13]	4.2 [58]	3.0
Other Foreign	3.5	-1.9	-13.0
Grenada			
Total Public Sector	5.3 [100]	25.1 [100]	27.7 [100]
Domestic	-0.8	0.7	0.7
Foreign	6.1	24.4	27.0
Foreign Grants	5.1 [96]	20.7 [82]	31.1 [114]
Government Borrowing	2.0 [38]	9.1 [36]	1.3 [5]
Other Foreign	-1.0	-5.4	-5.4
Average for OECS Countries (Unweighted)			
Total Public Sector	7.2 [100]	10.3 [100]	6.4[2]/ [100]
Domestic	-1.5	-1.4	2.7
Foreign	8.7	11.7	3.8
Foreign Grants	7.6 [106]	8.0 [78]	10.3 [161]
Government Borrowing	3.4 [47]	4.9 [48]	2.3 [36]
Other Foreign	-2.3	-1.2	-8.8

[1]/Resource gap only.
[2]/Excludes Antigua and Barbuda and Dominica.
N.A.: Not available.

Source: Table 2.9-2.14.

Table 2.17: OECS COUNTRIES - A COMPARISON OF PUBLIC SECTOR INVESTMENT
AND EXTERNAL FLOWS, 1977-87

(yearly averages; percent of GDP)

	1977-79	1980-84	1985-87
Antigua and Barbuda			
Public Sector Investment	13.9	8.2	N.A.
Foreign Grants	2.2	1.7	6.8
Government Borrowing Abroad	7.1	3.4	28.5
Grants & Borrowing as % of PSI	55.6	62.2	N.A.
St. Kitts and Nevis			
			('87 only)
Public Sector Investment	N.A.	11.7	5.2
			('85-87)
Foreign Grants	7.5	4.1	2.8
Government Borrowing Abroad	1.9	3.3	2.9
Grants & Borrowing as % of PSI	N.A.	63.2	N.A.
Dominica			
Public Sector Investment	12.5	16.6	N.A.
Foreign Grants	23.8	13.8	8.5
Government Borrowing Abroad	3.5	7.7	6.6
Grants & Borrowing as % of PSI	218.4	134.4	N.A.
St. Lucia			
Public Sector Investment	9.1	9.4	13.6
Foreign Grants	3.3	3.3	4.1
Government Borrowing Abroad	4.3	1.4	2.6
Grants & Borrowing as % of PSI	83.5	50.6	46.9
St. Vincent and the Grenadines			
Public Sector Investment	10.6	11.1	16.6
Foreign Grants	3.6	4.3	3.2
Government Borrowing Abroad	1.4	4.2	3.6
Grants & Borrowing as % of PSI	47.2	76.6	62.6
Grenada			
Public Sector Investment	8.2	34.6	29.5
Foreign Grants	5.1	26.7	31.1
Government Borrowing Abroad	2.6	9.1	1.3
Grants & Borrowing as % of PSI	86.6	86.1	109.8
OECS Countries (Unweighted average)[2]			
Public Sector Investment	11.5[1]	15.2	17.5
Foreign Grants	7.6	8.6	12.6
Government Borrowing Abroad	3.7	4.9	2.1
Grants & Borrowing as % of PSI	98.3	84.9	85.1
Grants as % of PSI	66.1	52.6	73.1
OECS Countries (Unweighted average excluding Grenada)[2]			
Public Sector Investment	12.3[1]	11.3	11.5
Foreign Grants	8.2	5.4	3.7
Government Borrowing Abroad	4.1	4.6	2.5
Grants & Borrowing as % of PSI	100.0	83.2	53.9
Grants as % of PSI	67.7	47.8	32.2

[1]Excludes St. Kitts and Nevis.
[2]Only St. Lucia, St. Vincent and the Grenadines and Grenada included.
N.A.: Not available.

Source: Tables 2.9-2.14.

Table 2.18: OECS COUNTRIES - GROSS PUBLIC INVESTMENT FINANCED BY
FOREIGN GRANTS AND GRANT ELEMENT OF GOVERNMENT
BORROWING ABROAD, 1977-87

	1977-79		1980-84		1985-87	
	Public Sector Investment as % GDP	Percent Financed by Grant and Grant Element	Public Sector Investment as % GDP	Percent Financed by Grants	Public Sector Investment as % GDP	Percent Financed by Grants
Antigua and Barbuda	16.9	27	8.2	35		
St. Kitts and Nevis			11.7	44		
Dominica	12.5	200	16.0	102		
St. Lucia	9.1	52	9.4	40	13.0	37
St. Vincent and the Grenadines	10.6	38	11.1	51	10.0	42
Grenada	8.2	70	34.6	69	29.5	107

Source: Calculated from Table 2.17 on assumption that grant element of govern-
ment borrowing abroad is one-third. For example, for Antigua and
Barbuda, calculation is 2.2 plus one-third of 7.1, or 4.6, which is 27%
of 16.9.

TABLE 2.19: OECS COUNTRIES - SUBSIDY ELEMENT OF GRANTS AND GRANT ELEMENT
OF GOVERNMENT BORROWING ABROAD, 1977-87

(percent of GDP)

	1977-79	1980-84	1985-89
Antigua and Barbuda	4.6	2.9	
St. Kitts and Nevis	8.1	5.1	
Dominica	25.0	16.3	
St. Lucia	4.7	3.8	4.8
St. Vincent and the Grenadines	4.0	5.7	4.2
Grenada	5.7	23.9	31.6

Source: Calculated from Table 2.18.

Table 2.20: ANTIGUA AND BARBUDA, DOMINICA, ST. LUCIA,
ST. VINCENT AND THE GRENADINES -
REAL WAGES, 1980-87

Year	Antigua	Dominica Government	Dominica Private	St. Lucia Government	St. Lucia Private	St. Vincent and the Grenadines
1980	1.00	100.00	100.00	1.00	1.00	1.00
1981	1.121	88.26	109.10	0.997	1.086	1.047
1982	1.318	92.91	118.80	1.095	1.142	1.102
1983	1.489	98.21	123.40	1.165	1.237	1.164
1984	1.601	105.64	133.00	1.228	1.345	1.247
1985	1.741	107.94	136.20	1.291	1.461	1.329
1986	1.907	109.31	139.80	1.338	1.542	1.408

Source: Bank staff estimates.

Table 2.21: OECS COUNTRIES - DOMESTIC EXPORTS AS A PERCENT OF GDP, 1966-86

(yearly averages)

	1966-69	1970-74	1975-79	1980-84	1985-86
Antigua and Barbuda	0.6	2.8	6.1	9.6	4.9
St. Kitts and Nevis	27.1	22.6	48.0	36.2	28.4
Dominica	40.2	31.0	34.5	28.2	33.0
St. Lucia	25.3	18.1	34.9	28.9	35.2
St. Vincent and the Grenadines	21.4	13.1	40.7	42.8	55.4
Grenada	n.a.	n.a.	n.a.	24.4	25.9

n.a. = not available

Source: 1987 World Tables; Chernick, Commonwealth Caribbean; Bank staff
estimates. GDP data for Grenada are not available for 1966 to 1980.

Table 3.1: OECS - VALUE OF BANANA AND SUGAR EXPORTS, 1977-87
(US$ Million)

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Bananas											
Dominica	6.9	9.2	4.4	3.0	9.1	10.0	11.2	11.1	13.3	25.3	31.8
Grenada	3.2	3.4	3.7	4.1	3.7	3.7	3.2	3.4	3.7	4.9	6.5
St. Lucia	9.5	12.1	13.5	10.5	14.7	14.6	20.4	22.8	31.7	52.7	44.8
St. Vincent and											
the Grenadines	5.6	7.3	5.9	6.3	10.1	9.0	11.0	11.8	16.9	19.7	n.a.
Sugar											
St. Kitts and Nevis	9.4	11.8	11.3	14.4	14.7	12.2	10.0	11.6	6.3	9.4	13.0

n.a. : Not available.

Source: World Bank.

Table 4.1: MANUFACTURING AS A COMPONENT OF GDP AT FACTOR COST, OECS, 1977-87

A. Manufacturing in Current Prices (EC$ million)

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Antigua	6.9	8.7	10.7	13.7	14.6	16.8	17.6	19.3	20.3	21.5	23.0
St. Kitts	12.5	13.2	12.8	15.7	17.9	18.7	17.6	22.6	21.9	32.8	33.4
Montserrat	1.8	2.3	3.0	3.5	4.1	4.0	5.3	5.6	5.1	5.8	6.8
Dominica	4.2	6.0	5.0	6.9	10.2	13.4	14.1	12.4	14.4	16.9	18.3
St. Lucia	13.8	15.2	18.9	24.7	25.3	26.8	30.2	31.1	33.0	34.0	35.0
St. Vincent	5.9	10.3	13.1	14.2	18.4	20.7	21.3	28.9	28.7	26.8	25.2
Grenada				6.6	8.7	10.2	10.5	9.8	12.5	13.3	16.2
OECS Total				85.3	99.2	110.6	116.6	129.7	135.9	151.1	157.9

B. Manufacturing in Constant Prices (EC$ million)

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Antigua	6.9	8.3	9.6	11.4	13.9	13.9	14.2	14.8	15.2	15.9	16.5
St. Kitts	12.5	13.2	13.3	13.5	12.2	13.2	11.7	13.2	12.4	13.5	13.0
Montserrat	1.8	2.4	2.9	3.1	3.5	3.4	3.6	3.5	3.5	3.6	3.7
Dominica	4.2	5.9	4.9	6.2	7.3	8.6	8.7	7.9	8.9	9.3	9.8
St. Lucia	13.8	16.C	13.4	15.5	15.8	17.0	18.8	18.8	19.3	19.6	19.8
St. Vincent	5.9	8.9	10.6	11.1	11.3	12.0	12.3	13.3	13.5	13.4	13.3
Grenada*				8.9	10.7	11.9	11.6	9.8	11.7	11.8	13.8

*Grenada is in constant 1984 prices, all others in constant 1977 prices.

C. Manufacturing as a Percent of GDP in Current Prices

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Antigua	4.4	4.9	4.9	5.3	5.1	5.3	4.9	4.8	4.4	4.0	3.7
St. Kitts	18.1	17.3	14.6	15.2	14.7	13.5	12.9	14.2	12.8	15.5	14.4
Montserrat	6.5	7.1	7.9	6.0	6.4	5.7	6.9	6.7	6.0	5.9	6.0
Dominica	5.0	5.7	4.7	4.8	6.7	8.2	7.8	6.1	6.4	6.7	6.6
St. Lucia	8.8	8.0	8.3	9.4	8.5	8.6	9.3	8.8	8.5	8.0	7.9
St. Vincent	7.2	9.9	10.9	10.5	11.0	10.9	10.1	12.5	11.5	9.5	8.3
Grenada				3.9	4.8	5.2	5.1	4.4	5.1	4.8	5.4
OECS				7.6	7.8	8.0	7.8	7.8	7.4	7.2	6.9

Source: OECS March, 1988 data. Data for 1987 are preliminary.

Table 4.2: ANTIGUA AND BARBUDA, MERCHANDISE EXPORTS, 1978-87

(EC$ million)

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Total Merchandise Exports	n.a.	n.a.	160.7	138.8	133.1	98.6	95.0	76.4	75.6	83.2
Domestic Exports	12.7	8.1	25.4	26.2	53.2	38.3	24.8	21.9	27.3	29.7
Re-Exports	n.a.	n.a.	135.3	112.6	79.9	60.2	70.2	54.5	48.3	53.5

Domestic Exports by SITC
Category:

Category	Description	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
0	Food	0.8	0.5	1.1	0.8	3.8	1.4	1.4	0.8	0.8	0.8
1	Beverages	1.6	0.0	1.4	1.9	1.6	1.4	1.1	0.5	0.8	0.8
6-8	Manufactured Goods	8.3	7.6	22.1	21.3	26.2	25.9	20.0	18.4	17.3	19.0
	Other (Residual)	2.0	0.0	0.8	2.2	21.6	9.6	2.3	2.2	8.4	9.1
	Total	12.7	8.1	25.4	26.2	53.2	38.3	24.8	21.9	27.3	29.7

Re-Exports:

Description	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Petroleum Products	n.a.	n.a.	85.6	36.2	40.2	40.8	53.5	43.2	35.1	35.4
Manufactured Goods	20.0	19.1	43.5	64.0	27.2	18.1	15.4	9.7	12.5	12.7
Other (Residual)	n.a.	n.a.	6.2	12.4	12.5	1.3	1.3	1.6	0.7	5.4
Total	n.a.	n.a.	135.3	112.6	79.9	60.2	70.2	54.5	48.3	53.5

Domestic Exports by Direction
of Trade:

		1986	1987
CARICOM	Total	10.7	10.2
	OECS	5.8	5.9
	Barbados	4.0	3.3
	Other CARICOM	0.9	1.0
All Other Countries		16.6	19.5

	1982	1983	1984	1985	1986	1987
U.S. Imports for Consumption	14.2	13.2	23.8	21.3	66.7	32.0	23.3
- 806/807 Items	9.7	11.8	15.6	15.5	15.6	13.3	
By Product - Clothing						12.4	
- Leather						6.8	
- Chemicals						1.5	
- Electrical Components						1.3	

N.A.: Not available.

Source: Antigua and Barbuda Statistical Yearbook and Bank staff estimates.

(EC$ million)

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Total Exports	32.2	42.9	25.4	26.3	51.8	66.0	74.2	69.2	76.8	117.2	129.6
Re-Exports	0.7	0.5	0.7	1.1	1.2	4.5	1.9	1.9	5.9	12.2	8.0
Domestic Exports	31.6	42.4	24.7	25.2	50.6	61.5	72.3	67.3	70.9	105.0	121.6
Selected Exports:											
Bananas		24.7	11.9	8.0	24.6	26.9	30.3	30.0	36.0	68.1	86.4
Soap		5.0	4.7	13.1	20.5	23.4	20.4	14.9	19.2	18.9	21.2
Coconut Oil		1.7	1.3	1.0	0.2	0.5	1.7	1.6	1.9	2.7	1.3
Bay Oil		1.5	1.3	0.3	0.9	0.9	1.0	1.2	1.1	1.1	1.3
Glycerol							0.1	0.2	0.3	0.4	0.4
Sauces		0.3	0.2	0.3	0.4	0.3	0.4	0.5	0.5	0.6	0.8
Vegetable Extracts										0.2	0.2
Spring Water										0.7	0.2
Other Water									0.9	0.6	0.2	0.1
Enamels and Paints								0.3	0.3	0.9	0.8	0.5
Gloves										0.8	1.1	1.3
Candles										0.2	0.3	0.2
Furniture											0.1	0.2
Galvanized Sheets							1.3	5.5	6.6	1.2	2.2	1.0
All Other Domestic Exports	9.2	5.3	2.5	4.0	8.2	12.6	11.1	8.2	7.6	6.5[1]

[1]/1987 figures identify other manufactured products as follows: concentrated grapefruit juice EC$0.7 million, prefabricated buildings EC$0.5 million, and textiles EC$0.1 million. Other domestic exports consist mainly of non-banana fruits and vegetables (EC$3.6 million).

Source: Dominica, Statistical Office.

Table 4.4: DOMINICA: DIRECTION OF TRADE, 1978-87

	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Percentage Distribution of Total Exports										
U.K.	67.1	55.5	34.6	51.0	44.4	43.7	45.8	50.1	57.0	67.4
U.S.	2.~	3.9	0.8	1.9	5.9	2.4	1.6	3.4	4.7	2.9
Jamaica	3.5	8.3	30.8	27.2	34.7	28.3	15.6	14.7	10.1	9.0
Barbados & Trinidad	7.5	9.4	9.9	5.4	2.7	13.1	17.2	8.6	6.4	7.9
OECS	7.5	14.2	20.9	9.8	7.7	7.4	12.4	11.3	7.5	6.0
Other	11.7	8.7	3.0	4.6	4.5	5.1	7.4	11.8	14.3	6.9
Total	100.1	100.0	100.0	99.9	99.9	100.0	100.0	99.9	100.0	100.1

Trade with the United States (EC$ Million)

Dominica exports to U.S.[a]

		1.0	3.9	1.8	1.1	2.6	5.5	3.7

U.S. Imports from Dominica[b]

		1981	1982	1983	1984	1985	1986	1987
Total		0.3	6.4	0.7	0.2	38.2	41.0	27.8
806/807		0.0	0.6	0.5	0.0	0.7	0.5	N.A.
CBI/GSP		0.2	0.5	0.1	0.0	3.0	3.4	N.A.
MFN		0.1	5.3	0.1	0.2	34.5	37.1	N.A.

By Product Category:

Parts for shovels	6.5
Cocoa beans	1.9
Calcium chloride	1.4
Rock lobster tails	1.2
Lime and orange oils	1.0
Phonograph records	0.8
Toilet soap	0.8

[a]Dominica estimates.
[b]U.S. estimates.

N.A.: Not available.

Source: 1) Dominica Statistical Digest, Ten Years of Growth, 1978-88.
2) U.S. Department of Commerce.

TABLE 4.5: GRENADA, MERCHANDISE EXPORTS, 1975-87

(EC$ million or percent)

	1975	1976	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Merchandise Exports	33.2	35.1	38.6	45.9	57.8	47.0	51.3	50.0	50.8	45.1	60.8	77.4	66.1
Domestic Exports					55.6	45.6	50.2	48.1	49.4	43.7	59.4	71.4	80.4
Re - Exports					2.2	1.4	1.1	1.9	1.4	1.4	1.4	6.0	5.7
Agricultural Produce[1]					52.9	40.8	40.2	£9.5	41.3	41.3[1]	54.3		
Clothing				1.0	1.1	2.4	5.9	6.5	4.9	1.9	1.6		
Other[2]					3.8	3.8	5.2	7.0	4.6	1.9	4.9		
Percent of Merchandise Exports													
Agricultural Produce					91.5	86.8	78.4	73.0	81.3	91.6	89.3		
Clothing					1.9	5.1	11.5	13.0	9.6	4.2	2.6		
Exports to U.S. from Grenada													
Total						1.4	0.8	1.2	1.4	2.7	1.9	2.8	4.0
Manufactured Goods						0.2				0.1	0.7	0.8	0.6
Clothing						0.2					0.1	0.8	0.5
Imports for Consumption into U.S. from Grenada							0.9	1.1	0.6	2.1	3.5	8.1	9.8

[1]/Consists of exports of bananas, cocoa, nutmeg,mace and fresh fruits.
[2]/Includes re-exports.

Source: Statistical Office, Grenada; U.S. Department of Commerce; and Bank staff estimates.

Table 4.6: ST. KITTS AND NEVIS, MERCHANDISE EXPORTS, 1977-87

(EC$ million)

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Total Merchandise Exports	40.5	45.1	45.9	65.9	68.3	56.2	49.1	57.8	55.1	71.0	73.4
Re-Exports	2.2	2.7	1.6	1.6	5.1	4.3	2.7	1.9	6.2	7.3	
Domestic Exports	38.3	42.7	44.3	64.3	63.2	51.8	46.4	55.9	48.9	63.7	
Selected Domestic Exports:											
Sugar		31.9	30.5	38.9	39.7	32.9	27.0	31.3	17.0	25.4	35.1
Beverages			1.6	1.6	0.8	1.4	2.7	3.0	3.2	2.2	
Clothing		2.2	4.1	4.9	4.6	4.3	4.6	6.8	3.8	11.1	
Footwear		0.5	2.2	9.7	6.5	2.4	4.3	3.8	3.2	0.8	
Electrical Components			0.8	2.7	4.3	4.3	4.1	5.9	10.8	12.4	
Other Manufacturing		n.a.	n.a.	n.a.	1.6	0.3	1.8	1.9	7.3	9.7	
Direction of Trade-Domestic Exports:											
U.S.					26.7	10.7	24.5	24.0	16.8		
U.K.					17.1	23.0	8.9	10.2	13.8		
OECS					?.2	2.7	3.1	3.6	4.8		
Trinidad					5.4	7.2	7.0	7.4	5.4		
All Other					9.1	2.9	3.6	7.4	8.1		
Total[1]					60.5	46.5	47.1	52.6	48.9		
Domestic Exports to U.S.					26.7	10.7	24.5	24.0	16.8		
Re-Exports to U.S.					1.1	3.5	0.6	0.8	4.3		
Total Exports to U.S.	17.0	13.3	15.0	29.7	27.8	14.2	25.1	24.8	21.1		
U.S. Imports for Consumption:					30.0	31.2	50.6	62.5	43.9	60.2	64.2
Sugar										11.4	
Clothing										21.7	
Electrical Components										23.7	
Headwear										0.8	

[1]/Total of Domestic Exports differs in Direction of Trade data from Domestic Exports as given above, but differences are not large.

Source: St. Kitts and Nevis Statistical Office; U.S. Department of Commerce: and Bank staff estimates.

Table 4.7: ST. LUCIA, MERCHANDISE EXPORTS, 1977-87

(EC$ million)

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Total Exports, f.o.b.	61.0	72.4	86.1	124.2	111.2	112.3	128.3	129.1	140.4	223.8	194.4
Re - Exports	5.4	5.4	10.5	33.2	13.0	10.5	21.3	5.4	12.4	10.8	11.6
Domestic Exports	55.6	67.0	75.6	91.0	98.2	101.8	107.0	123.7	128.0	213.0	182.8
Selected Exports:											
Bananas	25.5	32.7	36.5	28.4	39.6	42.2	50.2	64.2	81.4	142.2	120.1
Coconut Oil	5.5	5.4	7.2	7.9	6.7	8.3	7.6	7.5	3.1	7.3	6.9
Beer and Ale	2.6	3.1	4.3	3.3	2.6	5.7	4.3	3.1	3.1	3.5	5.9
Paper and Paper Board	9.5	7.8	5.2	7.0	15.1	14.2	11.8	13.6	13.5	15.4[1]/	18.8
Clothing	2.2	6.0	4.8	7.7	10.3	11.1	15.5	19.3	11.4	18.9[1]/	29.3
Total-Selected Manufacturers	19.8	22.3	21.5	25.9	33.7	39.3	39.2	43.5	31.1	45.1	60.9
Electrical Components									3.4	4.2	6.3
Exports to U.S.	1.2	1.3	4.0	28.7	7.6	8.6	13.6	21.5	18.6	27.2	40.2
U.S. Imports for Consumption					34.5	12.7	12.7	20.0	37.2	33.1	48.2
806/807 Imports					6.4	8.6	9.6	11.5	21.3	17.7	
MFN Imports					27.8	3.4	3.0	4.7	11.8	9.2	
Clothing										19.9	
Electrical Components										7.7	

[1]/Figures are from Annual Statistical Digest, 1987.

Source: St. Lucia Statistical Office; U.S. Department of Commerce;
and Bank staff estimates

Table 4.8: ST. VINCENT AND THE GRENADINES, MERCHANDISE EXPORTS, 1977-87
(EC$ million)

	1977	1978	1979	1980	1981	1982	1983	1984	1985	1986	1987
Merchandise Exports, Total	28.9	48.9	51.8[1]/	56.7[1]/	80.5[1]/	86.9	110.0	144.7	170.6	172.5	139.8
Re-Exports	1.9	1.9	1.8	2.2	2.5	2.1	4.1	2.4	2.9	1.9	
Domestic Exports	27.0	47.0	50.0	54.5	78.0	84.8	106.9	142.3	167.7	170.6	
Exports to Trinidad			8.7	10.8	15.7	27.2	37.8	65.7	76.7	74.1	30.5
Exports of Manufactured Products, Selected Products											
Flour	0.0	8.6	14.8	16.2	17.3	15.1	14.9	17.3	19.4	15.1	
Arrowroot	1.4	1.9	1.9	2.2	2.7	0.5	1.9	1.1	1.6	1.1	
Cooking Apparatus						1.9	2.1	1.1	0.3	0.2	
Assembled Watches						1.4	1.6	1.2	1.1	0.4	
Other Manufactured Goods[1]/						16.8	25.7	29.4	18.8	19.7	
Exports to the United States											
Total Exports f.o.b.	0.7	0.9	1.0	1.7	4.5	7.8	15.6	15.3	16.6	16.3	21.0
Electrical Components							6.9	5.1	5.1	4.7	4.9
Garments							4.1	6.4	5.5	5.1	
Sporting Goods							1.2	3.4	5.2	5.7	6.6
Other Exports							3.4	0.4	0.8	0.8	
U.S. Imports for Consumption						4.2	3.8	11.5	8.0	26.0	21.2	22.9
Electrical Components										0.5	
Garments										4.7	
Tennis Rackets										14.2	

[1]/SITC sectors 6-8 only, minus cooking apparatus and assembled watches.

Note: Blank space denotes data not available.

Source: St. Vincent and the Grenadines Statistical Office; U.S. Department of Commerce; and Bank staff estimates.

Table 4.9: OECS - THE BEHAVIOR OF REAL EXCHANGE RATES, 1977-87

(1980=100)

Year	St. Kitts and Nevis	Antigua and Barbuda	Dominica	Grenada	St. Lucia	St. Vincent and the Grenadines
1977	98.95	90.15	114.86	118.33	98.61	99.91
1978	100.62	95.39	121.56	114.31	101.48	105.19
1979	103.01	97.51	114.89	106.67	105.10	103.13
1980	100.00	100.00	100.00	100.00	100.00	100.00
1981	89.43	92.76	87.75	83.69	86.38	88.22
1982	82.40	82.96	81.98	75.80	80.62	80.29
1983	79.68	78.04	77.89	70.62	78.53	75.26
1984	76.82	73.32	75.49	66.23	76.83	72.61
1985	74.77	68.24	73.60	64.31	75.48	70.79
1986	82.85	72.78	79.54	71.19	82.15	77.83
1987	90.34	74.52	83.49	78.94	84.46	83.25

Note: The real exchange rate is measured using a weighted average of the wholesale price index in 6 major countries.

Source: Bank staff estimates.

Table 4.10: OECS - THE BEHAVIOR OF REAL EXCHANGE RATES, 1977-86

(1980=100)

Year	Antigua and Barbuda	Dominica	Grenada	St. Kitts and Nevis	St. Lucia	St. Vincent and the Grenadines
1977	95.80	122.05	125.74	105.15	104.78	106.17
1978	95.75	122.02	114.74	100.99	101.86	105.58
1979	97.22	114.55	106.30	102.70	104.79	102.83
1980	100.00	100.00	100.00	100.00	100.00	100.00
1981	101.78	96.28	91.83	98.13	94.78	96.80
1982	95.24	94.12	87.02	94.59	92.56	92.18
1983	91.80	91.62	83.07	93.72	92.37	88.53
1984	89.03	91.67	80.42	93.27	93.29	88.16
1985	82.90	89.42	78.13	90.83	91.70	86.00
1986	77.11	84.28	75.43	87.79	87.04	82.47
1987	73.69	82.55	78.05	89.33	83.52	82.31

Note: The real exchange rate is measured using the U.S. wholesale price index.

Source: Bank staff estimates.

Table 4.11: OECS - RESOURCE GAPS, 1977-86

(% of GDP at current prices)

Years	Antigua and Barbuda	Dominica	Grenada	St. Kitts and Nevis	St. Lucia	St. Vincent and the Grenadines
1977	51.02	31.53	9.61	15.18	33.60	43.50
1978	44.20	31.86	11.78	10.17	42.80	21.00
1979	69.54	32.67	17.87	22.72	42.30	36.90
1980	58.80	71.39	28.38	28.67	42.90	42.80
1981	69.00	53.86	36.41	28.21	47.90	27.20
1982	66.40	37.96	50.08	33.71	36.50	30.80
1983	48.50	29.25	42.31	43.50	18.30	21.60
1984	56.20	40.39	29.47	32.40	23.80	13.50
1985	60.90	35.24	32.01	30.42	17.30	6.20
1986	78.40	18.17	31.30	28.09	9.10	11.90

Source: World Bank. For Antigua and Barbuda, the balance of trade is used.

Table 4.12: DETERMINANTS OF REAL EXCHANGE RATES,
LEAST SQUARES ESTIMATES, 1977-86

	Dominica	Grenada	St. Lucia	St. Vincent and the Grenadines	
C	-3.3120 (-2.3767)	-.1356 (-.5476)	-2.4283 (-3.5078)	-2.0812 (-3.3428)	1.8248 (1.7274)
$\ln\frac{PB}{PT}$	-.5491 (-2.5549)	-.3616 (-1.4789)	-.5588 (-3.5768)	-.3682 (-3.3611)	-.0027 (-.0240)
Resource Gap	-.0031 (-2.1618)	-.0064 (-2.8227)	-.0046 (-3.2917)	-.0003 (-.2544)	-.0018 (-2.6902)
$\ln\frac{PT^*}{CPI}$U.S.	.7948 (5.4641)	.7043 (3.3417)	.5758 (8.2217)	.5678 (6.0653)	.6218 (11.7691)
ln GDP	-	-	-	-	.3842 (3.9039)
R^2	.9018	.9074	.9703	.9738	.9922
Q(5)	3.5518 (.6156)[a]	8.1277 (.1493)[a]	5.7653 (.3293)[a]	6.1403 (.2928)[a]	3.6895 (.5949)[a]

Note: The numbers in parenthesis are the t-statistics.

Q(x) is the Box-Ljung statistic, where x is the number of degrees of freedom.

(a) Marginal significance level of the Q(x) statistics.

$\ln\frac{PB^*}{PT}$ = Logarithm of the price of bananas deflated by a price index of traded goods.

Resource Gap = Ratio of imports minus exports of goods and non-factor services to Gross Domestic Product at current prices.

$\ln\frac{PT^*}{CPI}$U.S. = Logarithm of the U.S. real exchange rate vis-a-vis France, Germany, Japan and the U.K.

ln GDP = Logarithm of Gross Domestic Product at 1977 prices.

Source: Bank staff estimates.

Table 4.13: DETERMINANTS OF REAL EXCHANGE RATES,
SEEMINGLY UNRELATED REGRESSION ESTIMATES, 1977-86

	Dominica	Grenada	St. Lucia	St. Vincent and the Grenadines
C	-3.0698 (-2.4485)	-.1854 (-.7752	-2.0830 (-3.5394)	1.6239 (8.8691)
$\ln\frac{PB}{PT}$	-.5060 (-2.6154)	-.3769 (-1.5728)	-.4783 (-3.6223)	-
Resource Gap	-.0023 (-2.1384)	-.0046 (-2.3583)	-.0038 (-3.4318)	-.0014 (-3.5386)
$\ln\frac{PT^{*}}{CPI^{U.S.}}$	.7913 (5.7362)	.7651 (3.6809)	.5809 (9.0578)	.6368 (19.2709)
ln GDP	-	-	-	-.3398 (-8.8254)
R^2	.8955	.8982	.9686	.9922
Q(3)	.7874 (.8525)	1.0499 (.7892)	.4869 (.9218)	2.2882 (.5148)
Q(5)	6.2183 (.2856)	4.7545 (.4466)	5.7243 (.3284)	7.1338 (.2080)

Notes: See Table 4.12

Source: Bank staff estimates.

Table 4.14: REAL EXCHANGE RATES IN DOMINICA, GRENADA,
ST. LUCIA AND ST. VINCENT AND THE GRENADINES,
INSTRUMENTAL VARIABLES ESTIMATES, 1977-86.

	Dominica	Grenada	St. Lucia	St. Vincent and the Grenadines
C	-3.3206 (-2.3672)	-.1?92 (-.5608)	-2.7143 (-3.2600)	1.9904 (5.3725)
$\ln\frac{PB}{PT}$	-.5532 (-2.5567)	-.3609 (-1.4748)	-.6259 (-3.2940)	
Resource Gap	-.0035[1] (-2.3801)	-.0062[2] (-2.5507)	-.0054[3] (-2.9265)	-.0024[4] (-1.9015)
$\ln\frac{PT^*}{CPI^{U.S.}}$	.8033 (5.4816)	.7133 (3.3337)	.5741 (8.0066)	.6324 (13.4966)
ln GDP				-.4127 (5.6365)
R^2	.9005	.9073	.9690	.9925
Q(3)	.4048 (.9392)	1.7558 (.6246)	5.5740 (.1343)	1.31C7 (.7266)
Q(5)	2.8598 (.7216)	7.801∠ (.1675)	8.5201 (.1298)	4.7072 (.4526)

The instrumental variables for the resource gap are:

[1] Constant, Gap (t-1), D1(1980), $\frac{CPI^{U.S.}}{WPI^{U.S.}}$ (t)

[2] Constant, $\ln\frac{PB}{CPI}$ (t-1), D1(1980/83)

[3] Constant, $\ln\frac{PB}{CPI}$ (t-1), $\ln\frac{PB}{CPI}$ (t-2), $\ln\frac{PT}{CPI}$ (t-1)

[4] $\ln\frac{PB}{CPI^{U.S.}}$

Source: Bank staff estimates.

Table 4.15: DETERMINANTS OF THE REAL EXCHANGE
RATES, LEAST SQUARES ESTIMATES, 1977-86.

	Antigua and Barbuda	St. Kitts and Nevis
C	-.1091 (-1.1368)	-.2060 (-7.0577)
$\ln\frac{PT^*}{GNP}U.S.$	.7787 (8.0963)	.5824 (8.5142)
Resource Gap	-.0026 (-1.7505)	-.0035 (-2.8855)
R^2	.8801	.9455
Q(5)	4.9865 (.4175)	1.9028 (.8624)

Note: See Table 4.12

Source: Bank staff estimates.

Table 4.16: DETERMINANTS OF THE REAL EXCHANGE
RATES, INSTRUMENTAL VARIABLES ESTIMATES, 1977-86

	Antigua and Barbuda	St. Kitts and Nevis
C	.0418 (.2715)	-.1442 (-2.6457)
$\ln\frac{PT^*}{GNP}U.S.$	.7817 (6.9059)	.4849 (4.3678)
Resource Gap	-.0051 (-2.0714)	-.0066 (-2.6524)
R^2	.8340	.8954
Q(5)	4.7521 (.4469)	4.8863 (.4299)

Note: The instrumental variable for the trade gap is the one period lag
of the logarithm of stayover arrivals in each country.

Source: Bank staff estimates

Table 5.1: OECS - ENROLLMENTS AND PARTICIPATION RATES, BY AGE

	Enrollment by Age								Population 5-11	Enrollment as % of Population	Enrollment by Age					Population 12-15	Enrollment as % of Population
	5	6	7	8	9	10	11	5-11	5-11		12	13	14	15	12-15	12-15	
ANTIGUA AND BARBUDA (1985)	927	975	1,062	1,252	1,218	1,060	997	7,491	9,007	83.2	1,077	1,287	1,156	1,093	4,613	4,740	97.3
DOMINICA (1987)	1,871	1,613	1,685	1,460	1,539	1,449	1,406	11,023	11,985	92.0	1,380	1,404	1,422	1,018	5,224	7,700	67.8
GRENADA (1986)	1,551	2,037	2,254	2,309	2,178	2,145	2,247	14,721	17,879	82.3	2,224	2,179	2,167	2,065	8,635	11,040	78.2
ST. KITTS AND NEVIS (1987)	855	750	934	957	855	900	935	6,186	7,896	78.3	1,031	983	829	791	3,636	4,416	82.3
ST. LUCIA (1987)	3,356	3,566	3,461	3,896	3,593	3,751	3,291	24,915	26,355	94.5	3,510	3,653	3,192	1,090	11,445	14,600	78.4
ST. VINCENT AND THE GRENADINES (1986)	2,188	2,872	2,823	2,708	2,856	2,850	2,666	18,963	22,032	86.1	2,876	2,752	2,606	1,528	9,772	12,400	78.8

Source: National Educational Statistics and National Statistical Yearbooks.

Table 5.2: OECS - PRIMARY SCHOOLS, PUBLIC SECTOR, 1980-87

		1980	1983	1984	1985	1986	1987
ANTIGUA	Pupils: Total a/	11053	9933	9184	10551		
and BARBUDA	Males		5253	4663	5050		
	Females		4680	4521	5501		
	Teachers		426	408	436	420	479
	Teacher: Pupil Ratio		1:23	1:23	1:24		
DOMINICA	Pupils: Total	19429	17816	17615	17327	16364	16105
	Males	9887	9489	9201	9096	8489	8406
	Females	9542	8327	8414	8231	7875	7699
	Teachers	632			658	648	646
	Teacher: Pupil Ratio	1:31			1:26	1:25	1:25
GRENADA	Pupils: Total b/	21449	19736	19939	19834	19963	
	Males	10064	10378	10508	10468	10561	
	Females	10385	9358	3431	9366	9402	
	Teachers					772	
	Teacher: Pupil Ratio					1:26	
ST. KITTS	Pupils: Total c/	7155	6198	6680	6759	6564	
and NEVIS	Males			3471			
	Females			3209			
	Teachers	311	295	296	294	263	
	Teacher: Pupil Ratio	1:23	1:21	1:22	1:23	1:25	
ST. LUCIA	Pupils: Total	30391	32107	32383	32273	32400	32809
	Males	15889	16319	16506	16525	16686	16927
	Females	14502	15787	17877	15748	15714	15882
	Teachers	998	1084	1107	1084	1103	1060
	Teacher: Pupil Ratio	1:30	1:30	1:29	1:30	1:29	1:31
ST. VINCENT	Pupils: Total d/	24158	24651	24755	24561	24521	25074
and the	Males		12662	12756	12643		12905
GRENADINES	Females		11989	11999	11918		12169
	Teachers				1263		1097
	Teacher: Pupil Ratio				1:19		1:23

a/ Data are incomplete. Private schools are included.
b/ In 1986 an additional 1132 pupils were in private primary schools and 61 pupils in special education.
c/ There are an additional 800 pupils in private primary schools.
d/ About 2 percent of those aged 5-11 years are enrolled in fee-paying primary schools.

Source: National Educational Statistics and National Statistical Yearbooks.

Table 5.3: OECS - ENROLLMENTS BY FOUR LEVELS OF EDUCATION,[a]
(percent distribution)

	Primary[b]	Senior Primary	Secondary	Post-Secondary
ANTIGUA and BARBUDA (1983)	60.6	11.5	26.0	1.9
DOMINICA (1987)	61.6	20.2	16.6	1.6
GRENADA (1986)	64.8	10.2	22.8	2.2
ST. KITTS and NEVIS (1985)	56.3	4.6	37.5	1.6
ST. LUCIA (1987)	65.5	17.8	15.3	1.4
ST. VINCENT and the GRENADINES (1986)	59.9	17.6	20.2	2.3

[a] Excludes pre-school.

[b] Excludes senior primary.

Source: National Educational Statistics and National Statistical Yearbooks.

Table 5.4: OECS - SECONDARY SCHOOLS, PUBLIC SECTOR, 1980-87

		1980	1983	1984	1985	1986	1987
ANTIGUA and BARBUDA	Pupils: Total a/		4197	5300	5006		
	Males		1878	2412	2005		
	Females		2319	2888	3001		
	Teachers		331	340	304		
	Teacher: Pupil Ratio		1:13	1:16	1:16		
DOMINICA	Pupils: Total	2941	3464	3443	3439	3347	3264
	Males	1045	1226	1205	1231	1214	1215
	Females	1896	2238	2238	2208	2133	2049
	Teachers	146	157	160	162	166	171
	Teacher: Pupil Ratio	1:20	1:22	1:22	1:21	1:20	1:19
GRENADA	Pupils: Total	5253	6686	6508	6341	6437	
	Males	1935	2855	2749	2705	2708	
	Females	3318	3831	3759	3636	3729	
	Teachers					304	
	Teacher: Pupil Ratio					1:21	
ST. KITTS and NEVIS	Pupils: Total	4215	4051	4032	4047	4153	
	Males			2050			
	Females			1982			
	Teachers	263	270	269	270	277	
	Teacher: Pupil Ratio	1:16	1:15	1:15	1:15	1:15	
ST. LUCIA	Pupils: Total	3875	4989	5030	5665	5934	6284
	Males	1719	2135	2147	2414	2523	2726
	Females	2156	2854	2883	3251	3411	3558
	Teachers	234	309	295	309	337	351
	Teacher: Pupil Ratio	1:17	1:16	1:17	1:18	1:18	1:18
ST. VINCENT and the GRENADINES	Pupils: Total	5329	5501	5875	6237	6358	6739
	Males		2171	2353	2528		2689
	Females		3330	3522	3709		4050
	Teachers				368		398
	Teacher: Pupil Ratio				1:17		1:17

a/ Data are very incomplete, and represent only four of nine secondary
schools. Enrollments in private schools are included.

Source: National Educational Statistics and National Statistical Yearbooks.

Table 5.5: OECS - ENROLLMENTS BY THREE LEVELS OF EDUCATION, 1980-87[a]/
(percent distribution)

		1980	1983	1984	1985	1986	1987
Antigua and Barbuda	Primary		72.1	62.0	66.3		
	Secondary		26.0	35.8	31.4		
	Post-Secondary		1.9	2.3	2.3		
Dominica	Primary	86.0	82.8	82.5	82.1	81.7	81.8
	Secondary	13.0	16.1	16.1	16.3	16.7	16.6
	Post-Secondary	1.0	1.1	1.4	1.6	1.6	1.6
Grenada	Primary	80.3	74.7	75.4	73.9	75.0	
	Secondary	19.7	25.3	24.6	23.8	22.8	
	Post-Secondary				2.3	2.2	
St. Kitts and Nevis	Primary	61.9	59.1	61.7	60.9	60.1	
	Secondary	36.5	38.6	37.0	37.5	38.0	
	Post-Secondary	1.6	2.3	1.8	1.6	1.9	
St. Lucia	Primary	87.9	85.8	85.8	84.3	85.5	83.3
	Secondary	11.2	13.3	13.3	14.8	15.7	15.3
	Post-Secondary	0.9	0.9	0.9	0.9	1.5	1.4
St. Vincent and the Grenadines	Primary	81.9	79.5	79.2	78.4	77.5	77.6
	Secondary	18.1	17.7	18.8	19.9	20.2	20.9
	Post-Secondary		2.7	2.0	1.7	2.3	1.5

a/ Private education is excluded, except in Antigua. Pre-school is excluded.

Source: National Statistical Yearbooks and National Educational Statistics.

Table 5.6: OECS - EDUCATIONAL EXPENDITURE PER PUPIL BY LEVEL OF EDUCATION, PUBLIC SECTOR

	Antigua and Barbuda 1987	Dominica 1987	Grenada 1986	St. Kitts and Nevis 1986	St. Lucia 1986	St. Vincent and the Grenadines 1986
Total Population	77093	81185	97000	43700	139500	110742
GDP (EC$ mil.)	614.2	281.8	279.2	213.2	426.6	282.0
GDP per capita	7970	3470	2880	4880	3060	2550
Total Enrollments	12191 (a)	21479	30513	10928	43367	31102
Total Cur. Ed. Exp. (EC$ mil.)	23.1	16.8	18.5	10.1	35.6	19.4
Total Cur. Ed. Exp. per pupil	1900	800	600	900	800 (b)	600
Primary Enrollment	8452 (a)	15262	19963	6564	32400	24521
Primary Cur. Exp. (EC$ mil.)	7.8	10.8	9.4	8.4 (b)	18.4	12.6
Primary Exp. per Pupil	900	700	500	800 (b)	600	500
Secondary Enrollment	3380 (a)	3264	6437	4153	5934	6067
Secondary Expend. (EC$ mil.)	7.4	4.0	4.5		9.7	3.5
Secondary Exp. per pupil	2200	1200	700		1600	600
Post-Secondary Enrollment	361	326	615	211	559	514
Post-Secondary Expenditure (EC$ mil.)	1.9	1.5	1.4	1.0	2.6	1.8
Post-Secondary Exp. per pupil	5300	4600	2200	4700	4500	3600

(a)   Estimates based on 1983 data and population changes.   Private schools are excluded.
(b)   Includes secondary expenditure and enrollment.

Source: National Educational Statistics and National Statistical Year Books; Bank staff estimates.

Table 5.7: OECS - TEACHERS BY LEVEL AND QUALIFICATIONS, PUBLIC SECTOR

	Primary Education			Secondary Education					
	Total Teachers	Trained Teachers	Trained as % of Total	Total Teachers	Total Graduate	Trained Graduate	Untrained Graduate	Qualified Teacher	Total Graduate as % of Total
Antigua and Barbuda (85)	n.a.	n.a.	n.a.	218	86	53	33	102	39.4
Dominica (87/88)	622	250	40.2	182	54	20	34	12	29.7
Grenada (86/87)	772	353	45.7	304	97	41	56	197	31.9
St. Kitts and Nevis (84/85)	296	210	70.9	269	67	n.a.	n.a.	125	24.9
St. Lucia (87/88)	1060	429	40.5	351	99	n.a.	n.a.	252	28.2
St. Vincent and the Grenadines (87/88)	1097	277	25.3	393	105	50	55	133	26.4

n.a. : Not available.

Source: Educational Statistics and Statistical Yearbooks.

Table 5.8: OECS - EDUCATIONAL ATTAINMENT OF THE LABOR FORCE, 1980-81

(number and percent)

	Grenada	%	St.Vincent	%	St.Kitts	%	St.Lucia	%	Dominica	%
No Education	524	1.1	557	1.2	218	0.9	6276	10.3	2027	4.9
Primary Education	38170	82.4	37620	83.1	5462	22.0	43823	72.2	32534	78.5
Secondary Education	6322	13.7	5880	13.0	18446	74.4	7428	12.2	5402	13.0
University	526	1.1	457	1.0	373	1.5	551	0.9	555	1.3
Other	481	1.0	584	1.3	225	0.9	2181	3.6	727	1.8
Not Stated	276	0.6	173	0.4	107	0.4	434	0.7	224	0.5
TOTAL:	46299	100.0	45271	100.0	24831	100.0	60693	100.0	41469	100.0

Source: 1980-81 Census of Population. Figures show those aged 15-64 who are not attending primary or secondary school.

Table 6.1: OECS - TOURISM PROJECTIONS, 1989, 1994 AND 1999

A. Totals	Available Rooms (Number)			Gross Receipts (1989 EC$ Million)			Employment ('000)		
	1989	1994	1999	1989	1994	1999	1989	1994	1999
Grenada	763	1289	1815	86.1	118.8	153.8	1526	2578	3630
St. Vincent and the Grenadines	936	1140	1344	138.5	160.5	177.1	1310	1520	1790
St. Lucia	2116	2774	3224	259.6	325.4	371.0	4380	5742	6873
Dominica	440	556	672	34.2	40.3	45.6	748	945	1143
Antigua and Barbuda	2938	3898	4858	413.7	539.7	664.4	6550	8692	10833
St. Kitts and Nevis	864	2051	3302	101.2	195.8	312.6	1572	4102	6274
Total	8057	11708	15215	1033.3	1380.5	1724.5	16086	23579	30543

B. Percent Change	1989-1994	1989-1999		1989-1994	1989-1999		1989-1994	1989-1999
Grenada	68.9	137.9		38.0	78.6		68.9	137.9
St. Vincent and the Grenadines	21.8	43.6		16.9	27.9		16.0	36.6
St. Lucia	31.1	52.4		25.3	42.9		31.1	56.9
Dominica	26.4	52.7		17.8	33.3		26.3	52.8
Antigua and Barbuda	32.7	65.4		30.5	60.6		32.7	65.4
St. Kitts and Nevis	137.4	282.2		93.5	208.9		160.9	299.1
Total	45.3	88.8		33.6	66.9		46.6	89.9

Source: Bank staff estimates.

Table 7.1: TRANSPORT COSTS FOR MAJOR OECS MANUFACTURERS EXPORTS TO THE UNITED STATES, 1986

Country/Product[a]/	1986 Exports Value (US$000)	Applied Tariff[b]/	Nominal Freight Rate		
			Nominal OECS Exporters	Other Exporters	Rate Difference[c]/
Antigua and Barbuda					
Brassieres (3762430)	2247	32.0	2.1	3.5	-1.4
Underwear (3780553)	913	29.2	2.7	5.5	-2.8
Underwear (3780550)	426	28.3	4.5	4.7	0.2
Underwear (3786030)	311	24.0	2.2	6.4	-4.2
Electrical Equipment (6826064)	229	1.9	2.2	4.1	-1.9
Brassieres (3762830)	223	18.0	1.7	4.0	-2.3
Sand (5131100)	151	0.0	14.5	79.3	-64.8
Sand (5141400)	89	0.0	15.4	22.8	-7.4
Trousers (3843035)	78	17.3	16.8	10.7	6.1
Cotton Tops (3843441)	72	10.2	17.2	15.1	2.1
Cotton Sheets (3633039)	62	7.9	11.2	5.7	5.5
Coils (6826052)	59	0.0	5.1	4.9	0.2
Transformers (6826056)	58	1.5	4.9	8.0	3.1
Dominica					
Distilled Oils (4528042)	286	0.0	3.5	3.2	0.3
Toilet Soap (4661500)	278	0.0	7.1	8.8	-1.7
Aloes, Drug (4351000)	190	0.0	7.5	4.5	3.0
Headwear (7031650)	82	10.1	3.9	9.9	-6.0
Coverlets (3635300)	72	5.2	2.8	5.8	-3.0
Lime Oil (4523800)	64	0.0	6.4	3.3	3.1
Wood Chairs (7272900)	56	5.7	17.0	11.4	5.6
Toys (7374000)	52	0.3	3.8	8.1	-4.3
Grenada					
Motor Vehicle Parts (6923295)	434	3.2	3.0	6.7	-3.7
Measuring Instruments (7108080)	269	5.2	1.1	3.7	-2.6
Circuit Boards (6859059)	168	5.7	1.3	4.9	-3.6
Counters (7119840)	143	0.6	1.4	3.9	-2.5
Regulators (6862400)	143	5.2	8.4	4.3	4.1
Electrical Apparatus (7124975)	130	5.5	2.0	2.8	-0.8
Aircraft Parts (6946200)	124	0.0	2.5	2.0	0.5
Headwear (7031400)	112	12.6	4.4	6.1	-1.7
St. Kitts and Nevis					
Television Parts (6850855)	2279	1.6	1.5	3.5	-2.0
Transformers (6820520)	1762	0.4	1.2	6.3	-5.1
Electric Motor Parts (6825500)	1547	0.0	1.9	5.4	-3.5
Television Parts (6850860)	1488	3.4	1.2	2.7	-1.5
Transformers (6820710)	1123	0.0	0.5	5.1	-4.6
Underwear (3786030)	1042	23.9	2.4	6.5	-4.1
Brassieres (3762830)	1017	18.0	2.8	4.0	-1.2
Skirts (3847536)	923	18.3	6.0	4.0	2.0
Suits (3849158)	879	29.5	3.6	8.0	-4.4
Support Garments (3762886)	812	18.0	2.9	3.5	-0.6
Brassieres (3762430)	511	32.0	2.8	3.4	-0.6
Underwear (3780553)	483	28.4	1.9	5.5	-3.6
Suits (3849162)	459	30.0	4.1	5.1	-1.0
St. Lucia					
Brassieres (3762430)	1243	32.0	2.9	3.4	-0.5
Capacitors (6858035)	883	1.4	0.5	4.7	-4.2
Resistors (6861082)	784	0.2	1.3	3.3	-2.0
Brassieres (3762830)	689	18.0	4.0	4.0	0.0
Support Garments (3762886)	503	17.5	3.8	3.4	0.4
Resistors (6861035)	441	0.3	1.2	4.3	-3.1
Blouses (3780553)	344	28.4	3.0	5.5	-2.5
Trousers (3848012)	342	34.4	5.2	12.3	-7.1
Trousers (3841950)	330	32.1	3.2	11.6	-8.4
Blouses (3844614)	294	16.5	4.5	9.3	-4.8
Rainwear (3765623)	251	9.3	3.4	4.7	-1.3
Rainwear (3765630)	247	9.3	3.4	7.1	-3.7
Other Textiles (3897000)	246	6.6	9.4	8.0	1.4
Coils (6826052)	238	3.5	2.3	4.9	-2.6
Trousers (3848245)	232	31.7	3.7	9.8	-6.1
St. Vincent and the Grenadines					
Tennis Rackets (7348600)	4992	2.5	1.5	5.1	-3.6
Children's Dresses (3842515)	1155	26.7	4.7	6.6	-1.9
Children's Dresses (3840915)	322	20.0	3.8	7.4	-3.6
Tennis Rackets (7348700)	264	4.2	1.7	6.1	-4.4
Children's Dresses (3842510)	188	26.3	4.6	7.2	-1.6
Coils (6826052)	139	3.6	7.1	4.9	2.2
Children's Dresses (3840910)	78	20.8	3.9	6.6	-2.7

a/ United States TSUSA classification numbers are shown in parenthesis.
b/ Measured by the ratio of all tariff revenues collected on the product to the f.o.b. value of the
import. This ratio is then multiplied by 100.
c/ The nominal freight rate for OECS products minus that for other exporters. A negative value
indicates a favorable OECS transport differential.

Source: Bank staff estimates; U.S. Department of Commerce.

Table 7.2: TRANSPORT COSTS FOR MAJOR OECS FOOD AND AGRICULTURAL RAW MATERIALS
EXPORTS TO THE UNITED STATES, 1986

Country/Product[a]/	1986 Exports Value (US$000)	Applied Tariff[b]/	Nominal OECS Exporter	Freight Other Exporters	Rate Difference[c]/
Antigua and Barbuda					
Fish (1103570)	285	0.2	16.2	20.4	-4.2
Melons (1483200)	61	13.8	32.5	46.2	-13.7
Dominica					
Cocoa Beans (1561000)	705	0.0	9.8	7.6	2.2
Citrus Juices (1653680)	129	0.4	12.0	10.9	1.1
Cantaloupes (1481200)	93	0.0	114.6	57.1	57.5
Coffee (1602000)	50	0.0	9.3	5.2	4.1
Grenada					
Nutmegs (1616300)	494	0.0	2.7	3.9	-1.2
Cocoa Beans (1561000)	254	0.0	4.4	7.6	-3.2
St. Kitts and Nevis					
Sugar and Molasses (1552045)	3811	0.0	4.5	6.8	-2.3
Sugar Mixtures (1554000)	414	0.0	28.1	24.8	3.3
St. Vincent and the Grenadines					
Feed Grains (1847070)	80	0.0	23.3	23.8	-0.5
Breadfruit (1379300)	62	0.0	39.1	31.6	7.5
Arrowroot (1323540)	59	0.0	9.9	29.7	-19.8

a/ United States TSUSA classification numbers are shown in parenthesis.
b/ Measured by the ratio of all tariff revenues collected on the product to the f.o.b. value of the import. This ratio is then multiplied by 100.
c/ The nominal freight rate for OECS products minus that for other exporters. A negative value indicates a favorable OECS transport differential.

Source: Bank staff estimates; U.S. Department of Commerce.

Table 8.1: OECS - EXTERNAL DEBT,a/ AMORTIZATION AND INTEREST, 1977-88

	1977	1980	1985	1986	1987	1988	1977	1980	1985	1986	1987	1988
	(million of US dollars)						(percent of GDP)					
Antigua and Barbuda												
External Debtb/	19.8	34.4	61.9	184.6	249.6	266.9	33.7	36.1	30.7	77.8	90.6	82.7
Interest Arrearsc/	0.0	1.0	6.7	8.7	11.6	16.5	0.0	1.0	3.3	3.7	4.2	5.1
Principal Arrearsc/	0.0	1.4	18.0	23.9	32.6	47.2	0.0	1.5	8.9	10.1	11.8	14.6
St. Kitts and Nevis												
External Debt	5.2	10.5	17.8	17.0	22.1	26.4	20.3	27.4	23.8	18.4	20.8	22.2
Interest Payments	0.1	0.2	0.9	0.9	0.7	1.0	0.4	0.5	1.2	0.8	0.7	0.8
Amortization	0.6	0.3	0.6	3.6	0.8	0.9	2.3	0.8	0.8	3.9	0.8	0.8
Dominica												
External Debt	10.6	17.7	47.7	54.0	64.8	64.1	33.7	33.2	48.2	47.6	51.2	45.6
Interest Payments	n.a.	0.4	1.9	1.9	1.8	1.7	n.a.	0.8	1.9	1.7	1.7	1.6
Amortization	n.a.	0.2	2.2	2.7	4.4	4.5	n.a.	0.4	2.2	2.4	3.5	3.2
St. Lucia												
External Debt	8.0	18.2	29.6	32.7	40.7	48.4	13.8	18.6	17.1	16.9	19.4	20.5
Interest Payments	0.3	0.7	1.5	1.7	1.7	2.1	0.5	0.7	0.9	0.9	1.1	0.8
Amortization	0.0	0.7	2.8	4.3	1.7	2.7	0.0	0.7	1.6	2.2	0.8	1.1
St. Vincent and the Grenadinesd/												
External Debt	4.7	10.3	23.2	26.8	37.2	46.0	15.4	20.6	25.0	27.6	26.1	29.4
Interest Payments	0.1	0.3	1.2	1.3	1.1	1.3	0.3	0.6	1.3	1.2	0.8	0.8
Amortization	0.0	0.1	1.2	1.4	1.4	1.6	0.0	0.2	1.3	1.3	1.0	1.0
Grenada												
External Debt	9.2	15.3	50.6	57.9	76.1	80.1	n.a.	24.6	43.8	44.6	50.7	48.1
Interest Payments	0.3	0.5	2.2	2.4	2.7	3.1	n.a.	0.8	1.9	1.9	1.9	1.9
Amortization	0.2	0.9	6.7	5.5	8.8	5.4	n.a.	1.4	5.8	4.2	5.9	3.2

n.a.: Not available.

a/Long-term public and publicly guaranteed debt.
b/Excludes foreign loan receipts on deposit in local banks of US$11 million, 1978-80, and
  US$25.5 million, 1981-83. Includes interest arrears.
c/Cumulative.
d/1980-86 fiscal year data.

Source: Bank staff estimates.

	Actual 1987	Prel. 1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
A. Exports of Goods and NFS	220	265	294	325	359	395	434	477	522	572	624	681	739	802
1. Merchandise	29	30	32	34	36	37	39	41	43	45	47	49	51	53
2. Non-Factor Services	1 12	235	261	291	323	358	395	436	479	527	578	632	688	749
B. Imports of Goods and NFS	309	329	354	376	404	433	460	486	518	556	597	641	688	740
1. Merchandise	284	302	325	344	369	396	420	443	471	507	544	584	627	674
2. Non-Factor Services	25	26	29	32	35	37	40	43	46	50	53	57	61	66
C. Resource Balance	-89	-64	-61	-51	-45	-38	-26	-10	5	15	27	40	51	62
D. Net Factor Income	-12	-19	-21	-25	-27	-29	-31	-32	-34	-34	-34	-31	-30	-28
1. Factor Receipts	0	0	1	1	1	1	1	1	1	1	1	1	1	1
2. Factor Payments	12	19	22	26	28	30	32	33	35	35	35	32	31	29
(interest payments)	9	16	19	21	23	25	27	28	29	29	29	26	25	23
E. Net Current Transfers	17	19	21	21	23	24	26	27	28	30	30	30	30	30
1. Current Receipts	17	19	21	21	23	24	26	27	28	30	30	30	30	30
(workers remittances)	17	19	21	21	23	24	26	27	28	30	30	30	30	30
2. Current Payments	-0	0	0	0	0	0	0	0	0	0	0	0	0	0
F. Current Account Balance	-84	-63	-61	-55	-49	-42	-31	-15	-1	11	24	39	51	65
G. Long-Term Capital Inflow	69	55	61	55	49	42	31	15	1	-11	-24	-39	-51	-65
1. Direct Investment	28	56	40	38	34	28	20	15	13	12	10	10	10	10
2. Offical Capital Grants	1	2	3	2	2	2	2	2	2	2	2	2	2	2
3. Net LT Loans 1/	39	-3	18	14	13	12	9	-2	-14	-25	-36	-50	-62	-78
a. Disbursements	51	23	34	31	31	31	33	28	23	20	17	5	-6	-20
b. Repayments	12	26	16	17	18	19	24	30	37	45	52	55	56	56
4. Other LT Inflows (net)	-0	0	0	0	0	0	0	0	0	0	0	0	0	0
H. Total Other Items	-7	-2	0	0	0	0	0	0	0	0	0	0	0	0
1. Net Short Term Capital	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2. Capital Flows, n.e.i.	-7	-2	0	0	0	0	0	0	0	0	0	0	0	0
3. Errors and Omissions	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I. Changes in Net Reserves	22	10	0	0	0	0	0	0	0	0	0	0	0	0
1 Net Credit from the IMF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2. Other Reserve Changes	22	10	0	0	0	0	0	0	0	0	0	0	0	0
(- indicates increase)														

MEMORANDUM ITEM:

Shares of Current US$ GDP

Resource Balance	-32.2	-19.7	-17.1	-13.2	-10.7	-8.3	-5.2	-1.8	0.8	2.5	4 1	5.5	6 4	7 2
Total Interest Payments	3.4	4.9	5.3	5.5	5.5	5.5	5.4	5.2	5.0	4.6	4 2	3 6	3.1	2 6
Current Account Balance	-30.6	-19.6	-17.1	-14.1	-11.7	-9.2	-6.2	-2.8	-0.1	1.8	3 5	5 3	6 4	7.5
LT Capital Inflow	24.9	16.9	17.1	14.1	11.7	9.2	6.2	2.8	0.1	-1.8	-3 5	-5 3	-6 4	-7 5
GDP (Current US$)	275.5	322.6	355.9	387.6	421.5	457.0	495.3	536.3	579.1	625.6	675.6	730 0	794 8	865.4

Foreign Exchange Reserves

Gross Reserves	24.7	14.6	14.6	14 6	14.6	14.6	14.6	14.6	14.6	14.6	14.6	14 6	14 6	14.6
Gross Reserves in Months of Imports of Goods and Services	0.9	0.5	0.5	0.4	0.4	0.4	0.4	0.3	0.3	0 3	0 3	0 3	0.2	0.2

Exchange Rates (EC$/US$)

Nominal Official Rate	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2 7	2.7
Rate for GNP Conversion	2.7	2.7	2.7	2 7	2.7	2.7	2.7	2.7	2.7	2.7	2 7	2 7	2 7	2.7

1/ Includes financial gap.

Table 8.3: ANTIGUA - KEY INDICATORS, 1987-2000 1/

	Actual 1987	Prel. 1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
							Projections							
GDP Growth Rates	..	4.9	4.9	4.7	4.6	4.3	4.2	4.1	3.8	3.7	3.7	3.7	3.7	3.7
GNP Growth Rates	..	2.8	4.9	4.3	4.9	4.7	4.5	4.6	4.1	4.1	4.1	4.1	4.0	4.0
GNP/Capita Growth Rate	..	1.0	3.4	2.8	3.3	3.1	2.9	3.0	2.5	2.9	2.9	2.8	2.8	2.8
Consumption/Capita Growth	..	1.7	0.1	0.5	0.3	0.0	-1.0	-1.7	-1.0	0.0	-0.4	-0.2	0.4	0.4
Total DOD 2/ (US$ million)	249.6	267.0	284.7	299.1	312.5	324.7	333.9	332.1	318.4	293.3	221.0	170.7	106.3	32.1
DOD/XGS 3/	105.4	94.0	90.2	86.1	81.6	77.1	72.4	65.8	57.7	48.6	33.7	24.0	14.1	3.8
DOD/GDP	90.6	82.7	80.0	77.2	74.1	71.0	67.4	61.9	55.0	46.9	32.7	23.4	13.6	3.7
Debt Service (US$ million)	21.0	42.0	34.7	38.1	41.2	44.0	50.3	57.9	65.7	73.5	80.8	81.2	81.2	78.9
Debt Service/XGS 3/	8.9	14.8	11.0	11.0	10.6	10.5	10.9	11.5	11.9	12.2	12.3	11.4	10.5	9.5
Debt Service/GDP	7.6	13.0	9.7	9.8	9.8	9.6	10.2	10.8	11.3	11.8	12.0	11.1	10.2	9.1
Debt Service/PS Current Revenue	28.2	50.6	37.2	37.1	36.6	35.7	36.3	37.9	38.5	39.2	39.9	37.1	34.1	30.4
Interest/XGS	3.9	5.6	5.9	6.1	6.1	5.9	5.8	5.5	5.2	4.8	4.4	3.7	3.2	2.7
Interest/GDP	3.4	4.9	5.3	5.5	5.5	5.5	5.4	5.2	5.0	4.6	4.2	3.6	3.1	2.6
Gross Investment/GDP	37.9	27.8	27.3	26.8	26.3	25.8	25.3	24.8	24.3	23.8	23.6	23.4	23.2	23.0
Domestic Savings/GDP	5.7	6.6	8.9	12.5	14.8	16.9	19.7	22.9	25.1	26.4	27.8	29.0	29.7	30.7
National Savings/GDP	7.3	6.7	8.9	11.8	14.2	16.7	19.6	23.1	25.5	27.0	28.4	29.6	30.3	31.3
Marginal National Savings Rate	..	0.1	0.7	0.6	0.7	0.7	0.9	1.0	0.9	0.8	0.8	0.8	0.7	0.7
Public Investment/GDP	24.5	14.4	9.8	6.3	6.1	5.9	5.8	5.6	5.3	5.3	5.2	5.1	5.1	5.0
Public Sector Savings/GDP	4.7	2.6	1.8	3.0	3.7	4.5	5.5	6.0	7.0	7.5	7.5	7.5	7.5	7.5
Private Investment/GDP	13.4	13.4	17.5	20.5	20.2	19.9	19.5	19.2	19.0	18.5	18.4	18.3	18.1	18.0
Private Savings/GDP	2.6	4.1	7.1	8.8	10.5	12.2	14.1	17.1	18.5	19.5	20.9	22.1	22.8	23.8
Ratio of Public/Private Investment	1.8	1.1	0.6	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3	0.3
ICOR 4/	..	7.8	5.7	5.8	5.9	6.2	6.1	6.1	6.5	6.6	6.5	6.4	6.3	6.3
Public Sector Current Revenues/GDP	27.0	25.7	26.2	26.5	26.7	27.0	28.0	28.5	29.5	30.0	30.0	30.0	30.0	30.0
Public Sector Current Expenditures/GDP	22.3	23.1	24.4	23.5	23.0	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5	22.5
Public Sector Current Surplus/GDP	4.7	2.6	1.8	3.0	3.7	4.5	5.5	6.0	7.0	7.5	7.5	7.5	7.5	7.5
Export (GANFS) Growth Rate	..	16.3	5.4	6.4	6.2	6.0	5.7	5.5	5.4	5.1	4.8	4.6	4.2	4.2
Exports (GANFS)/GDP	79.9	52.1	82.5	83.8	85.1	86.5	87.7	88.9	90.2	91.4	92.4	93.3	93.0	92.7
Import (GANFS) Growth Rate	..	2.4	2.0	3.3	3.2	3.0	2.1	1.5	2.2	2.6	2.5	2.5	2.5	2.5
Imports (GANFS)/GDP	112.1	101.8	99.6	97.0	95.8	94.7	92.9	90.7	89.4	88.9	88.3	87.8	86.6	85.5
Current Account (US$ million)	-84.2	-63.2	-60.9	-54.7	-49.1	-41.8	-30.8	-14.8	-0.8	11.4	23.7	38.7	50.8	64.6
Current Account/GDP	-30.6	-19.6	-17.1	-14.1	-11.7	-9.2	-6.2	-2.8	-0.1	1.8	3.5	5.3	6.4	7.5
Terms of Trade Index	100.0	99.5	98.9	100.2	100.2	100.1	100.0	99.9	99.7	99.2	98.8	98.0	97.4	96.8

.. not available
_1/ Includes financial gap.
_2/ Debt outstanding and disbursed.
_3/ Exports of goods, services and net private transfers.
_4/ Five-year average, one year lag.

	Actual	Prel.	Projections											
	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
A. Exports of Goods and NFS	57	73	85	94	103	114	126	140	153	170	188	207	228	250
1. Merchandise	28	30	35	37	38	40	41	42	44	47	50	53	56	59
2. Non-Factor Services	30	43	50	57	65	74	85	98	109	123	138	154	172	191
B. Imports of Goods and NFS	90	106	119	120	132	141	152	163	174	187	201	216	231	248
1. Merchandise	79	95	107	108	118	126	135	145	155	166	178	191	205	220
2. Non-Factor Services	11	11	12	13	14	15	17	18	19	21	23	24	26	28
C. Resource Balance	-23	-33	-34	-26	-29	-27	-26	-23	-21	-17	-13	-9	-3	2
D. Net Factor Income	1	2	1	1	1	0	-1	-2	-3	-4	-5	-7	-9	-15
1. Factor Receipts	3	4	4	4	4	4	4	4	4	4	4	4	4	4
2. Factor Payments	1	1	3	3	3	4	5	6	7	8	9	12	14	19
(interest payments)	1	1	1	1	1	2	2	2	3	3	3	3	3	3
E. Net Current Transfers	11	13	13	12	12	12	12	12	12	12	12	12	11	11
1. Current Receipts	11	13	13	12	12	12	12	12	12	12	12	12	12	12
(workers remittances)	11	13	13	12	12	12	12	12	12	12	12	12	12	12
2. Current Payments	0	0	0	0	0	0	0	0	0	0	0	1	1	1
F. Current Account Balance	-10	-18	-20	-14	-16	-16	-16	-14	-12	-9	-7	-4	-1	-1
G. Long-Term Capital Inflow	16	18	20	14	16	16	16	14	12	9	7	4	1	1
1. Direct Investment	9	11	10	10	10	9	8	7	6	5	4	3	2	1
2. Offical Capital Grants	3	2	3	2	1	0	0	0	0	0	0	0	0	0
3. Net LT Loans 1/	4	5	7	2	5	7	8	7	6	4	3	1	-1	0
a. Disbursements	5	6	7	2	5	7	8	8	7	5	4	3	2	3
b. Repayments	1	1	0	0	0	0	0	0	1	1	1	2	2	3
4. Other LT Inflows (net)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H. Total Other Items	-6	-1	0	0	0	0	0	0	0	0	0	0	0	0
1. Net Short Term Capital	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2. Capital Flows, n.e.i.	-6	-1	0	0	0	0	0	0	0	0	0	0	0	0
3. Errors and Omissions	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I. Changes in Net Reserves	-1	0	0	0	0	0	0	0	0	0	0	0	0	0
1. Net Credit from the IMF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2. Other Reserve Changes	-1	0	0	0	0	0	0	0	0	0	0	0	0	0
(- indicates increase)														

MEMORANDUM ITEMS

Shares of Current US$ GDP

	-21.6	-27.3	-25.6	-19.2	-18.2	-16.0	-13.9	-11.5	-9.3	-7.1	-5.0	-3.0	-1.0	0.7
Total Interest Payments	0.7	0.6	0.6	0.9	0.9	0.9	1.0	1.1	1.1	1.1	1.1	1.1	1.0	0.9
Current Account Balance	-9.6	-14.8	-15.1	-10.2	-10.3	-9.4	-8.3	-6.9	-5.5	-3.9	-2.6	-1.6	-0.4	-0.3
LT Capital Inflow	14.7	15.4	15.1	10.2	10.3	9.4	8.3	6.9	5.5	3.9	2.6	1.6	0.4	0.3
GDP (Current US$)	106.2	119.2	132.4	140.6	157.1	171.6	187.4	204.6	222.4	242.1	263.6	285.7	309.5	335.4

Foreign Exchange Reserves

Gross Reserves	10.5	10.6	10.6	10.6	10.6	10.6	10.6	10.6	10.6	10.6	10.6	10.6	10.6	10.6
Gross Reserves in Months of Imports of Goods and Services	1.4	1.2	1.0	1.0	0.9	0.9	0.8	0.7	0.7	0.7	0.6	0.6	0.5	0.5

Exchange Rates (EC$/US$)

Nominal Official Rate	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
Rate for GNP Conversion	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7

1/ Includes financial gap.

Table 8.5: ST. KITTS AND NEVIS - KEY INDICATORS, 1987-2000 1/

	Actual 1987	Prel. 1988	Projections 1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GDP Growth Rates	..	5.9	5.7	2.1	7.5	5.0	5.0	5.0	4.5	4.5	4.5	4.0	4.0	4.0
GNP Growth Rates	..	6.7	4.6	1.5	7.2	4.2	4.5	4.6	4.2	4.4	4.0	3.4	3.4	2.5
GNP/Capita Growth Rate	..	16.7	3.6	0.5	6.1	3.2	3.4	3.5	3.2	3.3	3.0	2.3	2.4	1.5
Consumption/Capita Growth	..	24.7	1.7	-0.8	4.8	1.3	1.2	1.1	1.4	1.1	1.0	0.7	0.6	0.8
Total DOD 2/ (US$ million)	22.1	26.4	33.1	35.6	40.7	47.8	55.5	62.7	68.9	73.3	76.1	77.5	76.8	76.7
DOD/XGS 3/	27.4	29.5	32.7	32.6	34.3	36.9	39.1	40.3	40.7	39.4	37.3	34.7	31.5	28.8
DOD/GDP	20.8	22.2	25.0	25.3	25.9	27.9	29.6	30.6	31.0	30.3	28.9	27.1	24.8	22.9
Debt Service (US$ million)	1.5	1.9	1.1	1.3	1.4	1.6	1.9	2.7	3.1	3.7	4.3	5.0	5.5	5.9
Debt Service/XGS 3/	1.9	2.1	1.0	1.2	1.2	1.3	1.4	1.7	1.8	2.0	2.1	2.2	2.3	2.2
Debt Service/GDP	1.4	1.6	0.8	0.9	0.9	0.9	1.0	1.3	1.4	1.5	1.6	1.7	1.8	1.8
Debt Service/PS Current Revenue	4.6	5.5	2.8	3.2	3.1	3.3	3.6	4.6	5.0	5.4	5.9	6.2	6.4	6.3
Interest/XGS	0.9	1.1	1.0	1.2	1.2	1.3	1.3	1.4	1.5	1.5	1.4	1.4	1.3	1.1
Interest/GDP	0.7	0.8	0.8	0.9	0.9	0.9	1.0	1.1	1.1	1.1	1.1	1.1	1.0	0.9
Gross Investment/GDP	27.9	29.0	32.0	29.0	28.5	28.0	27.5	27.0	26.0	25.5	25.0	24.5	24.0	23.5
Domestic Savings/GDP	6.1	1.4	6.0	9.5	9.9	11.7	13.4	15.3	16.5	18.3	20.0	21.4	22.9	24.2
National Savings/GDP	18.1	14.3	16.9	18.5	17.9	18.2	18.7	19.6	20.1	21.3	22.1	22.6	23.2	22.8
Marginal National Savings Rate	..	-0.8	0.3	0.2	0.2	0.4	0.5	0.5	0.4	0.5	0.5	0.5	0.6	0.3
Public Investment/GDP	11.0	11.0	18.0	11.0	9.0	8.5	8.0	7.8	7.6	7.5	7.5	7.5	7.5	7.5
Public Sector Savings/GDP	6.9	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6
Private Investment/GDP	16.9	18.0	14.0	18.0	19.5	19.5	19.5	19.2	18.4	18.0	17.5	17.0	16.5	16.0
Private Savings/GDP	11.2	9.7	12.3	13.9	13.3	13.6	14.1	15.0	15.5	16.7	17.5	18.0	18.6	18.2
Ratio of Public/Private Invest.	0.7	0.6	1.3	0.6	0.5	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.5	0.5
ICOR	..	4.7	5.1	15.2	3.9	5.7	5.6	5.5	8.0	5.8	5.7	6.3	6.1	6.0
Public Sector Current Revenues/GDP	30.7	29.1	29.0	29.3	28.8	28.6	28.3	28.1	28.1	28.1	28.1	28.1	28.1	28.1
Public Sector Current Expenditures/GDP	23.8	24.5	24.4	24.7	24.2	24.0	23.7	23.5	23.5	23.5	23.5	23.5	23.5	23.5
Public Sector Current Surplus/GDP	6.9	4.6	4.6	4.6	4.6	4.6	4.6	4.6	4.6	7.6	4.6	4.6	4.6	4.6
Export (GNFS) Growth Rate	..	0.1	7.0	4.8	7.5	7.6	7.6	7.7	8.4	6.5	6.4	5.7	5.8	5.5
Exports (GNFS)/GDP	62.9	61.4	64.0	66.5	65.6	66.4	67.2	68.3	68.9	70.2	71.4	72.4	73.6	74.5
Import (GNFS) Growth Rate	..	12.1	6.8	-1.6	5.1	3.3	3.3	3.3	2.5	2.9	2.9	2.5	2.5	2.5
Imports (GNFS)/GDP	84.7	88.7	89.8	85.7	83.8	82.5	81.1	79.8	78.3	77.3	76.3	75.5	74.6	73.8
Current Account (US$ million)	-10.4	-17.5	-20.0	-14.4	-16.1	-16.1	-15.6	-14.2	-12.3	-9.4	-6.8	-4.4	-1.3	-0.9
Current Account/GDP	-9.8	-14.8	-15.1	-10.2	-10.3	-9.4	-8.3	-6.9	-5.5	-3.9	-2.6	-1.6	-0.4	-0.3
Terms of Trade Index	100.0	113.8	122.7	130.6	127.4	124.4	121.3	118.4	115.8	115.8	115.5	115.1	114.6	114.1

.. not available
1/ Includes financial gap.
2/ Debt outstanding and disbursed.
3/ Exports of goods, services and net private transfers.
4/ Five-year average, one year lag.

Table 8.6: DOMINICA - ACTUAL AND PROJECTED BALANCE OF PAYMENTS, 1987-2000 1/

(US$ million)

	Actual 1987	Prel. 1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
A. Exports of Goods and NFS	60	68	64	77	84	93	102	112	122	131	141	150	161	172
1. Merchandise	48	56	50	62	68	74	82	89	98	106	114	122	130	139
2. Non-Factor Services	12	12	14	15	17	18	20	22	24	25	27	29	31	33
B. Imports of Goods and NFS	70	91	94	106	114	122	131	140	149	160	173	182	195	209
1. Merchandise	66	88	90	102	109	117	125	133	142	152	164	173	185	198
2. Non-Factor Services	3	4	4	4	5	5	6	6	7	8	8	9	10	11
C. Resource Balance	-10	-23	-30	-30	-30	-30	-29	-28	-28	-28	-32	-32	-34	-37
D. Net Factor Income	-5	-3	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5	-5
1. Factor Receipts	0	1	2	2	2	3	3	3	3	3	3	3	3	3
2. Factor Payments	5	5	7	8	8	8	8	8	8	8	8	8	8	8
(interest payments)	2	2	3	3	3	3	3	4	4	4	3	4	4	4
E. Net Current Transfers	8	8	9	11	13	15	16	19	20	21	22	23	24	24
1. Current Receipts	8	8	9	11	13	15	16	19	20	21	22	23	24	24
(workers remittances)	8	8	9	11	13	15	16	19	20	21	22	23	24	24
2. Current Payments	0	0	0	0	0	0	0	0	0	0	0	0	0	0
F. Current Account Balance	-8	-18	-26	-24	-22	-20	-17	-15	-13	-12	-15	-14	-16	-19
G. Long-Term Capital Inflow	23	19	26	26	24	23	17	15	13	12	15	14	16	19
1. Direct Investment	9	7	7	6	6	6	6	6	6	6	6	6	6	6
2. Official Capital Grants	9	9	13	16	15	14	14	13	13	12	12	12	11	11
3. Net LT Loans 1/	5	3	6	4	3	3	-3	-4	-6	-6	-3	-4	-1	2
a. Disbursements	8	5	12	8	6	6	1	1	-1	0	3	3	5	8
b. Repayments	2	2	4	4	3	3	4	5	5	6	6	6	6	6
4. Other LT Inflows (net)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H. Total Other Items	-7	-1	0	0	0	0	0	0	0	0	0	0	0	0
1. Net Short Term Capital	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2. Capital Flows, n.e.i.	-11	-10	0	0	0	0	0	0	0	0	0	0	0	0
3. Errors and Omissions	5	9	0	0	0	0	0	0	0	0	0	0	0	0
I. Changes in Net Reserves	-9	0	-2	-2	-2	-3	0	0	0	0	0	0	0	0
1. Net Credit from the IMF	0	-2	-2	-2	-2	-3	0	0	0	0	0	0	0	0
2. Other Reserve Changes	-9	2	0	0	0	0	0	0	0	0	0	0	0	0
(- indicates increase)														

MEMORANDUM ITEMS

Shares of Current US$ GDP

	-8.1	-16.5	-20.6	-17.8	-16.4	-15.3	-14.0	-12.5	-11.8	-10.7	-11.4	-10.6	-10.5	-10.5
Total Interest Payments	1.5	1.2	1.9	1.9	1.6	1.6	1.7	1.6	1.5	1.3	1.2	1.2	1.1	1.1
Current Account Balance	-8.1	-13.0	-17.8	-14.4	-12.3	-10.5	-7.9	-6.5	-5.3	-4.7	-5.4	-4.8	-4.8	-5.3
LT Capital Inflow	18.4	13.7	19.3	15.6	13.5	11.8	7.9	6.5	5.3	4.7	5.4	4.8	4.8	5.3
GDP (Current US$)	125.7	140.5	144.6	166.3	180.0	194.8	210.4	226.6	243.6	261.9	281.3	301.9	326.4	352.8

Foreign Exchange Reserves

Gross Reserves	16.7	16.7	18.8	20.9	23.0	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5	25.5
Gross Reserves in Months of Imports of Goods and Services	2.7	2.1	2.2	2.2	2.3	2.4	2.2	2.1	1.9	1.8	1.7	1.6	1.5	1.4

Exchange Rates (EC$/US$)

Nominal Official Rate	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
Rate for GNP Conversion	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7

_1/ Includes financial gap.

	Actual	Prel.	Projections											
	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GDP Growth Rates	..	6.7	-2.1	10.6	4.1	4.0	3.9	3.5	3.4	3.2	3.1	3.0	3.0	2.9
GNP Growth Rates	..	8.4	-3.2	11.1	4.3	4.3	4.2	3.6	3.4	3.3	3.2	3.1	3.1	3.0
GNP/Capita Growth Rate	..	7.1	-4.3	9.8	3.2	3.2	3.0	2.4	2.3	2.1	2.0	2.0	1.9	1.9
Consumption/Capita Growth	..	7.0	1.6	1.7	2.0	2.3	1.9	1.4	1.5	1.2	1.6	1.7	1.5	1.2
Total DOD 2/ (US$ million)	64.6	64.1	78.9	87.5	93.4	96.3	93.0	88.7	82.6	77.0	78.6	75.2	73.9	75.5
DOD/XGS 3/	96.2	82.7	104.7	97.3	93.7	87.6	75.9	66.5	57.2	49.6	47.6	42.7	39.4	37.9
DOD/GDP	51.2	45.6	54.5	52.6	51.9	49.5	44.2	39.1	33.9	29.4	28.0	24.9	22.6	21.4
Debt Service (US$ million)	6.3	6.2	9.0	8.7	8.5	9.1	7.5	8.4	8.9	9.3	9.6	9.9	10.0	10.0
Debt Service/XGS 3/	9.3	8.0	12.0	9.7	8.6	8.3	6.1	6.3	6.2	6.0	5.8	5.6	5.3	5.0
Debt Service/GDP	5.0	4.4	6.2	5.2	4.7	4.7	3.6	3.7	3.7	3.5	3.4	3.3	3.0	2.8
Debt Service/PS Current Revenue	13.6	12.4	18.6	16.4	15.5	15.3	11.6	12.1	11.9	11.5	11.2	10.7	9.9	9.2
Interest/XGS	1.7	1.6	2.7	2.9	3.0	2.9	2.8	2.7	2.5	2.3	2.1	2.1	2.0	1.9
Interest/GDP	0.9	0.9	1.4	1.6	1.7	1.7	1.7	1.6	1.5	1.3	1.2	1.2	1.1	1.1
Gross Investment/GDP	23.0	28.6	28.0	29.0	28.5	28.0	27.5	27.0	26.5	26.0	25.8	25.3	25.0	25.0
Domestic Savings/GDP	14.9	12.2	7.6	11.2	12.1	12.7	13.5	14.5	15.2	15.3	14.5	14.7	14.5	14.5
National Savings/GDP	16.9	15.8	10.4	14.8	16.3	17.7	19.8	20.5	21.1	21.1	20.3	20.4	20.0	19.6
Marginal National Savings Rate	..	0.2	1.7	0.8	0.5	0.5	0.7	0.4	0.4	0.4	0.3	0.3	0.3	0.3
Public Investment/GDP	12.6	16.1	15.3	20.0	12.8	10.0	9.5	9.0	8.5	8.0	7.5	7.0	6.5	6.5
Public Sector Savings/GDP	9.1	9.0	7.5	6.4	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
Private Investment/GDP	10.4	12.5	12.7	9.0	15.7	18.0	18.0	18.0	18.0	18.0	18.3	18.3	18.5	18.5
Private Savings/GDP	7.8	6.8	2.9	8.4	10.6	12.0	14.1	14.8	15.4	15.4	14.6	14.7	14.3	13.9
Ratio of Public/Private Investment	1.2	1.3	1.2	2.2	0.8	0.6	0.5	0.5	0.5	0.4	0.4	0.4	0.4	0.4
ICOR	..	3.4	-13.9	2.6	7.1	7.0	7.2	7.8	8.0	8.3	8.4	8.6	8.5	8.5
Public Sector Current Revenues/GDP	36.3	35.4	33.5	31.9	30.7	30.7	30.7	30.7	30.7	30.7	30.7	30.7	30.7	30.7
Public Sector Current Expenditures/GDP	27.2	26.4	26.0	25.5	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0	25.0
Public Sector Current Surplus/GDP	9.1	9.0	7.5	6.4	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7	5.7
Export (G&NFS) Growth Rate	..	11.8	-9.7	23.0	5.6	5.1	5.1	5.1	4.4	4.4	3.3	3.3	3.3	3.3
Exports (G&NFS)/GDP	47.0	48.3	44.3	46.1	46.9	47.6	48.3	49.2	49.9	50.2	50.0	49.8	49.3	48.8
Import (G&NFS) Growth Rate	..	24.5	-2.2	10.1	3.2	3.2	2.9	2.6	2.5	2.3	2.4	2.1	2.3	2.5
Imports (G&NFS)/GDP	55.1	64.8	64.9	63.9	63.4	62.9	62.3	61.8	61.3	60.9	61.4	60.4	59.8	59.3
Current Account (US$ million)	-7.8	-18.2	-25.8	-23.9	-22.2	-20.4	-16.6	-14.7	-12.9	-12.4	-15.2	-14.5	-15.7	-18.5
Current Account/GDP	-6.1	-13.0	-17.8	-14.4	-12.3	-10.5	-7.9	-6.5	-5.3	-4.7	-5.4	-4.8	-4.8	-5.3
Terms of Trade Index	100.0	97.0	95.8	89.5	89.9	90.3	90.7	91.2	91.6	90.5	88.6	88.5	87.5	86.5

.. not available
_1/ Includes financial gap.
_2/ Debt outstanding and disbursed.
_3/ Exports of goods, services and net private transfers.
_4/ Five-year average, one year lag.

Table 8.8: ST. LUCIA - ACTUAL AND PROJECTED BALANCE OF PAYMENTS, 1987-2000 1/

(US$ million)

	Actual	Prel.	Projections											
	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
A. Exports of Goods and NFS	186	237	256	272	296	323	351	382	418	445	478	512	549	588
1. Merchandise	80	119	126	129	140	153	165	179	193	206	220	236	252	269
2. Non-Factor Services	107	119	131	143	156	170	186	203	220	239	258	276	297	318
B. Imports of Goods and NFS	219	264	296	322	336	352	371	394	420	450	482	517	556	597
1. Merchandise	179	221	247	269	279	292	307	325	345	369	395	423	454	488
2. Non-Factor Services	40	43	49	53	57	61	65	70	75	81	87	94	102	110
C. Resource Balance	-33	-27	-40	-51	-40	-29	-20	-13	-7	-5	-5	-5	-7	-10
D. Net Factor Income	-4	-4	-10	-13	-13	-16	-18	-19	-21	-22	-23	-24	-24	-25
1. Factor Receipts	0	1	2	2	2	2	2	2	2	2	2	2	2	2
2. Factor Payments	4	6	12	15	16	19	20	22	23	24	25	26	27	27
(interest payments)	2	2	2	2	3	4	4	4	4	4	3	3	3	2
E. Net Current Transfers	17	19	20	21	22	22	23	23	24	24	25	25	26	26
1. Current Receipts	17	19	20	21	22	27	23	23	24	24	25	25	26	26
(workers remittances)	17	19	20	21	22	22	23	23	24	24	25	25	26	26
2. Current Payments	0	0	0	0	0	0	0	0	0	0	0	0	0	0
F. Current Account Balance	-20	-13	-29	-42	-31	-24	-15	-9	-4	-3	-2	-4	-6	-9
G. Long-Term Capital Inflow	30	22	29	42	31	24	15	9	4	3	2	4	6	9
1. Direct Investment	20	24	12	13	13	13	13	13	12	12	12	10	10	10
2. Official Capital Grants	8	4	5	5	4	4	3	0	0	0	0	0	0	0
3. Net LT Loans 1/	5	8	12	24	14	7	-1	-4	-8	-9	-10	-6	-4	-1
a. Disbursements	7	10	14	26	16	9	1	-1	-4	-4	-4	0	2	5
b. Repayments	2	3	2	2	2	2	2	3	4	5	6	6	6	6
4. Other LT Inflows (net)	-3	-13	0	0	0	0	0	0	0	0	0	0	0	0
H. Total Other Items	0	2	0	0	0	0	0	0	0	0	0	0	0	0
1. Net Short Term Capital	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2. Capital Flows, n.e.i.	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3. Errors and Omissions	0	2	0	0	0	0	0	0	0	0	0	0	0	0
I. Changes in Net Reserves	-10	-11	0	0	0	0	0	0	0	0	0	0	0	0
1. Net Credit from the IMF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2. Other Reserve Changes	-10	-11	0	0	0	0	0	0	0	0	0	0	0	0
(- indicates Increase)														

MEMORANDUM ITEMS

Shares of Current US$ GDP

Resource Balance	-15.6	-11.4	-15.2	-17.9	-13.1	-8.9	-5.5	-3.3	-1.6	-1.1	-0.9	-1.0	-1.3	-1.6
Total Interest Payments	1.0	0.9	0.7	0.9	1.1	1.2	1.2	1.1	1.0	0.8	0 7	0.5	0.5	0.4
Current Account Balance	-9.5	-5.3	-11.3	-14.8	-10.1	-7.2	-4.2	-2.3	-0.8	-0.7	-0.5	-0.7	-1.0	-1.4
LT Capital Inflow	14.3	9.3	11.3	14.8	10.1	7.2	4.2	2.3	0.8	0.7	0.5	0.7	1.0	1.4

| GDP (Current US$) | 210.0 | 236.6 | 260.8 | 282.8 | 306.4 | 332.0 | 359.7 | 389.4 | 419.2 | 452.1 | 487.5 | 525 7 | 571.2 | 620.7 |

Foreign Exchange Reserves

Gross Reserves	14.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2	25.2
Gross Reserves in Months of	0.8	1.1	1.0	0.9	0.9	0.8	0.8	0.7	0.7	0.6	0.6	0.6	0.5	0.5
Imports of Goods and Services														

Exchange Rates (EC$/US$)

Nominal Official Rate	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
Rate for GNP Conversion	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7

_1/ Includes financial gap.

	Actual	Prel.	Projections											
	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GDP Growth Rates	..	8.4	4.9	4.3	4.2	4.2	4.2	4.1	3.5	3.5	3.5	3.5	3.5	3.5
GNP Growth Rates	..	8.6	2.8	3.6	4.5	3.7	4.1	4.1	3.4	3.6	3.6	3.6	3.7	3.7
GNP/Capita Growth Rate	..	6.7	0.7	1.5	2.4	1.6	2.0	2.0	1.3	1.6	1.6	1.6	1.7	1.7
Consumption/Capita Growth	..	-0.1	1.0	0.3	0.4	1.0	1.8	1.7	1.3	0.8	1.2	1.6	1.2	1.1
Total DOD 2/ (US$ million)	40.7	48.4	60.8	84.8	98.8	105.6	104.6	100.7	92.3	83.2	73.6	67.4	63.0	61.9
DOD/XGS 3/	20.0	18.8	21.8	28.7	30.8	30.4	27.8	24.7	21.0	17.7	14.6	12.5	10.9	10.0
DOD/GDP	19.4	20.5	23.3	30.0	32.2	31.8	29.1	25.9	22.0	18.4	15.1	12.8	11.0	10.0
Debt Service (US$ million)	3.9	4.8	3.6	4.1	5.1	5.6	5.9	6.8	8.3	9.0	9.2	8.9	8.6	8.1
Debt Service/XGS 3/	1.9	1.9	1.3	1.4	1.6	1.6	1.6	1.7	1.9	1.9	1.8	1.6	1.5	1.3
Debt Service/GDP	1.9	2.0	1.4	1.5	1.7	1.7	1.6	1.7	2.0	2.0	1.9	1.7	1.5	1.3
Debt Service/PS Current Revenue	4.6	4.8	3.6	3.9	4.6	4.8	4.7	5.0	5.7	5.7	5.4	4.8	4.3	3.7
Interest/XGS	1.1	0.8	0.7	0.8	1.1	1.1	1.1	1.0	0.9	0.8	0.6	0.5	0.5	0.4
Interest/GDP	1.0	0.9	0.7	0.9	1.1	1.2	1.2	1.1	1.0	0.8	0.7	0.5	0.5	0.4
Gross Investment/GDP	38.0	37.7	42.1	43.0	39.4	36.0	33.0	31.0	29.5	29.0	28.5	28.0	28.0	28.0
Domestic Savings/GDP	22.4	26.7	27.9	28.1	29.3	30.1	30.3	30.5	30.7	30.9	30.9	30.6	26.7	26.4
National Savings/GDP	28.6	32.9	31.9	31.2	32.5	32.1	32.1	31.8	31.7	31.6	31.5	31.0	27.0	26.6
Marginal National Savings Rate	..	0.9	0.2	0.5	0.4	0.3	0.3	0.3	0.3	0.4	0.4	0.2	0.4	0.3
Public Investment/GDP	12.5	12.6	20.2	25.3	12.2	12.0	10.0	9.0	8.0	8.0	8.0	8.0	8.0	8.0
Public Sector Savings/GDP	10.4	13.5	8.7	7.3			5.8	6.2	6.6	6.6	6.6	6.6	6.6	6.6
Private Investment/GDP	25.5	25.1	21.9	17.7			23.0	22.0	21.5	21.0	20.5	20.0	20.0	20.0
Private Savings/GDP	18.2	19.4	23.2	23.9	26.		23.3	25.6	25.1	25.0	24.9	24.4	20.4	20.0
Ratio of Public/Private Investment	0.5	0.5	0.9	1.4	0.6	0.	0.4	0.4	0.4	0.4	0.4	0.4	0.4	0.4
ICOR	..	4.5	7.7	9.9	10.3	9.4	8.6	8.0	8.8	8.4	8.3	8.2	8.0	8.0
Public Sector Current Revenues/GDP	40.3	42.0	38.5	36.9	36.0	35.5	35.0	35.0	35.0	35.0	35.0	35.0	35.0	35.0
Public Sector Current Expenditures/GDP	29.9	28.5	29.8	29.6	29.8	29.5	29.2	28.8	28.4	28.4	28.4	28.4	28.4	28.4
Public Sector Current Surplus/GDP	10.4	13.5	8.7	7.3	6.2	6.0	5.8	6.2	6.6	6.6	6.6	6.6	6.6	6.5
Export (GNFS) Growth Rate	..	25.1	3.8	5.3	4.7	4.6	4.2	4.3	3.9	3.7	3.4	3.1	3.1	3.1
Exports (GNFS)/GDP	88.6	100.3	98.3	96.1	96.7	97.3	97.6	98.0	98.6	98.4	98.0	97.4	96.0	94.7
Import (GNFS) Growth Rate	..	17.2	6.9	4.9	0.3	0.7	1.1	2.1	2.2	2.7	2.7	2.7	2.9	2.9
Imports (GNFS)/GDP	104.2	111.7	113.5	113.9	109.8	106.2	103.2	101.3	100.1	99.6	99.0	98.4	97.3	96.3
Current Account (US$ million)	-19.9	-12.5	-29.4	-42.0	-31.0	-23.9	-15.0	-9.1	-3.6	-3.0	-2.3	-3.8	-5.7	-8.9
Current Account/GDP	-9.5	-5.3	-11.3	-14.8	-10.1	-7.2	-4.2	-2.3	-0.8	-0.7	-0.5	-0.7	-1.0	-1.4
Terms of Trade Index	100.0	97.2	95.9	89.7	90.0	90.3	90.7	91.0	91.3	90.4	89.6	88.7	87.9	87.0

.. not available
_1/ Includes financial gap.
_2/ Debt outstanding and disbursed.
_3/ Exports of goods, services and net private transfers.
_4/ Five-year average, one year lag.

Table 8.10· ST VINCENT AND THE GRENADINES - ACTUAL AND PROJECTED BALANCE OF PAYMENTS, 1987-2000 1/

(US$ million)

	Actual 1987	Prel. 1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
A. Exports of Goods and NFS	72	108	119	123	133	143	154	166	178	190	202	215	228	241
1. Merchandise	52	84	94	97	105	113	122	132	142	152	162	173	183	194
2. Non-Factor Services	20	24	25	27	28	30	32	34	36	38	40	42	45	47
B. Imports of Goods and NFS	109	134	156	160	166	174	185	197	209	222	235	249	264	280
1. Merchandise	98	123	144	146	151	158	168	179	190	202	214	226	240	255
2. Non-Factor Services	11	12	13	14	15	16	17	18	19	20	21	23	24	25
C. Resource Balance	-37	-27	-37	-37	-32	-30	-31	-31	-31	-32	-33	-34	-36	-39
D. Net Factor Income	-3	-3	-3	-4	-4	-4	-t	-5	-6	-6	-6	-7	-8	-8
1. Factor Receipts	0	0	1	1	1	1	1	1	1	1	1	1	1	1
2. Factor Payments	3	4	5	5	5	6	6	7	7	7	8	8	9	10
(interest payments)	1	1	2	1	2	2	2	2	1	1	1	1	1	1
E. Net Current Transfers	15	17	18	19	20	23	24	25	26	26	26	27	27	28
1. Current Receipts	15	17	18	19	20	23	24	25	26	26	26	27	27	28
(workers remittances)	15	17	18	19	20	23	24	25	26	26	26	27	27	28
2. Current Payments	0	0	0	0	0	0	0	0	0	0	0	0	0	0
F. Current Account Balance	-25	-13	-23	-21	-16	-12	-12	-11	-10	-11	-13	-14	-17	-19
G. Long-Term Capital Inflow	20	21	23	21	16	12	12	11	10	11	13	14	17	19
1. Direct Investment	4	4	3	4	4	5	5	6	6	7	7	8	8	8
2. Official Capital Grants	7	10	11	11	11	10	10	10	10	10	10	10	10	10
3. Net LT Loans 1/	10	9	8	7	1	-3	-3	-5	-6	-6	-4	-4	-1	1
a. Disbursements	11	10	10	8	3	-2	-2	-4	-4	-4	-2	-3	-1	2
b. Repayments	1	2	1	1	1	1	1	1	1	1	1	1	1	1
4. Other LT Inflows (net)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H. Total Other Items	-1	-6	0	0	0	0	0	0	0	0	0	0	0	0
1. Net Short Term Capital	3	5	0	0	0	0	0	0	0	0	0	0	0	0
2. Capital Flows, n.e.i.	-4	-11	0	0	0	0	0	0	0	0	0	0	0	0
3. Errors and Omissions	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I. Changes in Net Reserves	5	-3	0	0	0	0	0	0	0	0	0	0	0	0
1. Net Credit from the IMF	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2. Other Reserve Changes	5	-3	0	0	0	0	0	0	0	0	0	0	0	0
(- indicates increase)														
MEMORANDUM ITEMS														
Shares of Current US$ GDP														
Resource Balance	-25.7	-17.1	-21.6	-19.7	-16.1	-14.0	-13.2	-12.4	-11.5	-11.0	-10.8	-10.5	-10.3	-10.4
Total Interest Payments	0.8	0.8	0.9	0.8	0.8	0.8	0.7	0.6	0.5	0.4	0.4	0.4	0.3	0.3
Current Account Balance	-17.2	-8.5	-13.2	-11.4	-8.1	-5.4	-5.0	-4.5	-3.9	-4.0	-4.4	-4.4	-4.7	-5.1
LT Capital Inflow	14.1	14.4	13.2	11.4	8.1	5.4	5.0	4.5	3.9	4.0	4.4	4.4	4.7	5.1
GDP (Current US$)	142.3	156.5	172.0	185.9	200.7	216.5	233.0	250.2	267.5	286.0	305.7	325.7	349.8	375.6
Foreign Exchange Reserves														
Gross Reserves	20.2	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6	23.6
Gross Reserves in Months of Imports of Goods and Services	2.2	2.1	1.8	1.7	1.7	1.6	1.5	1.4	1.3	1.2	1.2	1.1	1.0	1.0
Exchange Rates (EC$/US$)														
Nominal Official Rate	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
Rate for GNP Conversion	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7

_1/ Includes financial gap.

Table 8.11: ST. VINCENT AND THE GRENADINES - KEY INDICATORS, 1987-2000 1/

	Actual	Prel.	Projections											
	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GDP Growth Rates	.	5.8	4.6	3.9	3.8	3.7	3.C	3.3	2.8	2.6	2.6	2.3	2.3	2.3
GNP Growth Rates	.	5.9	4.8	3.9	3.8	3.7	3.5	3.2	2.8	2.5	2.6	2.2	2.2	2.2
GNP/Capita Growth Rate	.	4.4	3.0	2.1	2.1	2.0	1.8	1.5	1.2	1.1	1.1	0.7	0.7	0.8
Consumption/Capita Growth	.	-3.6	-1.1	0.2	0.6	1.1	1.4	1.1	0.6	0.5	0.9	0.4	0.7	0.4
Total DOD 2/ (US$ million)	37.2	46.0	54.3	60.8	62.2	58.9	55.5	50.7	45.0	39.5	39.9	36.2	34.7	35.9
DOD/XGS 3/	42.5	37.0	39.3	42.3	40.2	35.1	30.9	26.4	21.9	18.2	17.4	14.9	13.5	13.3
DOD/GDP	26.1	29.4	31.6	32.7	31.0	27.2	23.8	20.3	16.8	13.8	13.1	11.1	9.9	9.5
Debt Service (US$ million)	2.6	2.8	2.4	2.4	2.5	2.6	2.4	2.1	2.2	2.2	1.9	1.8	1.5	1.2
Debt Service/XGS 3/	2.9	2.2	1.8	1.6	1.6	1.5	1.3	1.1	1.1	1.0	0.8	0.8	0.6	0.4
Debt Service/GDP	1.8	1.8	1.4	1.3	1.2	1.2	1.0	0.8	0.8	0.8	0.6	0.6	0.4	0.3
Debt Service/PS Current Revenue	5.2	5.1	4.1	3.8	3.9	3.8	3.2	2.7	2.7	2.5	2.0	1.8	1.4	1.0
Interest/XGS	1.3	1.0	0.8	0.7	0.8	0.8	0.7	0.6	0.5	0.4	0.3	0.3	0.2	0.2
Interest/GDP	0.8	0.8	0.7	0.6	0.6	0.6	0.5	0.5	0.4	0.3	0.2	0.2	0.2	0.2
Gross Investment/GDP	32.4	31.2	38.0	35.0	32.5	31.0	30.5	30.0	29.6	29.0	28.5	28.0	27.5	27.5
Domestic Savings/GDP	6.7	13.9	16.0	15.0	16.2	16.9	17.2	17.5	17.9	17.9	17.7	17.5	17.1	17.0
National Savings/GDP	15.1	22.5	24.5	23.3	24.2	25.5	25.4	25.4	25.5	24.8	23.9	23.4	22.5	22.1
Marginal National Savings Rate	.	1.4	0.9	0.6	0.5	0.7	0.3	0.3	0.4	0.2	0.1	0.3	0.1	0.3
Public Investment/GDP	16.4	12.5	25.8	22.6	13.2	12.0	10.0	8.5	7.5	7.5	7.5	7.5	7.5	7.5
Public Sector Savings/GDP	9.0	8.7	8.0	7.8	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
Private Investment/GDP	16.0	18.7	12.2	12.4	19.3	19.0	20.5	21.5	22.0	21.5	21.0	20.5	20.0	20.0
Private Savings/GDP	6.1	13.8	16.5	15.5	16.7	18.0	17.9	17.9	18.0	17.3	16.4	15.9	15.0	14.5
Ratio of Public/Private Investment	1.0	0.7	2.1	1.8	0.7	0.6	0.5	0.4	0.3	0.3	0.4	0.4	0.4	0.4
ICOR	.	5.6	6.8	9.7	9.2	8.7	8.9	9.4	10.7	11.3	11.1	12.6	12.3	12.1
Public Sector Current Revenues/GDP	34.4	34.8	34.3	33.1	32.1	31.6	31.4	30.9	31.0	31.0	31.0	31.0	31.0	31.0
Public Sector Current Expenditures/GDP	25.4	26.1	26.3	25.3	24.6	24.1	23.9	23.4	23.5	23.5	23.5	23.5	23.5	23.5
Public Sector Current Surplus/GDP	9.0	8.7	8.0	7.8	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5	7.5
Export (GNFS) Growth Rate	..	45.9	6.4	3.8	3.8	3.6	3.4	3.3	3.2	2.9	2.5	2.4	2.2	2.0
Exports (GNFS)/GDP	50.6	68.7	69.1	66.3	66.3	66.3	66.2	66.3	66.6	66.5	66.1	66.0	65.2	64.2
Import (GNFS) Growth Rate	..	21.1	10.2	-1.3	-0.6	0.8	2.3	2.2	1.8	1.6	1.6	1.4	1.4	1.6
Imports (GNFS)/GDP	76.3	85.8	90.9	86.1	82.5	80.2	79.4	78.7	78.1	77.5	76.9	76.5	75.4	74.6
Current Account (US$ million)	-24.5	-13.4	-22.8	-21.2	-16.4	-11.7	-11.6	-11.3	-10.3	-11.4	-13.4	-14.2	-16.5	-19.1
Current Account/GDP	-17.2	-8.5	-13.2	-11.4	-8.1	-5.4	-5.0	-4.5	-3.9	-4.0	-4.4	-4.4	-4.7	-5.1
Terms of Trade Index	100.0	100.1	98.1	93.5	93.5	93.4	93.4	93.3	93.3	92.5	91.8	91.1	90.4	89.7

.. not available
_1/ Includes financial gap.
_2/ Debt outstanding and disbursed.
_3/ Exports of goods, services and net private transfers.
_4/ Five-year average, one year lag.

Table 8.12: GRENADA - BALANCE OF PAYMENTS, 1987-2000 1/

	Actual	Prel.	Projections											
	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
A. Exports of Goods and NFS	79	84	91	98	107	118	129	141	154	167	182	199	217	237
1. Merchandise	32	33	34	35	37	40	42	45	49	52	56	60	65	70
2. Non-Factor Services	47	51	57	63	70	78	86	96	105	115	126	139	152	167
B. Imports of Goods and NFS	120	122	132	139	148	157	167	178	188	201	214	228	243	259
1. Merchandise	103	105	113	119	127	135	143	152	161	172	183	195	208	221
2. Non-Factor Services	17	17	18	20	21	22	24	25	27	29	31	33	35	37
C. Resource Balance	-42	-38	-41	-41	-40	-39	-38	-36	-35	-33	-31	-29	-26	-22
D. Net Factor Income	-2	-3	0	0	0	-2	-1	0	0	0	0	0	0	1
1. Factor Receipts	2	2	2	2	2	2	2	2	2	2	2	2	2	2
2. Factor Payments	4	4	2	2	2	4	2	2	2	2	2	2	2	1
(interest payments)	3	3	2	2	2	4	2	2	2	2	2	2	2	1
E. Net Current Transfers	12	15	17	18	19	19	20	21	22	22	23	24	25	26
1. Current Receipts	12	15	17	18	19	20	20	21	22	23	23	24	25	26
(workers remittances)	12	15	17	18	19	20	20	21	22	23	23	24	25	26
2. Current Payments	0	0	0	0	0	0	0	0	0	0	0	0	0	0
F. Current Account Balance	-32	-25	-25	-24	-22	-22	-18	-16	-14	-11	-9	-5	-1	5
G. Long-Term Capital Inflow	31	28	26	24	22	22	18	16	14	11	9	5	1	-5
1. Direct Investment	13	17	13	12	12	11	9	8	8	8	7	7	7	7
2. Offical Capital Grants	8	5	9	10	10	10	9	8	7	6	5	4	3	2
3. Net LT Loans 1/	11	6	3	2	0	1	0	0	-1	-3	-3	-6	-9	-14
a. Disbursements	19	11	8	8	5	7	6	6	3	2	1	-1	-4	-8
b. Repayments	8	5	5	6	5	7	5	6	4	4	5	5	6	6
4. Other LT Inflows (net)	0	0	0	0	0	0	0	0	0	0	0	0	0	0
H. Total Other Items	1	-6	0	0	0	0	0	0	0	0	0	0	0	0
1. Net Short Term Capital	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2. Capital Flows, n.e.i.	1	-9	0	0	0	0	0	0	0	0	0	0	0	0
3. Errors and Omissions	0	1	0	0	0	0	0	0	0	0	0	0	0	0
I. Changes in Net Reserves	0	5	-1	-1	0	0	0	0	0	0	0	0	0	0
1. Net Credit from the IMF	-1	-1	-1	-1	0	0	0	0	0	0	0	0	0	0
2. Other Reserve Changes	1	6	0	0	0	0	0	0	0	0	0	0	0	0
(- indicates increase)														

MEMORANDUM ITEMS

Shares of Current US$ GDP

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Resource Balance	-27.9	-22.8	-22.3	-20.6	-18.9	-17.2	-15.5	-13.7	-12.3	-11.0	-9.6	-8.3	-6.8	-5.4
Total Interest Payments	1.9	1.9	1.2	1.1	1.1	1.8	1.0	0.9	0.8	0.7	0.7	0.5	0.4	0.3
Current Account Balance	-21.5	-15.2	-13.5	-11.9	-10.4	-9.5	-7.5	-6.0	-4.8	-3.7	-2.6	-1.3	-0.1	1.1
LT Capital Inflow	20.9	17.0	14.0	12.2	10.4	9.5	7.5	6.0	4.8	3.7	2.6	1.3	0.1	-1.1
GDP (Current US$)	150.1	166.4	182.7	197.7	213.1	229.1	246.3	264.3	283.5	304.5	326.9	350.8	379.5	410.5

Foreign Exchange Reserves

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Gross Reserves	24.7	19.4	20.2	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7	20.7
Gross Reserves in Months of Imports of Goods and Services	2.4	1.8	1.8	1.8	1.7	1.5	1.5	1.4	1.3	1.2	1.1	1.1	1.0	0.9

Exchange Rates (EC$/US$)

	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
Nominal Official Rate	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7
Rate for GNP Conversion	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7	2.7

_1/ Includes financial gap.

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Table 8.13: GRENADA - KEY INDICATORS, 1987-2000   1/

	Actual	Prel.	Projections											
	1987	1988	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000
GDP Growth Rates	7.8	6.8	4.5	4.0	3.7	3.4	3.4	3.2	3.1	3.1	3.0	3.0	3.0	3.0
GNP Growth Rates	..	6.6	6.0	4.1	3.6	2.7	3.9	3.2	3.1	3.0	3.0	3.0	3.0	3.0
GNP/Capita Growth Rate	..	4.7	4.1	2.2	1.8	0.9	2.1	1.4	1.3	1.4	1.4	1.4	1.4	1.4
Consumption/Capita Growth	0.4	0.9	2.5	1.7	0.9	0.2	-0.1	-0.4	0.3	0.4	0.3	0.2	0.2	0.1
Total DOD 2/ (US$ million)	76.1	80.1	83.9	85.0	56.1	86.9	87.3	87.0	85.6	83.0	69.0	62.7	53.3	39.8
DOD/XGS 3/	82.7	79.6	76.9	73.2	67.4	62.5	57.8	53.0	48.3	43.3	33.2	27.9	21.9	15.0
DOD/GDP	50.7	48.1	45.9	43.5	40.4	37.9	35.4	32.9	30.2	27.3	21.1	17.9	14.0	9.7
Debt Service (US$ million)	11.6	8.6	7.7	9.0	7.5	10.2	7.8	6.2	6.3	6.6	7.2	7.1	7.2	7.0
Debt Service/XGS 3/	12.6	8.5	7.1	7.6	5.8	7.3	5.2	5.0	3.6	3.5	3.4	3.2	3.0	2.6
Debt Service/GDP	7.7	5.2	4.2	4.5	3.5	4.4	3.2	3.1	2.2	2.2	2.2	2.0	1.9	1.7
Debt Service/PS Current Revenue	26.7	16.0	13.3	14.4	11.2	14.4	10.4	10.2	7.4	7.3	7.3	6.7	6.3	5.7
Interest/XGS	2.9	3.1	1.9	1.8	1.8	2.6	1.6	1.4	1.3	1.2	1.1	0.8	0.6	0.5
Interest/GDP	1.8	1.9	1.1	1.1	1.1	1.6	1.0	0.9	0.8	0.7	0.7	0.5	0.4	0.3
Gross Investment/GDP	34.0	32.1	31.0	29.8	29.0	28.5	28.2	28.0	27.5	27.0	26.5	26.0	25.5	25.0
Domestic Savings/GDP	6.1	9.3	8.7	9.1	10.0	11.2	12.6	14.2	15.1	16.0	16.8	17.7	18.6	19.5
National Savings/GDP	12.5	16.9	17.5	17.8	18.5	18.9	20.6	21.9	22.5	23.0	23.6	24.2	24.8	25.5
Marginal National Savings Rate	..	0.9	0.3	0.3	0.4	0.4	0.6	0.6	0.4	0.4	0.5	0.5	0.5	0.5
Public Investment/GDP	15.1	14.3	12.9	11.0	10.2	9.1	8.8	8.6	8.7	8.9	9.1	8.6	8.1	7.6
Public Sector Savings/GDP	-0.3	7.3	7.6	7.9	7.9	8.1	8.2	8.2	8.4	8.4	8.4	8.4	8.4	8.4
Private Investment/GDP	18.9	17.8	18.1	18.8	18.8	19.4	19.4	19.4	18.8	18.1	17.4	17.4	17.4	17.4
Private Savings/GDP	12.8	9.6	9.9	9.9	10.6	10.8	12.4	13.7	14.1	14.6	15.2	15.8	16.4	17.1
Ratio of Public/Private Invest.	0.8	0.8	0.7	0.6	0.5	0.5	0.5	0.4	0.5	0.5	0.5	0.5	0.5	0.4
ICOR	0.0	5.0	7.2	7.7	8.1	8.5	8.5	8.8	8.9	9.0	8.9	8.8	8.6	8.5
Public Sector Current Revenues/GDP	28.9	32.2	31.8	31.5	31.1	30.8	30.5	30.2	30.0	30.0	30.0	30.0	30.0	30.0
Public Sector Current Expenditures/GDP	29.2	24.9	24.2	23.6	23.2	22.7	22.3	22.0	21.6	21.6	21.6	21.6	21.6	21.6
Public Sector Current Surplus/GDP	-0.3	7.3	7.6	7.9	7.9	8.1	8.2	8.2	8.4	8.4	8.4	8.4	8.4	8.4
Export (GNFS) Growth Rate	-3.4	3.0	4.4	5.0	5.2	5.2	5.3	5.3	4.4	4.4	4.5	4.5	4.5	4.5
Exports (GNFS)/GDP	52.3	50.2	49.7	49.6	50.3	51.3	52.3	53.4	54.1	54.9	55.8	56.7	57.2	57.7
Import (GNFS) Growth Rate	5.8	-2.9	2.8	2.4	2.3	2.3	2.3	2.2	2.0	2.0	2.0	2.0	2.0	2.0
Imports (GNFS)/GDP	80.2	73.0	72.0	70.2	69.3	68.5	67.8	67.2	66.5	65.9	65.4	64.9	64.0	63.0
Current Account (US$ million)	-32.3	-25.4	-24.7	-23.6	-22.2	-21.8	-18.4	-15.8	-13.6	-11.4	-8.6	-4.7	-0.5	4.5
Current Account/GDP	-21.5	-15.2	-13.5	-11.9	-10.4	-9.5	-7.5	-6.0	-4.8	-3.7	-2.6	-1.3	-0.1	1.1
Terms of Trade Index	100.0	99.4	96.4	94.2	94.4	94.6	94.8	95.0	95.3	95.3	95.5	95.6	95.8	96.0

.. not available
_1/ Includes financial gap.
_2/ Debt outstanding and disbursed.
_3/ Exports of goods, services and net private transfers.
_4/ Five-year average, one year lag.

UNITED
STATES
OF
AMERICA

THE CARIBBEAN AREA
ORGANIZATION OF EASTERN CARIBBEAN STATES
(OECS)

THE BAHAMAS

C U B A

OECS MEMBERS
OECS ASSOCIATED MEMBER
INTERNATIONAL BOUNDARIES

TURKS and
CAICOS (UK)

CAYMAN (UK)

HAITI   DOMINICAN
REPUBLIC

JAMAICA

*VIRGIN ISLANDS
(UK)*
ANGUILLA
PUERTO   *ST. MARTIN*
RICO (US)   Virgin Islands
(US)
*ST. KITTS
and NEVIS*   *ANTIGUA and BARBUDA*

*MONTSERRAT
(UK)*   *GUADELOUPE (Fr)*

DOMINICA

MARTINIQUE (Fr)

ST. LUCIA

*ST. VINCENT
and the
GRENADINES*   *BARBADOS*

GRENADA   ATLANTIC

ARUBA   CURAÇAO (Neth)
BONAIRE (Neth)

TRINIDAD AND TOBAGO   OCEAN

M E X I C O

BELIZE

GUATEMALA

HONDURAS

EL
SALVADOR

NICARAGUA

COSTA
RICA

P A N A M A

V E N E Z U E L A

G U Y A N A

SURINAME

C O L O M B I A

B R A Z I L

0 100 200 300 400 500 KILOMETERS

0   100   200   300 MILES