CARIBBEAN DEVELOPMENT BANK

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DR. COMPTON BOURNE, O.E.

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ADDRESS

by

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to the

EUROMONEY CONFERENCES/ LATINFINANCE
CARIBBEAN INVESTMENT FORUM

THE RITZ-CARLTON GOLF AND SPA RESORT, ROSE HALL
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CHALLENGE AND OPPORTUNITY: AN INVESTMENT OVERVIEW OF CARIBBEAN COMMUNITY COUNTRIES

I. Introduction

I am honoured and pleased to address this Euromoney Conferences/Latin Finance Caribbean Investment Forum. The Caribbean Development Bank (CDB) as part of its normal operations monitors and appraises the situation and prospects of its borrowing member countries (BMCs). I thought it may be useful to kick off the deliberations in the Conference by sharing my views about the investment environment based on the information generated by the Bank.

The focus of my address the Caribbean Community (CARICOM) member countries. Among the distinguishing characteristics of these countries are the following: (i) many of them have small land mass; (ii) most of them are islands; (iii) they have small populations, usually less than half a million and only 752 thousand for Guyana, 1.3 million for Trinidad and Tobago, and 2.7 million for Jamaica. Haiti is a strong exception with a population of 9.3 million.

Although there are many elements constituting the investment climate or environment, I will restrict my remarks to just a few major ones.

II. Socio-Economic Situation

Despite their small land mass and small population size, most of CARICOM members are classified by the United Nations as Medium or High Human Development countries. Per Capita purchasing power parity (PPP) GDP for 2004 ranged from USD5643 to USD8021 in the nine medium human development index (HDI) countries, and from USD12,182 to USD17843 in the high HDI countries. Haiti which is low HDI had a per capita PPP GDP of USD1892. Adult literacy is high and the combined gross enrolment ratio for primary, secondary and tertiary schools ranged between 60 percent and 89 percent in 2004.

However, there are weaknesses in the socio-economic situation which are both challenges and opportunities for investment. The housing stock is inadequate, especially for low income and lower middle income households who comprise the majority. Addressing this deficiency can assist with solutions to the problems of concentrations of the poor in urban areas and informal housing settlements and with associated problems of urban crime, urban congestion and vulnerability of the poor to environmental pollution and natural hazards. Furthermore, there are deficiencies in access to several

infrastructural services such as improved water supply, sanitation, telephones and electricity. They are perhaps more due to production and distribution capacity limitations than to inadequate household purchasing power. Whatever the reasons, these deficiencies can impinge negatively on productivity and output and on personal wellbeing. Another infrastructural weakness pertains to the network of roads and public transportation which entails such long commuting time that they impose significant transactions costs and capital costs to users. CARICOM governments have been doing much to alleviate these difficulties but there is evidently scope for expanded and accelerated investment by both the public sector and the private sector separately and in partnership.

III. Macroeconomic Performance

CARICOM sub-region, subject to natural hazard occurrences which shall be addressed later, exhibited solid macroeconomic growth between 2002 and 2006. With the exception of Dominica which regressed by 4% in 2002, annual rates of increases in GDP in constant prices varied between 1% and 12 %, with most countries clustered in the 3% - 7% range. Trinidad and Tobago whose annual growth rate varied between 7% and 12.6% is a positive outlier, while Jamaica whose growth rate varied between 1% and 2.6%, Haiti (-3.5% to 2.5%), and Guyana (-3.0% to 1.6%) are the negative outliers. Grenada's economic performance has been distorted by the occurrence of Hurricane Ivan in 2004.

Inflation has not been a major problem for most countries within the sub-region. Average annual rates of inflation for 2002-2005 ranged between 1.3% to 2.5% for 8 countries, between 2.9% to 6% in 2 countries, but was 11.6% in Jamaica, 14.3% in Suriname and 21.6% in Haiti. However, in 2006 most countries began to experience inflationary surges to which monetary policy has been directed.

IV. Fiscal and Debt Management

Macroeconomic stability and growth are contingent upon sound fiscal and debt management. Fiscal capacity deteriorated in banana and sugar exporting countries as a consequence of structural downturns in agricultural and agro-industrial export markets and tropical storm inflicted losses of production and taxable capacity. In many cases, deficient tax administration also resulted in slow revenue growth. In contrast, public expenditure budgets became buoyant as governments engaged in contra-cyclical expenditures and natural disaster relief and rehabilitation programmes funded only partially from foreign grants. The overall result was larger fiscal deficits and unsustainable external debt. The most heavily indebted CARICOM countries in 2005 were Guyana (143% of GDP), St. Kitts and Nevis (66%), St. Vincent and the Grenadines (81%), Grenada (79%), Belize 84%), and Jamaica (54%).

With the assistance of the Caribbean Development Bank (CDB), the Caribbean Technical Assistance Centre and other development partners, there has been a widespread programme of capacity building in tax administration, public expenditure management and fiscal restructuring. In relation to external debt, several countries have recently benefited from debt restructuring and debt relief. The sub-region, therefore, shows clear signs of improvements in fiscal management and debt management. These augur well for potential investors.

V. An Outward Looking CARICOM

CARICOM economies have historically exhibited acute foreign trade dependence. Paradoxically, that dependence co-existed with restrictive trade control regimes and capital controls on the balance of payments. Exports were dominated by preferential market arrangements and imports were controlled by oligopolistic merchant houses. Cross-border investments emanating from the Caribbean were rare.

Within the last decade, there has been a distinct shift towards an outward orientation. Foreign trade has been liberalised within the framework of regional integration as well as within the global movement for freer trade. Many new actors are appearing on the scene. In relation to financial market transactions, countries as they have adopted floating exchange rate systems or as they fulfil their obligations under the CARICOM Single Market and Economy (CSME) are removing restrictions on capital movements and international payments. Furthermore, as the Caribbean Trade and Investment Report 2005 documents there is strong growth of cross-border direct investments and portfolio capital flows by CARICOM enterprises in other member countries and in Latin America and the Caribbean. There is also strong inward direct foreign and portfolio capital inflow to CARICOM countries by North American, European and Latin American and Caribbean entities. And of course there is accelerating trend of Caribbean development finance institutions (DFIs) in Europe and North America as Caribbean enterprises exploit opportunities for asset portfolio diversification and seek means to circumvent barriers to access to overseas markets.

An important parallel set of developments within the CSME is the liberalisation of movement of labour, rights of business establishment, mutual recognition of educational qualifications and skills certificates, and the inter-linking of national equity exchanges.

The productivity and market enlargement implications of all these developments especially within the context of the CSME are perhaps intuitively obvious but bear repetition: more efficient use of factors of production; more cost-efficient sourcing of supplies; larger target markets; lower transactions costs, and greater scope for entrepreneurship, among others. All of which should assist in improving the international competitiveness of Caribbean enterprises.

VI. Natural Hazard Vulnerability

The exposure of Caribbean countries to natural hazards is well known as is the fact that the frequency of occurrence and intensity of tropical storms have increased with global warming. Business disruption, destruction of capital assets and reallocation of scarce public financial resources to disaster relief and rehabilitation can be repetitive negative factors in the investment environment. It is incumbent on governments, the business sector and civil society to adopt improved policies and practices for natural hazard risk reduction and management. In this latter regard, regional and sub-regional development banks, multilateral financial institutions and bilateral donors have sought to provide assistance with advocacy, training, institutional capacity building and policy development.

A particularly significant recent development at risk management for CARICOM countries is the establishment of the Caribbean Catastrophe Risk Insurance Facility (CCRIF) in 2007. It is a facility to provide catastrophe insurance on the pooled risk basis against government losses up to a predetermined limit. Because the insurance contract is based on parametric variables, e.g. the intensity of a tropical storm or earthquake, rather than post-event assessment of actual losses, payouts are expected to be swift thereby minimising the financial difficulties of affected governments and enabling faster post-event relief and rehabilitation. Although the scope of CCRIF is presently limited to hurricanes and earthquakes, a good case can be made for extending it to include floods which typically result from storms of lesser intensity than hurricanes but which nonetheless are in the general nature of natural hazards. Caribbean residents know well that floods frequently reduce agricultural output, damage physical property and occasionally cause of loss of life.

VII. Cost of Doing Business

An overview of the investment climate or environment should include some observations of the cost of doing business. The World Bank and IFC publication ***Doing Business 2007*** reports that of 175 economies including advanced industrial economies ranked in 2007, four (4) CARICOM countries ranked between 27th to 50th of the aggregate ease of doing business; four (4) between 56th to 73rd, and one (1) at 85th. Suriname was ranked 122nd, Guyana 136th and Haiti 139th. Thus, most CARICOM countries were in the top half of the rankings. The same cannot be said for many other developing country regions.

However, disaggregated analysis of the components of the composite rank reveals that much remains to be done to reduce the costs of doing business. First, starting a business is an extremely protracted process in some countries with costs amounting to anything between 12% to 34% of per capita income in the least costly jurisdictions and as

much as 100% to 154% in the highest cost jurisdictions. Second, in respect of labour market costs, redundancy payments per worker are high, ranging between 52 to 67 weeks of salary per worker in 8 of the 12 countries reported. Third, registering property is another time consuming process – typically between 40 to 81 days, but could be as long as 162 days (Trinidad and Tobago), 193 days (Suriname) and 683 days (Haiti) – which can cost anywhere between 7% to 13% of property value. Fourth, while tax rates are not out of line with some economically advanced countries such as Canada, France and the United Kingdom, high transactions and monetary costs are associated with paying taxes. The time consumed in paying taxes is a function of the complexity of the tax structure, i.e., how many different kinds of tax liabilities, required frequency of payment, as well as the documentary requirements. With reported hours per year between 140 and 528, simplification seems an obvious good. Fifth, with respect to contract enforcement, archaic documentation requirements and arcane legal processes might explain why there may be as many as 30 to 52 procedures, and 297 to 1340 days from start to finish of litigation and settlement. Certainly a barrier of significance is the estimate that court-sanctioned costs and attorney fees might comprise anywhere between 11% and 33% of the claim.

Much public attention, usually negative criticism, is directed at many aspects of government administration. The inefficiency of judicial administration seems to escape such scrutiny, perhaps because of our respect for the sanctity of the rule of law and a reluctance to appear to be breaching the convention of non-interference in the administration of justice. However, high transactions costs and extreme delays can make a mockery of the rule of law and are often tantamount to a denial of justice. Too often, it appears, there is a conspiracy of convenience between judicial officers and attorneys which results in repeated adjournments, delays and postponements of matters before the courts. The concern is not the quality of judicial decisions for which there is justifiably high regard. The concern is with the efficiency of administration of the judicial process. It is time that legal administration be subject to critical review and reform where warranted to raise the quality of administration not only in respect of civil law but also in matters of criminal law. In those countries where the legal profession has not displayed a willingness or the capacity for reform, the initiatives must come from the executive arm of the State.

VIII. Conclusion

I will end by stating the essence of my conclusions on the general investment climate or environment. CARICOM countries despite their small individual geographical and demographic sizes offer a conducive investment environment. The strong positive factors are - (i) their moderately high per capita incomes and human development status; (ii) the solidity of their macroeconomic performance; (iii) the return to sound fiscal management and debt management; (iv) a genuine international opening of goods, capital

and labour markets (to a lesser extent) and strongly outward looking government leadership; (v) progress in natural hazard risk reduction and management. The cost of doing business while not excessively prohibitive on a global scale is not competitive with economically advanced economies but could be significantly reduced by process-engineering and regulatory reforms to reduce transactions and financial costs of business registration, labour force redundancy costs, tax payments, and contract enforcement.

PUBLIC GOVERNANCE, PRIVATE SECTOR GROWTH AND THE PUBLIC INTEREST

Address

by

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President

CARIBBEAN DEVELOPMENT BANK

to the

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PUBLIC GOVERNANCE, PRIVATE SECTOR GROWTH AND THE PUBLIC INTEREST

I. INTRODUCTION

In the economic plans and other policy documents of developing countries, one is likely to find recognition and espousal of the role of the private sector in engendering and sustaining broad-based economic growth. Small and medium-sized enterprises are often specially mentioned because of their significance for employment generation, economic diversification particularly in the services industries and manufacturing, and for their potential for reducing concentrations in income and wealth.

Broad-based, equitable economic growth is certainly in the public interest. Nonetheless as governments promote private sector development they must be mindful of other public interest objectives or considerations such as avoidance of abuse of market power, workplace safety and health, environmental protection and preservation, product safety and phyto-sanitary standards, and many other social externalities which may ensue from business operations.

The public interest and private sector interests have been pursued with only limited success in most developing countries. The experience with private sector growth has been modest. In many countries, a few large domestic enterprises have grown spectacularly, expanding their asset base through mergers and acquisitions and cross-border operations. These are the brilliant stars in constellations of predominantly small, twinkling, easily clouded stars. In relation to public interests, market imperfections abound, environmental degradation is a major problem, and the health and safety standards of many enterprises are poor. More effective public governance can play an important role in remedying this state of affairs.

II. ASPECTS OF PUBLIC GOVERNANCE

Discussions of public governance in relation to private sector growth usually focus on two aspects: macroeconomic policy, particularly fiscal policy, and the regulatory framework. Sound macroeconomic and fiscal policies are certainly critical components of the enabling framework for private sector growth. As suggested earlier, private sector growth is compatible with the public interest. Furthermore, solid macroeconomic performance, i.e. economic growth rather than recession, price level stability rather than inflation, strong balance of payments, etc. is in the public interest quite apart from its effects through the private sector. International development partners

and multilateral financial institutions are therefore correct in the constancy of their efforts to encourage the adoption and persistence of sound macroeconomic policies, especially since fiscal deficits like some sins are ever present temptations.

The regulatory framework which is usually interpreted as the set of rules and regulations governing the output, pricing and investment decisions of enterprises is also central to the quality of public sector support of private sector growth and to the reconciliation of private interests with public interests. Regulatory reforms are more in the nature of structural shifts with little risk of reversal and generally do not warrant the same degree of surveillance and persistent attention as macroeconomic policy.

The overall quality of public governance and its effectiveness in reconciling private interests and public interests should be measured by more than the quality of economic management and the optimality of the regulatory framework. Administrative efficiency in the broad compass of public services and in the legal system is no less important than sound macroeconomic management and regulatory purpose for public validation of government. According to Anthony Giddens in The Third Way: Renewal of Social Democracy: "To retain or regain legitimacy, states without enemies have to elevate their administrative efficiency." In relation to the private sector, administrative efficiency would be determined by the number of procedures required for particular transactions, the length of time it takes enterprises to complete them, and the costs incurred in doing so. On these criteria, developing countries across the globe have to be characterized as administratively inefficient.

This conclusion is illustrated by reference to LAC in comparison with a benchmark set on economically advanced countries in North America and Europe namely Canada, USA, France, Germany and UK.

The kinds of business transactions considered are (i) starting a business, (ii) obtaining licenses for construction, (iii) registering property, (iv) paying taxes, (v) enforcing contracts, and (vi) closing a business. The centrality of these processes and decisions in private sector operations is obvious. The data used are taken from Doing Business 2007 published by the World Bank and IFC.

In the benchmark countries, between 2-9 procedures are required to start a business, 10-18 to obtain construction licenses, 2-9 to register property, and 17-21 to enforce contracts, except in Germany where 30 procedures are required. Of the 30 LAC countries, 13 require 10-15 procedures to start a business, and 3 require between 16 -20 procedures. The other 12 countries require 4-9 procedures. Obtaining a construction license requires 11-30 procedures in 28 LAC countries. Property registration requires 2-9 procedures which puts them on par with the benchmark countries in this respect. Enforcement of contracts requires more than 30 procedures in 25 LAC countries and 11-30 procedures in the other 5 countries. Except in relation to property registration, the number of required procedures is clearly excessive in Latin America and the Caribbean.

The length of the administrative processes is another barrier. In the benchmark countries, it takes between 3-24 days to start a business, 69-155 days to obtain a construction license, 10-40 days to register property except in France where it takes 183 days, 229-394 days to enforce contracts and 9-24 months to close a business. In marked contrast, in only 2 LAC countries does it take less than 20 days to register a business; 15 countries require 21-50 days, 6 require 51-100 days and in 2 countries as much as 694 days might be required. Obtaining a construction license can take between 100-300 days in most LAC countries. In only 3 countries does it take less than 100 days. Property registration is also a lengthy process in LAC, requiring 41-100 days in 12 countries and more than 100 days in 5 countries. Only 4 countries meet the benchmark standard of 20-40 days to register property.

The wheels of justice operate at snails' pace in LAC. It takes 400-700 days to have a contract enforced in 21 countries and in excess of 800 days in 5 countries. Closing a business takes more than 2 years in most LAC cases. These instances of excessively long completion time for bureaucratic processes are evidence of process inefficiency which impose substantial opportunity costs and transaction costs (exclusive of fee and other such payments) on enterprises.

Monetary fees and payments are also important. In the benchmark countries, the costs of starting a business may constitute 0.7%-1.1% of per capita income. Obtaining construction licenses is more costly, between 16%-75% of per capita income except in Canada where it is 117%. Property registration costs 0.5%-6.8% of property value. In contract enforcement actions, enterprises in the benchmark countries can expect to incur costs of 7.7%-16.8% of the amount claimed. In cases of business closure, they can expect to recover 53-99 cents in the $. In LAC, the costs of starting a business are much higher: 26%-100% of per capita income in 15 countries, and in excess of 100% in 5 countries. Getting construction licenses is a very expensive process, costing between 31%-100% of per capita income in 8 countries, 101%-200% in another 8 countries, and exceeded 200% in a further 8 countries. In property registration, LAC enterprises can expect to incur costs of the same order as the benchmark countries. Only in 8 LAC countries, does the cost as a percentage of the amount claimed exceed the highest benchmark of 7% of property value. Enforcement of contract is expensive. In 23 countries, costs comprise 11%-30% of claim value; in 5 countries, costs comprised 31%-40% of claim value, which when combined with the extremely protracted nature of the legal process, must be a serious disincentive to attempts at legally enforcing claims.

Because the ability to enforce contracts is important whether the enterprise is a non-financial institution, e.g. a manufacturer, or a financial institution, e.g. a commercial bank, weak and expensive contract enforcement systems constitute a formidable obstacle to private sector growth. Furthermore, without effective contract enforcement systems,

risk avoidance may become pre-eminent in business behavior. For credit relations, the problems are compounded by the weak protection of legal rights through instrumentalities such as laws and regulations in relation to collateral, secured creditors and bankruptcy.

The private interest in an administratively efficient legal system is not confined to matters of contract enforcement. It extends to a much wider range of civil claims and rights and to criminal matters. The adage that justice delayed is justice denied applies both to individual and enterprises awaiting legal determination of civil suits and to individuals awaiting determination of criminal cases. There is evidence that the passage of time may affect the ultimate outcome, frequently through the unavailability of witnesses. Delays can undermine the quality of justice and reduce confidence in a crucial component of the governance system.

When a business closes in LAC, the odds do not favour substantial recovery of capital. In 19 of the 24 countries detailed, less than 40 cents in the dollar is recovered. This is likely to be an additional disincentive to business start-ups.

Even the payment of taxes turns out to be administratively inefficient in LAC compared with the benchmark countries. Of the 30 countries, 20 are required to make more than 33 payments per year, compared with 7-33 in the benchmark countries. In LAC, paying taxes took up more than 200 hours of company time yearly in 22 countries, with countries like Brazil, Bolivia and Venezuela taking more than 800 hours. In the benchmark countries, the time required to pay taxes varied between 105-128 hours, with the striking exception of the USA at 325 hours. Evidently, it is more difficult and more costly to be tax compliant in LAC.

III. CONCLUSIONS

The implications of these findings are essentially that administrative requirements and processes as well as legal administration and regulation are major impediments to private sector growth and development. It would not be stretching logic to infer that small and medium-sized enterprises would be particularly handicapped because they do not have easy access to financial resources and lack the network of contacts that larger enterprises can use to overcome administrative obstacles. The laudatory stated intentions of governments with respect to promoting the private sector as an instrumentality of economic growth and development are severely compromised by bureaucratic process inefficiencies and by costly regulation and pricing of public administration services, including legal administration. Substantive public administration reform focused on these aspects of governance would result in closer correlation between governance and private sector interests. They would also be consistent with the promotion of the public interest, if only because the public ultimately pays the price in terms of reduced economic opportunities, more costly provision of goods and services and regulatory non-compliance.

References

Anthony Giddens: The Third Way, The Renewal of Social Democracy: Oxford, Blackwell Publishers Ltd., 1998

APPENDIX 1

TABLE 1: DOING BUSINESS: BENCHMARK COUNTRIES

	Canada	USA	France	Germany	UK
Starting a Business					
No. of procedures	2	9	7	9	6
No. of days taken	3	24	8	24	18
Cost as % per capita income	0.9	5.1	1.1	5.1	0.7
Dealing with Licences					
No. of procedures	15	18	10	17	19
No. of days taken	77	69	155	137	115
Cost as % per capita income	117.9	16	75.0	71.7	68.9
Registering Property					
No. of procedures	6	4	9	4	2
No. of days taken	10	12	183	40	21
Cost as % property value	1.7	0.5	6.8	4.5	4.1
Enforcing Contracts					
No. of procedures	17	17	21	30	19
No. of days taken	346	300	331	394	229
Costs as % claim value	12.0	7.7	11.8	10.5	16.8
Closing a Business					
No. of years	0.8	1.5	1.9	1.2	1.0
Recovery rate (costs per $)	89.3	77.0	48.0	53.1	85.2
Paying Taxes					
No. of payments per year	10	10	33	32	33
Hours taken per year	119	325	128	105	105
Strength of Legal Rights Index	7	7	5	5	10
Employment					
Employment Rigidity Index	4	0	56	34	14
Firing Costs (weeks per pay	28	0	32	69	22

APPENDIX 2

TABLE 2: DOING BUSINESS IN LATIN AMERICA AND THE CARIBBEAN: REGISTERING PROPERTY

Procedures		Days for Completion		Costs	
No. of Procedures	No. of Countries	No. of Days	No. of Countries	% of Property Value	No. of Countries
0-5	10	0 - 50	18	0-2	5
6-10	19	51- 100	7	3-5	12
11+	1 30	101-150	2	6-10	8
		151-200	2	11-15	5
		201-300	0		
		301+	1 30		

TABLE 3: ENFORCING CONTRACTS

Procedures		Days for Completion	
No. of Procedures	No. of Countries	No. of Days	No. of Countries
0-10	0	100-200	0
11-20	2	201-300	2
21-30	3	301-400	2
31-40	11	401-500	9
41-50	10	501-600	4
50+	4	601-700	8
		701 + (892-1459)	5

APPENDIX 4

TABLE 4: DOING BUSINESS IN LATIN AMERICA AND THE CARIBBEAN: STARTING A BUSINESS

Procedures		**Days for Completion**		**Costs**	
No. of Procedures	No. of Countries	No. of Days	No. of Countries	% Per Capita Income	No. of Countries
4-9	12	0-20	4	0 - 10	4
10	4	21- 50	15	11 - 25	6
11-15	9	51-100	6	26 - 50	10
16-20	3	101-200	2	51 - 75	3
	28	201+	2	76 - 100	2
			29	101 - 150	4
				151 - 200	1
					30

TABLE 5: DOING BUSINESS IN LATIN AMERICA AND THE CARIBBEAN DEALING WITH CONSTRUCTION LICENSES

Days for Completion		**Procedures**		**Costs**	
No. of Days	No. of Countries	No. of Procedures	No. of Countries	% Per Capita Income	No. of Countries
0-100	3	0-10	2	0 - 30	4
101-150	8	11- 20	24	31 - 100	8
151-200	9	21- 30	4	101 - 200	8
201-250	3		30	201 - 300	2
251-300	4			301+	8
300+	3				30
	30				

APPENDIX 5

TABLE 6: DOING BUSINESS IN LATIN AMERICA AND THE CARIBBEAN
CLOSING A BUSINESS

Time Taken		**Recovery Rate**	
Years	No. of Countries	Cents per $	No. of Countries
0-1	3	0- 10	4
2-3	13	11- 20	6
4-5	6	21- 30	3
6-7	2	31- 40	6
8-9	1	41- 50	2
	25	51- 60	1
		61- 70	3
			25

STRENGTHS OF LEGAL RIGHTS INDEX

Index	No. of Countries
0-4	18
5-7	12
8-10	0
	30

A DISCOURSE ON DEBT AND ECONOMIC GROWTH IN THE CARIBBEAN COMMUNITY

Presentation by

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at the

Conference on

Economic Growth and Transformation – Reassessing Challenges and Prospects at the Dawn of the 21st Century

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A Discourse on Debt and Economic Growth in the Caribbean Community

I. INTRODUCTION

I am a Macroeconomist of sorts. It has been said that "God put Macroeconomists on earth not to propose and test elegant theories but to solve practical problems. The problems, moreover, which he gave us were not modest in dimension" (Mankiw 2006). Public debt is one such problem.

The management of public debt has become a front burner issue again in the Caribbean Community although not generating the same degree of wide spread public interest as the debt crises of the 1970s and 1980s did. Social governance issues such as crime and security weigh more heavily on the minds of residents.

Among the international donor community, international financial institutions (IFIs) and regional development banks, the main concerns expressed in public are about debt sustainability and fiscal discipline. The belief is that public debt has reached unsustainable levels, resulting in fiscal crises with potentially harmful effects on economic growth. Hardly any attention has been paid to the related issue of the contribution that debt accumulation might make to economic growth.

In this presentation, I engage in a discourse on not only the debt sustainability issue but also on economic growth effects during the stage of debt accumulation.

II. THE CONTEMPORARY DEBT SITUATION

"The Caribbean countries are among the most indebted emerging market countries in the world …….. In general, public debt-to-GDP ratios over 50 to 60 percent are considered high". (Ratna Sahay 2006, page 29).

Data substantiate this compelling observation by Sahay. Ratios of public debt to GDP in 2004 exceed 50 percent in 10 of 12 cases, going beyond 100 percent in six cases. (Details are in Table 1). External debt is a large component of the public debt, and ratios of external debt to GDP tell the same story of high levels of indebtedness. In 2004, most countries fell within a range of 54 percent to 82 percent, and one was as high as 137 percent Only four of the twelve countries were below 50 percent, i.e. Bahamas at 10 percent, Trinidad and Tobago at 13 percent, Barbados at 24 percent, and St. Lucia at 43 percent.

The level of indebtedness had increased remarkably between 1997 and 2004. Only seven countries including Guyana, Jamaica and Antigua and Barbuda were in the heavily public indebted range in 1997. By 2004, Belize, Grenada, St. Lucia and St. Vincent and the Grenadines had joined them, while Trinidad and Tobago had dropped out. With respect to the external debt ratio, only two countries were in the heavily indebted range in 1997 compared with eight in 2004.

Sahay and others attribute this episode of debt expansion to rising interest costs, higher public investments and larger non-interest current expenditures. Interest costs rose partly in line with movement of world interest rates. Even though many of the countries do not have easy direct access to the international private capital market, the IFIs and regional development banks from which they obtain much of their loan resources adjust their own loan rates of interest to the movements of international capital market rates. However, the stronger explanation for the rise in interest costs is the greater recourse of governments to higher price but less conditional and faster disbursed commercial credit from commercial banks operating within the Caribbean. In most of these cases, the countries substituted commercial credit for IFI and regional bank credit in their debt portfolios, consequently raising the average cost of funds to themselves.

Increases in public investment expenditures and non-interest current expenditures were part of the adjustment policies adopted by some governments to deal with external trade shocks, such as loss of agricultural trade preferences and short term contraction of tourism demand caused by the terrorist attack on the US in September 2001. A further influence is the repetitive occurrence of tropical storms which depleted capital stock (thereby necessitating replacement expenditures) and engendered income and consumption shocks. In some respects, government expenditures have accommodated the inadequacy of household risk management capacity, reducing the volatility of household incomes and consumption. One should not underestimate the welfare value of this aspect of government policy. Auffret (2003) reparts that the volatility of per capita consumption in the Caribbean with a standard deviation of 8.56 is highest in the world.

III. THE CONTRIBUTIONS OF DEBT TO ECONOMIC GROWTH

Debt accumulation has been variously motivated. As noted previously, the motives include countering the effects of external economic shocks and natural hazard events. They also include the desire to maintain or increase the level of public consumption in situations of fiscal revenue inadequacy. Another reason is to speed up economic growth and development. The various uses to which debt proceeds may be allocated are sometimes complementary; at other times, they are not.

One channel through which debt accumulation may have aided Caribbean economic growth is by increasing the capital stock per worker. One can employ a Solow-type economic growth model such as the one developed by Milbourne (1991).

Output per worker (y_t) is determined by the production function:

(1) $y_t = a_t f(k_t)$

where **a** is the technical knowledge parameter and **k** is capital stock per worker. The condition for capital use optimization, i.e marginal productivity of capital equals marginal cost of capital is given by:

(2) $a_t f_k(k_t) = r + w$

where $f_k > 0$, r is the real interest rate and **w** is the rate of depreciation. Capital stock grows according to

(3) $k_{t+1} = k_t + i_t - (w + n) k_t$

where n is the population growth rate.
Aggregate demand must equal supply. Therefore,

(4) $y_t = c_t + i_t + g_t + x_t$

where **c** is consumption, **i** is investment expenditures, **g** is government current expenditures and x is net exports.
In an open economy, net foreign asset accumulation could be represented by

(5) $d_{t+1} = d_t + (r? - n)d_t + x_t$

where r? signifies constancy of the real rate of interest and d is greater or less than zero depending on whether the economy is a net lender or borrower.
With simplifying assumptions, the relationship between the savings – investment gap and the steady state level of net foreign assets is:

(6) $d^* = (s^* - i^*) /- (r? - n)$

In the closed economy $d^* = 0$ and $s^* = i^*$. In the open economy net debt ($d^* < 0$) allows a country to increase capital per worker to a higher steady state level as Figure 1 illustrates.

The closed economy steady state is given at $k=k^c$. Required savings (represented by the savings function, s) equals required investment (n+w)k. In the open economy case, domestic savings can be augmented by foreign savings (the savings function is a composite of domestic and foreign savings). If foreign savings are positive, i.e. gross inflows exceed debt service payments, capital stock per head increases from k^c to k^*.

In endogenous growth models of the Lucas-Romer-Barro type, capital stock augmentation would include human capital through public investment in education and training and would include the effect of technical change embodied in new capital goods.

Any reasonable intertemporal utility maximizing model of government debt would predict some allocation (diversion) of debt proceeds to current consumption (Rahaman, 1967). Furthermore, in the conditioning political economy context of competitive party politics, there are strong pressures for contra-cyclical public expenditures, replacement of storm-damaged capital stock and relief from consumption losses associated with natural hazard events. It is not surprising that investment additionality is substantially less than debt accumulation.

There is considerable international evidence to support conjectures that whatever public investment has taken place is likely to have some positive effects on growth and productivity.

Aschauer (1989) presented evidence of strong influence of public capital creation on output and productivity. Kamps (2004) established an average elasticity of output to public investment of 0.12. Khan and Kumar (1997) in a pooled time-series cross-section study of 95 developing countries concluded that, although private investment expenditures have a more substantial effect, public investment expenditures do have positive and significant effects on economic growth. Roache (2007) in a study of ECCU countries estimated long run growth elasticities between 0.06 and 0.08 and marginal productivity of public investment in the order of 0.54 to 0.76.

A problem in some Caribbean countries has been the temptation to take advantage of purpose-unconstrained commercial credit to implement public investment projects of question-able economic growth impact. This has reduced the overall quality of public investment and reduced the economic growth contribution of public debt.

Government foreign debt can also influence economic growth via its effects on domestic savings behaviour. Critical parameters are government propensity to consume debt proceeds, government propensity to consume tax revenues, the tax-GNP ratio, the private consumption-disposable income ratio, and the incremental capital output ratio. (Dacy 1975; Bourne 1981). In the case of Jamaica 1970-1978, government foreign debt exerted substantial fiscal drag on private savings (20-30 percent) and on government savings. Given that tax ratios are not much lower now than in that period, that government consumption of tax revenues has remained high as has private consumption ratios, and that ICORs do not seem to have fallen substantially in the Caribbean, it would be surprising if the recent period of debt expansion has not resulted in fiscal drag on domestic savings, thereby offsetting some of the positive impact of external debt on national savings and capital formation.

One also has to take account of debt service payments which are competitive with the use of foreign exchange earnings for imports of capital, intermediate and consumption goods and with the use of fiscal revenues for other purposes. In 2004, debt service absorbed substantial proportions (11 % – 22 %) of export earnings in five of 12 CARICOM countries and as much as 51 % in Belize.

IV. DEBT SUSTAINABILITY

Debt sustainability analysis is a newer version of the older concern with debt capacity. Earlier approaches to debt capacity focused on required debt service payments relative to the government's capacity to pay as measured by fiscal revenues and foreign exchange reserves or earnings. Reference has already been made to the substantial call on foreign exchange earnings presently made by debt service commitments. Details are available in Table 2. The proportionate claims made on government current revenues are larger. In 2004, the proportion varied between 17 percent and 30 per-cent in eight of twelve countries and was 76 percent in one country. In many countries, there was a sharp deterioration in debt servicing capacity (conventionally measured) between 1997 and 2004.

The 'modern' version of debt capacity analysis posits the question of what is the primary surplus (defined as non-interest fiscal surpluses) as a percent of GDP that is required to maintain a constant debt to GDP ratio. If that primary surplus is infeasible, the level of public debt is unsustainable. Analytically, debt sustainability analysis is firmly rooted in the intertemporal budget constraint on government's fiscal activities. The budget constraint requires the primary surplus over time to be no less than the initial debt stock. Drawing on Easterly (2001)

$$(7) \qquad \int_0^8 e^{-rt} (T_t + A_t - G_t)\, d_t = D_o$$

where T is tax revenues,
A is Net debt inflows,
G is government expenditures,
D is public debt stock,
and r is the discount rate

The steady state condition for its satisfaction is that the primary surplus as a percent of GDP (call it p) divided by the discount rate (r) minus the economic growth rate (g) be equal to the initial ratio of debt to GDP, i.e.

$$(8) \qquad p/(r-g) = D_o/Y_o$$

In accounting terms,

$$(9) \qquad (T_t + A_t - G_t)) \ /Y_t = (r-g)\, D_t / Y_t$$

is the debt sustainability condition for a given debt ratio.
The required primary surplus varies positively with the discount rate (the average loan rate of interest in practical terms) and negatively with the economic growth rate.

As previously remarked, interest rates rose in the period 1997-2004. Furthermore, economic growth rates decreased in several instances (See Table 3). The outcome of these two trends is that required primary surpluses increased thereby creating additional fiscal pressures to which governments have been unable to respond effectively by either raising fiscal revenues or reducing expenditures. In three instances (Dominica, Grenada and Guyana) the contraction of economic growth has been sufficiently precipitate to create acute problems of insolvency.

In Belize, the difficulty lies not in the economic growth rate which remained buoyant but in fiscal incapacity to generate the requisite primary surplus once external creditors had suspended debt inflows. (This fiscal incapacity is largely as a result of a narrow effective tax base and expenditure rigidity).

Unsustainable public debts can have negative effects on economic growth. If governments cannot readily lower consumption to make room for debt service payments, but instead resort to domestic borrowing there could be a liquidity squeeze on private sector investment. If there is a contraction of public sector investment expenditures, then overall capital formation is slowed.

In most countries, liquidity in the banking sector and among non-bank financial intermediaries is very high, reflecting the mismatch of lending preferences which militate against long term financing of private investment and the demand for that kind of loan. It would be difficult in such circumstances to conclude that public debt crowds out private debt for investment purposes.

Expectations of higher future taxes to service high levels of debt as well as uncertainty stemming from distortionary taxes and overall economic deterioration are more likely to be disincentives for private investment. A country for this reason can thus find itself in a debt trap situation of high debt and decelerating economic growth.

Especially if the debt unsustainability situation is the result of adverse external economic shocks, including natural disasters, adjustment policies which threaten economic growth or otherwise derail economic growth policies are not an appropriate response. The appropriate line of adjustment is debt relief through restructurings and write-offs. In such arrangements, avoidance of moral hazard necessitates conditionalities which ensure reform of fiscal revenue systems and administration, public expenditure policy and debt management. This is the course of action taken by IFIs and the regional development banks in respect of Dominica, Grenada, Belize and St. Kitts and Nevis. Dominica appears to be an emerging success. The jury is out on Grenada. Belize and St. Kitts and Nevis are at the starting point and cannot be judged as yet.

V. TOWARDS A CONCLUSION

The preceding discourse points in the direction of the following conclusions.

1. Public debt can make significant positive contributions to economic growth.

2. The positive growth impact is greater, the better the quality of public investment, the greater the complementary of public investment and private investment, and the smaller are the negative effects on domestic savings.

3. The perceived benefits of the substitution of high interest, low conditionality private commercial debt for low interest, high conditionality official debt might be illusionary.

4. Debt management to ensure an appropriate balance between debt accumulation and debt servicing capacity is critical. Debt unsustainability, while sometimes due to exogenous shocks, can nonetheless retard economic growth, with the risk of cumulative downward spirals.

5. Debt management entails attention not only to the terms of debt but to domestic macroeconomic variables such as fiscal revenue capacity, current expenditures and the economic growth rate.

6. If there are situations of debt unsustainability and crisis, debt relief is the policy response more consistent with the pursuit of economic growth.

TABLE 1: DEBT AS % OF GDP

Country	Total Public Debt as % GDP		External Debt as % GDP	
	1997	2004	1997	2004
Antigua & Barbuda	102	99	60	64
Bahamas	47	46	9	10
Barbados	67	86	16	24
Belize	43	102	34	74
Dominica	62	115	35	73
Grenada	41	129	30	77
Guyana	211	166	204	137
Jamaica	103	139	44	58
St. Kitts & Nevis	86	179	39	82
St. Lucia	35	70	22	43
St. Vincent & the Grenadines	48	79	44	54
Trinidad & Tobago	52	45	27	13

Source: Sahay (2006); CDB (2007)

TABLE 2: DEBT SERVICE RATIOS – 1997 AND 2004

Country	1997		2004	
	% XGS	% CR	% XGS	% CR
Antigua and Barbuda	2.7	9.8	9.4	28.7
The Bahamas	5.2	12.5	3.4	9.9
Barbados	5.6	9.6	5.5	8.8
Belize	9.0	21.4	50.9	76.3
Dominica	6.7	14.3	11.4	17.0
Grenada	6.0	11.0	11.3	19.8
Guyana	10.5	53.9	7.7	20.2
Jamaica	15.3	28.5	20.4	30.0
St. Kitts and Nevis	4.7	8.1	22.0	28.5
St. Lucia	3.5	8.8	7.8	18.1
St. Vincent and the Grenadines	3.5	8.8	11.5	17.6
Trinidad and Tobago	15.4	32.5	4.6	10.3

XGS - Exports of Goods and Services
CR - Government Current Revenues
Debt Service - Interest and Amortization Payments

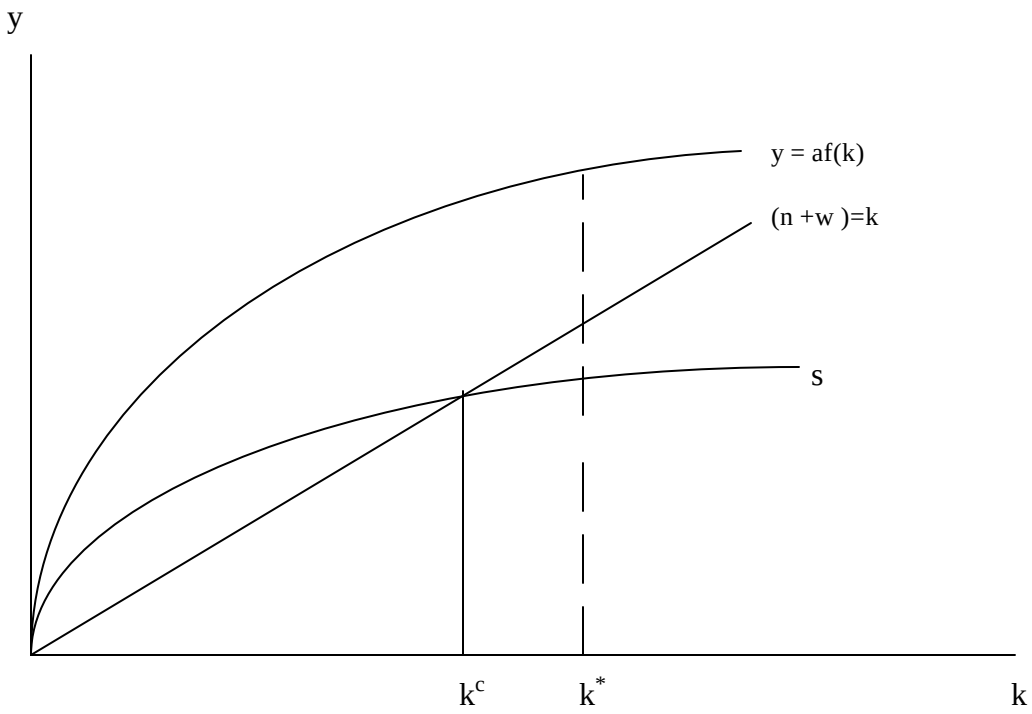
Source: CDB (2007)

TABLE 3. : ANNUAL GROWTH RATE OF REAL GDP
(%)

Country	Year	
	1990-1997	**1998-2004**
Antigua and Barbuda	3.0	3.8
The Bahamas	0.9	2.8
Barbados	3.4	1.8
Belize	5.7	6.9
Dominica	2.7	0.1
Grenada	2.8	3.1
Guyana	5.9	0.6
Jamaica	1.0	1.2
St. Kitts and Nevis	4.5	2.5
St. Lucia	2.3	1.4
St. Vincent and the Grenadines	3.3	3.2
Trinidad and Tobago	2.0	7.1

Source: Sahay (2006), except for Barbados 1990-1997 which is calculated from CDB data

FIGURE 1: EFFECTS OF DEBT ON ECONOMIC GROWTH



References

1. Auffret, Philippw (2003): "High Consumption Volatility: The Impact of Natural Disasters?" Policy Research Working Paper 2962, World Bank, January 2003.

2. Aschauer, D. (1989) : "Is Public Expenditure Productive?" Journal of Monetary Economics 23, 177-200.

3. Barro, R.J., N.G. Mankin and X. Sala – I - Mantin (1995): Capital Mobility and Neoclassical Models of Growth" – American Economic Review, 85, 103-115.

4. Bourne, C. (1981): " Government Foreign Borrowing and Economic Growth: The case of Jamaica" Social and Economic Studies 30, 4: 52-74.

5. Claessers, Stign and Ishac Diwan (1989): Liquidity, Debt Relief and Condition-ality" 213-225 in Ishrat Husain and Ishac Diwan (eds) Dealing with the Debt Crisis (World Bank, Washington, DC.).

6. Dacy, Douglas (1975): "Foreign Aid, Government Consumption, Savings and Growth in Less Developed Countries" Economic Journal 85: 548-561.

7. Easterly, William R. (2001): "Growth Implosions and Debt Explosions: Do Growth Slowdowns Cause Public Debt Crisis?" Contributions to Macro-economics Vol. 1, Issue 1, 1-23

8. Kamps, Christophe (2004): The Dynamic Macroeconomic Effects of Public Capital – Theory And Evidence for OECD Countries. (Berlin, Springer – Verlag).

9. Khan, Moshin S. and Manmohan S. Kumar (1997): "Public and Private Investment and the Growth Process in Developing Countries", Oxford Bulletin of Economics and Statistics 59, 1, 69-88.

10. Lucas, R.E. (1988): "On the Mechanics of Economic Development" Journal of Monetary Economics, 22, 3, 42.

11. N. Gregory Mankiw (2006): "The Macroeconomist as Scientist and Engineer" Journal of Economic Perspectives

12. Milbourne, Ross (1977): "Growth, Capital Accumulation and Foreign Debt", Economica 64, 1-13.

13. Rahaman, M.A. (1967): "The Welfare Economics of Foreign Aid", Pakistan Development Review, Vol. 7, No. 2.

14. Roache, Shaun K. (2007): "Public Investment and Growth in the Eastern Caribbean" IMF Working Paper WP/07/124.

15. Romer, P. (1986): "Increasing Returns and Long Run Growth" Journal of Political Economy 94, 1002-37.

16. Sahay, Ratna (2006): "Stabilization, Debt and Fiscal Policy in the Caribbean" 17-57 in Ratna Sahay, David O. Robinson and Paul Cashin (eds) The Caribbean: From Vulnerability to Growth (International Monetary Fund).

NATURE AND THE ECONOMY: ADDRESSING THE DELICATE BALANCE

Presentation by

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at a

CONFERENCE ON THE ENVIRONMENT:
"FOSTERING A GREEN CULTURE"

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(Revised Version)

I. INTRODUCTION: THE ECONOMY-ENVIRONMENT SYMBIOSIS

Currently growing at an average annual rate of 4%, Caribbean countries must considerably increase their economic growth rates in order to ensure economic capacity to provide significantly improved levels of living. Not only must they raise their economic growth trajectories, they must also sustain them.

Sustained economic growth does not result only from the interplay of conventional economic factors of production such as labour, manufactured capital and technology. It is very much dependent on the natural environment. For Caribbean countries, hurricanes and tropical storms of lesser intensity are too frequent reminders of the vulnerability of economic growth to environmental changes.

The Brundtland Commission on Environment and Development: Our Common Future emphasizes the inseparability of "development" and "environment": "The 'environment' is where we live; and 'development' is what we all do in attempting to improve our lot within that abode. The two are inseparable." (Brundtland Commission, 1987).

This inseparability has not been interpreted in the past as a call for environmental sustainability, i.e., maintenance and protection of the environment. More typically, it has been treated as the justification for exploitation and management of environmental resources for accelerated economic growth. The harvesting of forests, the damming of rivers, the mining of minerals are ready examples of natural resource exploitation and management with economic growth objectives.

Now, however, it is widely recognised at the global level that the nature and pace of economic growth can have major detrimental effects on the environment and on the sustainability of economic growth. According to Clive Hamilton, "economic growth is insistently propelling the process of environmental decline" (Hamilton 2004, page 177). Lester Brown, (2001, page 4) warns that the "trends of an increasingly stressed relationship between the economy and the earth's eco-system are taking a growing economic toll (and) that at some point in time, this could overwhelm the worldwide forces of progress, leading to economic decline."

These observations about the relationship between economic growth trends and patterns and the environment are valid. However, it is very important to also realise that the absence of economic growth, especially manifested in extreme poverty, is itself a contributory factor to environmental degradation. The rural poor without access to affordable alternative sources of energy are more likely to harvest trees for firewood and charcoal without considerations of deforestation and soil erosion. The poor in urban and rural areas are more likely to pollute water courses and soils by inappropriate sanitary practices. Biological species conservation through observance of hunting regulations is not likely to be a more compelling objective than the satisfaction of hunger. Economic growth if it alleviates poverty can create socio-economic conditions more favourable to good environmental practices within communities and provide the scope for a more positive symbiosis at the national level.

II. A CARIBBEAN ENVIRONMENTAL SCORECARD

It is appropriate within this context to consider the environmental status of the Caribbean. The United Nations Global Environment Outlook 4 (UNGEO-4, 2007) and the United Nations Economic Commission for Latin America and the Caribbean - The Sustainability of Development in Latin America and the Caribbean (UNECLAC 2001) provide excellent overviews of the situation. Although much of the material deals with Latin America and the Caribbean as a region, it is possible to comment on the Caribbean specifically in several important instances.

Forestry

Latin America and the Caribbean has the greatest plant cover and biodiversity and the largest area of closed forests in the world. (UNECLAC 2001). These forests provide extremely important environmental services such as habitat for many valuable species, production and regulation of freshwater and absorption of carbon dioxide (CO_2) .

However, it is the region with the most severe loss of forest cover. UNGEO-4 (2007) reports that 60% global loss between 2000-2005 took place in Latin America even though the region contains only 23% of the world's forest cover. There has also been deforestation in the Caribbean. Jamaica's average annual rate of deforestation between 1990 and 1995 was 7.2% which was the second highest in the world (UNECLAC 2001). The average annual rate of deforestation in St. Lucia was 3.6%. In Haiti, which lost 98% of its original forest cover a long time ago, the average annual rate of deforestation in 1990-1995 was 3.4%. The Bahamas had an average annual rate of 2.6%. Overall, the average annual rate of deforestation slowed in the Caribbean between 1990-1995 compared with 1981-1990, but in the cases of the Bahamas and Jamaica, it did not.

Deforestation has several possible consequences:

(i) there is likely to be a reduction in the quantity and quality of water resources;
(ii) there could be soil erosion;
(iii) there can be sedimentation of water bodies;
(iv) biodiversity could be degraded or even lost; and
(v) the ability of countries to absorb greenhouse gas emissions would be reduced.

Given the fragility of Caribbean ecosystems, these environmental risks should be taken seriously.

Marine and Coastal Systems

The Latin America and Caribbean region has seven highly productive zones ("upwelling zones") located along 64,000 kilometres of coastline and its 16 million square kilometres (km^2) of maritime territory, (UNECLAC 2001). In addition, the mouths of the rivers, notably the Amazon and the Orinoco, form other productive areas. It is estimated that 70% of the species in the system of deltas, lagoons and creeks formed by the rivers are of commercial importance (UNECLAC 2001). Mangrove forests are important parts of the coastal system. They occupy between 40,000 and 60,000 km^2 in Latin America and the Caribbean. Their value do not derive solely from their production and sustenance of many species. Mangrove forests provide other critical environmental services:

(i) their vegetation protect the coasts from ocean tidal erosion;
(ii) they absorb nutrients deposited by rivers, thereby reducing eutrophication in coastal waters; and
(iii) they restrict the flow of seawater upwards into the river systems and inland water sources. This is especially important for countries below sea level.

In these two latter services, mangrove forest could be viewed as intermediating between fresh water and seawater.

The most important coastal and marine ecosystems in the Caribbean are the coral reefs (UNECLAC 2001). The Meso-American Caribbean Reef along the coasts of Mexico, Belize, Guatemala and Honduras extends more than 700 km^2 and is the second largest barrier reef globally. The reefs are highly significant for economic activity and biodiversity. UNECLAC (2001) adjudges that although the Caribbean's coastal and marine ecosystems are in a good state of conservation, 60% of the coral reefs are

endangered. UNGEO-4 (2007) reports that an estimated 71% of Caribbean coral reefs are endangered by sediment, marine and land-based sources of pollution and over-fishing.

Pollution of coastal waters is severe. Between 80%-90% of wastewater is discharged into the marine waters of the Caribbean without treatment. The consequence of this is anoxia and eutrophication, both of which harm marine life. Many of the activities that pollute the coastal and marine systems occur very far from the coast.

There are also dangers emanating from climate change. Sea level temperatures have risen significantly as a component of global warming. It has been reported for example, that at 30 metres below sea level, the temperature off the coast of Barbados is 31^{o} C (Leslie 2007). Generally, the warming of the ocean directly affects marine plant and animal communities, altering fish species distribution and stock abundance (UNGEO-4, 2007). "In the tropics, unusually high sea surface water temperatures are becoming increasingly frequent, causing widespread coral bleaching and mortality" (UNGEO-4, 2007, page 125). Newman (2007) reported that in the US Virgin Islands, 92% of coral reefs have bleached and 50% have died. Global warming has increased the frequency and intensity of hurricanes and by so doing increased wave motions to the detriment of coral reefs (Leslie 2007). The rise of CO_2 emissions has also increased the acidity of the seas with detrimental effects on coral reefs.

Mangrove swamps have been seriously depleted in the Caribbean. UNECLAC (2001) reports that only 10% of the original area still has forest cover and that more than 25% of the mangrove swamps have been deforested.

Environmental degradation of the marine and coastal systems has reduced the productivity of these systems. In particular, fish stocks have been reduced. Furthermore, biodiversity has been adversely affected by habitat loss in the mangrove swamps and coral reefs.

Beach and Coastal Erosion

Beach and coastal erosion is another environmental problem of serious proportions. Cambers (1997) estimated that 70% of Eastern Caribbean beaches monitored had eroded. Beach erosion is evident in the South East Coast of Barbados where remedial work is in progress and in other areas of the country. Lengthy stretches of the Demerara and Berbice coasts in Guyana show signs of serious erosion due in part to the disappearance of mangrove swamps. There have also been reports of beach erosion in other Caribbean islands such as the Bahamas. Beach and coastal erosion weakens natural protective barriers against tidal changes. Furthermore, it increases vulnerability to sea level rise caused by global warming. Globally, sea levels rose by 1.8 millimetres per year between 1961 and 2003 and by 3.1 millimetres per year between 1993 and 2003.

There is clearly a steeply increasing trend for sea levels. For Caribbean islands and mainland countries with significant proportions of their coast below sea level, this trend is a major danger to population settlements, tourism facilities especially beachfront hotels and many essential economic and physical infrastructures.

Dasgupta et al (2007) engaged in a comparative analysis of the impact of sea level rise on developing countries, including Latin America and the Caribbean. They considered the cases of a 1-metre rise, a 2-metre rise, continuing on to a 5-metre rise. They estimated that the percentage of the total area impacted could vary from 0.34% in the case of a 1-metre rise to 1.24% in the case of a 5-metre rise with the urban impacted area varying from 0.61% to 3.03% of the total urban area. The percentage of the total population impacted could vary from 0.57% to 2.69%. Wetland losses could be significant, anywhere between 1.35% and 6.57% of the total wetlands area. In the Caribbean specifically, the Bahamas total area land loss could vary between 11% and 60% and Belize between 1% and 8%. The urban impact could also be quite substantial in the Bahamas (3%-35%), Guyana (10%-60%), Suriname (3%-36%), and Belize (3%-16%). Among the Caribbean countries, wetlands could be impacted most in the Bahamas (18% - 80%), Belize (30%-68%), Cuba (10%-56%), Jamaica (30%-45%), Mexico (15% - 40%), Honduras (5%-30%) and Haiti (2%-25%). However, countries like the Dominican Republic, Suriname, Nicaragua and Guyana could experience significant wetland losses i.e., between 2% and 12%.

Sanitation

Urbanisation in the Caribbean has been rapid and unplanned to a large extent. The urban population of Caribbean Community (CARICOM) countries at 7.7 million persons comprised 64% of total population in 2005 and is expected to reach 71% or 10.5 million persons in 2020. Informal housing settlements have been a concomitant of the rapid urbanisation. The provision of sanitation services has not kept pace with the growing urban population. The World Health Organisation reports in 2004 in 4 of the 14 CARICOM countries, 11%-29% of the urban population did not have access to improved sanitation, with the proportion being as high as 43% in Haiti.

Policy and Approaches

"The challenge for our generation is to reverse these (negative environmental) trends before environmental decline leads to long-term economic decline, as it did for so many earlier civilisations" (Brown 2001, page 4).

The above statement would have potency if it induces an orientation of policy and approaches, which reflect a strong positive view of environmental protection and economic growth. There are several facets of an appropriate policy orientation, which come to mind.

First, it is necessary to pay explicit attention to natural capital in the economic growth process. Orthodox economic approaches place predominant emphasis on human capital and manufactured capital (Barro 1984). It should be recognised that environmental resources are assets, which when properly used, can generate streams of current and future incomes. The sustainable use of natural ecosystems such as forests and tropical reefs can be a source of livelihoods reconciling the conflict often presumed between economic gains and environmental conservation. Eco-tourism, as an industry based on forest and marine resources, is another example of how economic growth can be generated by natural capital. Within the conventional beach tourism and recreation industry, beaches must be considered to be natural capital, the quality of which is instrumental to tourism demand, domestic demand for beach amenities and the values of beachfront properties. These are just a few examples of how the environment as natural capital can be incorporated into the explanation or determination of economic growth.

Second, environmental degradation, resulting in pollution and natural hazards, imposes economic costs through deterioration in public health and loss of human life. Both of these effects reduce the quantity and quality of human capital. There can also be loss of manufactured capital or unintended, prolonged downtimes in the use of installed capacity in the aftermath of floods and hurricanes. Furthermore, agriculture and fisheries production can be compromised by soil degradation, water pollution and habitat loss. The effects of climate change on sea level temperatures, sea level rise, acidity in marine waters, and on wave action can also impact negatively on the productivity of coastal fisheries and inland farms. It is worth noting that Dasgupta et al (2007) identified non-trivial losses of agricultural land occasioned by hypothetical sea level rises of between 1 metre and 5 metres in Latin America and the Caribbean, especially in the Bahamas, Suriname, Jamaica, Guyana and Belize. Just as deterioration in human capital and manufactured capital compromises economic growth, so can environmental degradation.

A third facet of an appropriate orientation of environmental policy is realisation that pursuit of environmental objectives can create new economic opportunities. Hamilton (2004) points to the economic advantages in Germany derived from its early promotion of environmental goals. Eco-tourism is another case of how an industry can be developed on the basis of conservation of biodiversity. For example, Costa Rica has established a very successful tourism industry around its policy of conserving and propagating its tropical forests, fauna and butterfly species. It can be expected as well that as countries attempt to develop alternatives to fossil fuels as part of their environmental programmes, industries integral to those alternative energy sources would emerge and develop. The nascent solar energy industry in Barbados which at present targets household water heating is yet another case of emerging economic opportunities that can be stimulated by environmental concerns.

The overarching significance of the two points made earlier about the environment's positive contributions to economic growth and the point about the negative economic effects of environmental degradation is that unless the economic growth accounting is complete, there is a strong likelihood of over-emphasizing the costs of environmental protection to economic growth and arriving at negative sum outcomes whereas full accounting may lead to positive sum outcomes. The absence of full economic accounting could well lead to failure to pursue environmental goals where they should be pursued.

Environmental Management

An activist approach to environmental management by governments and communities is highly desirable. The agenda for action might be quite extensive but should include the following:

(a) forestry conservation and reforestation;
(b) biodiversity conservation and species propagation;
(c) management of the use of mangrove swamps;
(d) solid and liquid waste management; and
(e) urban and rural planning.

In relation to forestry, certification of timber can be a useful component in the management of forests as in the case of the Guyana Iwokrama protected area. Communities can be involved in reforestation programmes as has been done on a volunteer basis in Belize. Among the more important initiatives for biodiversity conservation is the creation of protected areas in which there is controlled usage of environmental resources, protection of species and opportunity for regeneration. UNGEO-4 (2007) reports that areas under protection of terrestrial biodiversity doubled between 1985 and 2006 and now cover about 10.5% of total territory. Valuable new initiatives are the Meso-America Biological Corridor that extends from southern Mexico to Panama, and the Brazilian pilot project to conserve the Amazon rain forest. Guyana took an early start in 1989 by allocating 1 million acres (371,000 hectares) of tropical forest to an experiment in global biodiversity. The Iwokrama Project in Guyana provides a protected habitat for at least 200 mammals, 420 fish species, 150 species of amphibian and reptiles and more than 500 species of birds. The Asa Wright Nature Centre established in 1967 in Trinidad and Tobago while not having the de jure status of a protected area, has by virtue of private 'not-for-profit' ownership succeeded in conserving an impressive biodiversity of bird specie and maintaining a stable segment of the eco-recreational industry. The Centre is located on 1500 acres of mainly forested land.

Governments can become active in the development of coral reefs through construction of artificial reefs, i.e., reefs started with physical building materials and land-based energy supplies rather than through natural accretions. This is a development in train in several countries across the globe, including the Turks and Caicos Islands in the Caribbean. Artificial coral reefs seem to be healthier, more disease resistant and live longer. Their establishment is a means of rebuilding an important form of natural capital. Reef development also helps to regenerate stocks of fish and crustaceans and to preserve and expand beaches (Goreau 2007).

Marine farming can also assist in biodiversity conservation and specie propagation. In the Cayman Islands where the meat of sea turtles is consumed, the establishment of a turtle farm has reduced predatory fishing of turtles and provided a means of growing the stock of marine turtles. This is done by allocating some of the farm's output for commercial use and releasing a proportion of live turtles into the open seas. The Turks and Caicos, similarly, has established a conch farm that is an important initiative for the sustainable use of this particular biological specie.

In the Caribbean, mangrove swamps have been minimally managed and used marginally as eco-tourism assets. The Caroni swamps in Trinidad and Tobago may be one of the strongest examples of specie conservation – the protected status of the Scarlet Ibis whose habitat is those swamps – and emergent eco-tourism, but there have been recent reports about predatory human behaviour and inadequate capacity for enforcing regulations.

Another example, although not on the same scale, and with the same length of experience, is the Graeme Hall Nature Sanctuary in Barbados.

Management of solid and liquid waste needs to be considerably strengthened. The earlier discussions in this paper pointed to the severity of the risks of pollution of inland water sources and marine waters. Creation of controlled solid waste dumps and the establishment of capacity for more distant discharge into the sea are not sufficient means of dealing with these risks. Greater attention should be paid to recycling and to on-site waste treatment especially by large commercial enterprises, including hotels in the island countries. The example of the Turks and Caicos, which now makes provision for on-site treatment and disposal of waste a condition for new commercial construction, is worthy of attention by other Caribbean countries.

Because many man-made environmental problems and risks derive from the pattern of human settlements, the quality of urban and rural planning is of critical importance to environmental sustainability. Environmental criteria and guidelines should

be integral parts of the process of physical planning *ex ante.* But since there is a backlog of already extant informal and formal human settlements for which environmental problems and risks are acute, public policy must address existing environmental imperatives by warranted investments in systems for waste disposal, water supply and soil conservation. In any of these areas, community participation in design and implementation would be valuable.

Environmental Governance

Environmental governance needs to be strengthened. By 'environmental governance' is meant the complex reporting and compliance regulations, capacity and systems for research, knowledge acquisition and public information dissemination, and enforcement of environmental regulations. UNGEO-4 (2007) is of the view that environment governance is weak, and that "biodiversity conservation and effective is "limited enforcement of environmental laws remain major challenges to the protection of biological resources." UNECLAC (2001) concludes that certification of timber extraction and controversial." Part of the reason for weak environmental governance is inadequate knowledge of the current situation and future risks, instanced, for example, by statements to the effect that beach erosion is natural and self-correcting. Another important source of the weaknesses in environmental governance is the relative paucity of human resources allocated to agencies entrusted with the functions of environmental conservation. In the Caribbean, there seems to be scope for capacity building in information and knowledge systems and in human resources, and for updating of environmental laws and regulations in the light of evolving knowledge and situations. It is interesting to note that according to anecdotal evidence, environmental sensitivity seems greater among the school age population than among their elders, and that the young transmit environmental values to their elders. If these two observations are generally valid, they are encouragement for the establishment of environmental education programmes targeted at the pre-working age population and for accelerated programmes targeted at the post-school population. In effect, one would ensure inter-generational continuity of a commitment to environmental goals and objectives.

Financing Environmental Conservation and Protection

The financing of environmental conservation and protection is a major problem area at national and global levels. Governments in developing countries, frequently experiencing fiscal difficulties in the face of many competing claims for economic growth and social improvement, are seriously challenged to find resources for what seems a more distant and less compelling objective of environmental protection and conservation. Moreover, they are situated in communities in which the needs of the present appear more urgent then the needs of the future. The issue of fiscal resource allocation is indeed a very delicate one in which the environment has tended to come out second-best.

The financing of environmental conservation and protection has been severely compromised by the "free rider" approach of individuals and corporate entities within nations and by countries within the global community. Everyone can enjoy the benefits of many environmental services, especially those of a global nature such as absorption of CO_2 emissions. Exclusion from beneficiary participation is difficult in most cases and impossible in many. Environmental services are in the nature of public goods for which user charges are impossible to levy because of non-excludability and non-rivalrous consumption. Governments as representatives of the public interest accept the financial responsibility.

However, there are doubtless significant private economic interests and considerable private economic gains derived from some environmental services. As a case in point, access to good quality beaches is of central importance to revenue in hotels and other beachfront tourism enterprises and to property values of private residences (See for example, Houston 2002, Pompe and Rinehart 1995). It would not be stretching the point to assert that beaches are the unpurchased natural capital of beachfront service providers and residential property owners. There should be interest in sharing the costs of maintaining or enhancing the value of the natural capital, i.e., beach quality, in such circumstances.

An interesting application of the "free rider" problem has recently surfaced in the global discussions on climate change. Forests provide crucial environmental services as absorbers of CO_2 emissions. The million acres of Iwokrama Rainforest in Guyana alone stores more than 150 million tons of CO_2. The entire global community is a beneficiary of these services. Global financial support for reforestation and afforestation is a clear indication of investment in forest resources for the provision of environmental services. This approach could be extended to include global financial support for conservation of existing forest resources, i.e., for the maintenance of this form of environmental capital. The call for such action has come from His Excellency Bharrat Jagdeo, President of Guyana at the Commonwealth Finance Ministers Meeting in Georgetown, Guyana on 15 October 2007 and again at the Commonwealth Heads of Government Meeting in Kampala, Uganda in November 2007. The advisability of treating comprehensively with conservation and reforestation stems from the perverse incentive to migrate deforestation activities from areas where there are rewards for ceasing deforestation to areas where there are no rewards because of the absence of deforestation. In effect, if bad behaviour is rewarded and good behaviour is not, there is a perverse incentive to behave badly.

III. CONCLUSION

Achieving balance between the environment and economic growth is no longer a choice; it is a necessity. It is an endeavour in which all must be involved: individuals of all generations; enterprises; governments; and the global community as a whole. The reconciliation of economic growth and the environment must be truly viewed as a shared responsibility.

References

1. Barro, Robert J. (1984): Macro-Economics (New York: John Wiley & Sons, 1984).

2. Brundtland Commission (1987): Our Common Future (New York: Oxford University Press, 1987)

3. Brown, Lester R. (2001): Eco-Economy (New York: W.W. Norton & Co. 2001)

4. Cambers, G. (1977): "Beach Changes in the Eastern Caribbean Islands: Hurricane Impacts and Implications for Climate Change: "Journal of Coastal Research Vol. 24, 1997: 29-47.

5. Dasgupta, Susmita et al (2007): "The Impact of Sea Level Rise on Developing Countries: A Comparative Analysis" World Bank Policy Research Paper 4136, February 2007.

6. Goreau, Thomas (2007): Coral Reefs: Coral Reefs and Climate Change, 2007 Conference on the Environment, Providenciales, Turks and Caicos Islands, 18-20 November 2007

7. Hamilton, Clive (2004): Growth - Growth Fetish (London: Pluto Press, 2004).

8. Houston, James (2002) " The Economic Value of Beaches – A 2002 Update" Shore and Beach 2002.

9. Jagdeo, Bharrat (2007): Opening Address, Commonwealth Finance Ministers Meeting, Georgetown, Guyana 15 October 2007.

10. Leslie, Kenrick (2007): Panel Presentation: Coral Reefs and Climate Change, 2007 Conference on the Environment, Providenciales, Turks and Caicos Islands, 18-20 November 2007.

11. Newman, Steve (2007) Panel Presentation: Coral Reefs and Climate Change, 2007 Conference on the Environment, Providenciales, Turks and Caicos Islands, 18-20 November 2007

12. Pompe, Jeffrey Jr. and James R. Rinehart (1999): "Establishing Fees for Beach Protection: Paying for a Public Good" Coastal Management Vol 27, 1999: 57-67

13. UNECLAC (2001): The Sustainability of Development in Latin America and the Caribbean: Challenges and Opportunity (October 2001)

14. UNEP (2000): Global Environment Outlook: Latin America and the Caribbean

15. UNEP (2007): Global Environment Outlook 4: Environment for Development

VARIETIES OF CARIBBEAN ECONOMIC GROWTH

Sir Arthur Lewis Distinguished Lecture

by

Professor Compton Bourne, PhD., O.E.
President
Caribbean Development Bank

at the

Ninth Annual Conference of the Sir Arthur Lewis Institute of Social and Economic Research
Kingston
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VARIETIES OF CARIBBEAN ECONOMIC GROWTH

PREAMBLE

I am honoured by the invitation of Professor Duncan and the Sir Arthur Lewis Institute of Social and Economic Research to deliver the Sir Arthur Lewis Distinguished Lecture at their Ninth Annual Conference. The honour is magnified and becomes a real pleasure because this Conference is a tribute to Professor Norman Girvan, a colleague and friend of longstanding who has made and continues to make major contributions to our understanding of the political economy of the Caribbean.

I first became aware of Girvan in 1967 when I was on the verge of specialising in monetary economics. I happened upon his PhD thesis in the University of London Senate House Library and found it so electrifying that I immediately started reading other material in development economics including William G. Demas' now classic Economics of Development in Small Countries published in 1965. Girvan was there when I joined the Faculty at Mona in 1971 which allowed for the start of a long intellectually satisfying relationship on my part.

I encountered Sir Arthur Lewis for the first time in 1969 or 1970 when he was Chancellor of the University of Guyana at the occasion of a Graduation Ceremony. I was in the first year of my assignment as a lecturer at the University of Guyana but took the opportunity at the end of the ceremony to engage Sir Arthur Lewis in a discussion about the development of economic theory, particularly the work of William J. Baumol who I hitherto had not known was his colleague and friend. I was surprised when the great man made himself comfortable by sitting on the floor of the platform so that we could continue the discussion. I did not speak with him again until the year following the Nobel Prize when he gave a lecture at the University of the West Indies Institute of Social and Economic Research which now bears his name. On that occasion, unwisely confident in my knowledge of the historical behaviour of terms of trade, I challenged him persistently on the basis of data recently published by John Spraos. He finally put an end to the matter by appealing to his wife, Gladys. "Gladys, you remember John Spraos. He was my student. His statistics were always bad."

The more I read Sir Arthur Lewis, the more I appreciate that he was a superb political economist, bringing insights from history, sociology, politics and education to his analyses of economic growth and development. Girvan, of course, is himself a fine political economist of different lineage from Sir Arthur. The difference in lineage would be expected to be reflected in their approaches to issues of common concern of which economic dependence is a good example but that is a subject for some other occasion.

I. INTRODUCTION

The title of my lecture is **"Varieties of Caribbean Economic Growth."** From my vantage point in the Caribbean Development Bank from which I am obliged to review the economic performance of the Bank's members in the Anglophone Caribbean I have been struck by the significant differences in economic growth over the past 20 or so years. Periodic visits to the countries reinforce the conclusion that economic welfare and economic progress have not been uniformly distributed over this subset of the Caribbean region.

When I was well advanced in the preparation of this lecture, I discovered on my bookshelves Girvan's Second Sir Arthur Lewis Memorial Lecture "Reinterpreting Caribbean Development" delivered in 1997 which pointed to the income disparities between the British dependent countries and the rest. For Girvan: "This raises some intriguing questions about traditional views on the disadvantages of colonial rule, and of small size …" (Girvan 1997, page 29). This is not the tack I take.

In this Lecture, using a Lewisian method of empirical data and economic interpretation, I attempt to depict the differences in economic status and economic growth over the 1985 – 2005 period and explore some underlying macroeconomic reasons. Particular attention is paid to savings and investment, exports, migrant remittances, fiscal performance and public debt.

II. SNAPSHOTS OF ECONOMIC STATUS: 1985 AND 2004

In 1985, the British Dependent Countries (BDCs) i.e., Anguilla, British Virgin Islands, Cayman Islands, Montserrat and Turks and Caicos Islands comprised 1% of the total population of the Anglophone Caribbean and 2% of output measured by factor cost Gross Domestic Product (GDP) (see Table 1). The newly constitutionally independent Leeward and Windward member states of the Organisation of Eastern Caribbean States i.e., Antigua and Barbuda, Dominica, Grenada, St. Kitts and Nevis, St. Lucia and St. Vincent and the Grenadines (OECS 6) with 10% of the population accounted for 5% of output. The other 6 countries, namely, the Bahamas, Barbados, Belize, Guyana, Jamaica and Trinidad and Tobago (the MDC 6), most of whom became constitutionally independent in the 1960s and early 1970s, had 89% of the total population and 93% of output. Economic fortune seemed to have favoured the constitutionally independent countries, especially if one treats Guyana as exceptional, being on the road to perdition from as early as 1970.

Within the BDCs, there was rough equivalence between population share and output share, except for the British Virgin Islands with 0.2% of population and 0.6% of GDP. The correspondence between population share and GDP share was less tight among the OECS 6: close or fairly close for Antigua and Barbuda and St. Vincent and the Grenadines, but relative output falling short of population proportions in the other 4 countries. Among the MDC 6, a more mixed picture obtained. The Bahamas, Barbados and Trinidad and Tobago had output shares which more than doubled their population shares. Belize, Guyana and Jamaica had output shares less than their population shares.

Fast forward to 2004 – a mere 20 years later. The British Dependents share of total population almost doubled to 1.8%, despite a precipitate decline in the Montserrat population from 10,000 persons in 1985 to 4,800 persons in 2004 because of repeated volcanic eruptions and loss of habitable space. Output share in the British Dependents increased greatly to 7%, mainly in the British Virgin Islands, Cayman Islands and Turks and Caicos Islands. Anguilla and Montserrat maintained an equivalence between population shares and GDP shares. The OECS 6 improved their GDP share from 5% to 7%, while their population share decreased to 9%. The increase in output shares was located principally in Antigua and Barbuda, St. Kitts and Nevis and St. Lucia, although small increases occurred in Grenada and in St. Vincent and the Grenadines. The MDC 6, whose population share remained constant in aggregate, experienced a substantial contraction in their combined GDP share from 93% to 85%, despite a substantial increase in the output share of Jamaica and small increases for Belize and the Bahamas. The decrease in output shares was pronounced in Trinidad and Tobago, Barbados and Guyana.

Another way of looking at the altered economic status of the countries is to compare absolute levels and rank orderings of per capita GDP (Table 2). In 1980, the top three countries were the Bahamas, Trinidad and Tobago and Barbados. The only two BDCs among the 14 countries were in fourth and fifth place. The middle ranked countries were Antigua and Barbuda, Belize, Jamaica and St. Lucia, i.e., two of the MDC 6 and two of the OECS 6. Four of the OECS 6, namely St. Kitts and Nevis, Grenada, Dominica and St. Vincent and the Grenadines along with Guyana were in the bottom five countries. The Bahamas, Trinidad and Tobago and Barbados had per capita GDP in current prices 3 to 5 times those of the OECS 6.

By 2005, relative positions had changed remarkably. For the 17 countries ranked, four BDCs were in the top five, i.e., Cayman Islands, British Virgin Islands, Turks and Caicos Islands and Anguilla. The Bahamas was the other country, the only MDC 6 in the top five, but it had surrendered its pole position to the Cayman Islands. Two of the MDC 6, *viz* Barbados and Trinidad and Tobago, two of the OECS 6, *viz* Antigua and Barbuda, St. Kitts and Nevis and the remaining British Dependent, Montserrat, occupied the middle ranks. The remaining three OECS 6 countries, i.e., St. Lucia, Dominica and St. Vincent and the Grenadines were in the lower range of the distribution along with two MDC 6 countries – Belize and Jamaica, but yet a considerable distance away from the lowest ranked country, Guyana. Barbados and Trinidad and Tobago which had ranked number one and number 2 in 1980 had slipped to 6th and 7th with per capita incomes approximately 60 % that of the Bahamas and Turks and Caicos Islands, 23% that of the Cayman Islands and 30% that of the British Virgin Islands. Among the OECS 6, Antigua and Barbuda and St. Kitts and Nevis had closed the per capita income gap on Barbados and Trinidad and Tobago and along with Grenada, St. Lucia, Dominica and St. Vincent and the Grenadines had surpassed Belize and Jamaica.

Rank orderings based on constant price GDP could only be done for the OECS 6 and the MDC 6 (Table 3) but these too show the diminution in the income status of Barbados, Belize and Jamaica and the rise in income status of Antigua and Barbuda, Dominica, Grenada and St. Vincent and the Grenadines.

Because of their economic progress, the BDCs by 1990 had drawn level with their Caribbean counterparts in terms of the quality of life, even surpassing many of them. The data in Table 4 pertain to three social indicators, namely the percentage of households with access to piped water (an indicator of improved water quality), flush toilets (an indicator of improved sanitation), and electricity (which facilitates reading and communication, access to electronic media, and energy saving and efficiency). It is evident that in respect of access to piped water, the three BDCs for which data are available are on par with the Bahamas, Barbados, Trinidad and Tobago among the MDCs and with St. Lucia among the OECS. Furthermore, the proportion of households with access to piped water is lower in five of the OECS 6 (namely Antigua and Barbuda, Dominica, Grenada, St. Lucia, and St. Vincent and the Grenadines) and in three of the MDC 6 (namely Belize, Guyana, and Jamaica). The proportion of households with access to improved sanitation (flush toilets) is also greater for the BDCs than it is for the OECS 6 and the MDC 6. The BDCs had proportions ranging between 70 and 90, the OECS 6 between 33 and 56, and the MDC 6 between 29 and 74. The gap between the BDCs and the other two groups of Anglophone Caribbean countries is less pronounced with respect to household access of electricity. Two of the OECS 6, i.e. Antigua and Barbuda and St. Kitts and Nevis, are in the same league as the BDCs as are three of the MDC 6, i.e. Bahamas, Barbados and Trinidad and Tobago.

There are differences in the incidence of poverty among the countries. Table 5 presents estimates of the per cent of the respective populations below the poverty line circa 1999-2006. In the three BDCs (Anguilla, British Virgin Islands, and Turks and Caicos Islands), the poverty rate is 22%-26% approximately. In the OECS, it is 29%-39%, except in Antigua and Barbuda in 2006 where it is estimated to be 18%. Among the MDCs, the poverty rate was 9% in the Bahamas, between 14%-20% in Barbados, Trinidad and Tobago and Jamaica, and between 33%-35% in Belize and Guyana. The Jamaican poverty rate has been decreasing rapidly from 24% in 1993 to 13% in 2005. On the basis of the data available, it does appear that the incidence of poverty is lower in the BDCs than it is in the MDC 6 which themselves have a lower incidence of poverty than do the OECS 6.

III. REGIONAL VARIATIONS IN ECONOMIC GROWTH

Differences in economic growth underlie the changes in relative economic status over the period 1985-2004. The mean annual growth of constant price GDP for all countries was approximately 3.8% over the period as a whole (Table 6). Growth for the group slowed in successive five yearly intervals: 5.7% in 1985-1989; 3.6% in 1990-1994; 3.1% in 1995-1999; and 2.9% in 2000-2004.

Nine countries had economic growth rates for 1985-2004 which exceeded the group average. The three fastest growing were British Dependents (Turks and Caicos, Anguilla, Cayman Islands), followed by Belize among the MDC 6 and the Bahamas. Next in order of economic growth rates were four of the OECS 6 (Antigua and Barbuda, St. Kitts and Nevis, St. Lucia and St. Vincent and the Grenadines) and the Bahamas. Slightly above the group average or below it are Guyana, Grenada, Trinidad and Tobago, Dominica, Barbados and Jamaica.

Generally the British Dependents surpassed the economic growth performance of the OECS 6 which in turn surpassed the economic growth performance of the MDC 6. This was also the case for the sub-periods, except for Belize whose economic growth rates matched those of the OECS 6 in 1985-1989 and 1995-1999 and surpassed them in 1990-1994 and 2000-2004, Guyana, which grew faster in 1990-1994 and equally as fast as the OECS 6 in 1995-1999, the Bahamas which matched the OECS growth rates in 1995-1999 and 2000-2004, and Trinidad and Tobago with the fastest growth rates in the last two sub-periods.

Economic growth in the Caribbean is highly unstable. The coefficient of variation of the annual percent change in constant price GDP for the period 1985-2004 was between 72 and 221 for the 15 countries measured (Table 7). Three of the MDC 6, i.e. Barbados, Trinidad and Tobago, and Jamaica are the most volatile. Next are two of the OECS 6, i.e. Dominica and St. Lucia followed by Guyana and Grenada. The data show that the MDC 6 generally have more unstable economic growth trajectories than the OECS 6. The British Dependents i.e. Anguilla, Cayman Islands and Turks and Caicos Islands with coefficients of variation between 60 and 94 exhibited less growth instability than the OECS 6 and the MDC 6.

The overall empirical conclusions on the economic growth experience are that the British Dependents grew faster and less unstably than both the OECS 6 and the MDC 6, and that the OECS 6 grew faster and less unstably than the MDCs over the period 1985-2004.

Consumer prices

The OECS countries are characterised by low and relatively stable rates of consumer prices inflation (Table 8). The period average annual percentage changes in consumer prices was below 4%, except for Antigua and Barbuda in 1990-1994 and St. Kitts and Nevis in 1995-1999. Consumer price inflation tended to be somewhat faster among the BDCs. It was approximately 4% per annum in Anguilla in 1990-1994 and 2000-2004, of a similar magnitude in the British Virgin Islands in 1990-1994 and 1995-1999, and 4% and 5% in 1985-1989 and 1990-1994 in the Cayman Islands.

The MDCs present a much more varied picture. Guyana and Jamaica have been the high inflation countries. Guyana had period average annual inflation rates as high as 30% in 1985-1989 and 39% in 1990-1994 before subsiding to as low as 5% in 2000-2004. Jamaica's inflation rate rose from 14% in 1985-1989 to 41% in 1990-1994 before decreasing to 9% in 2000-2004. Trinidad and Tobago with average annual inflation rates of 9% in 1985-1989 and 8% in 1990-1994 and Barbados with 10% price inflation. In contrast, the Bahamas and Belize were relatively low inflation countries during the period under review.

IV. SAVINGS AND INVESTMENT

W. Arthur Lewis attached great importance to savings and investment in the process of economic growth. Much quoted is the statement in his "The Theory of Economic Growth" that the central problem in economic development is to raise the savings and investment rate from 4% or 5% (or less) to 12% to 15% or greater). He asserted that: "This is the central problem because the central fact of economic development is rapid capital accumulation" (Lewis, 1954, page 155).

In retrospect, one should treat the 12% target savings rate as hyperbole rather than as an economic law or empirical proposition.

The Caribbean economies are typified by high ratios of investment to GDP, although much of it is financed by foreign savings. The ratio of gross fixed capital formation to GDP at market prices ranged between 25% and 40% in most countries, and was low (between 10% and 20%) only in Trinidad and Tobago (Table 9).

Moreover, the investment ratios for every country are quite stable – coefficients of variation ranging between 10 and 25 for 15 of the 16 countries measured. There is no discernible basis for differentiating the three country groupings in respect of gross investment rates. As a result, cross-country differences in economic growth rates cannot be explained by cross-country differences in the ratio of gross fixed capital formation to GDP.

The correlation between gross investment ratios and economic growth is weak in each country. A reason for the weak correlation might be that gross investment rates substantially overstate net investment rates, adding much less to the capital stock than would be predicted from the high gross investment rates. Bosworth and Collins (2003 page 126) noted that Guyana is "conspicuous for (its) small change in capital stock despite high average investment shares." Much of gross investment might be investment in inventories and replacement investment rather than capital accumulation, making up for stock of physical capital that has been depleted by wear and tear and by natural hazard events and rebuilding inventories used up in trade and commerce.

We know that most of the countries have suffered from natural hazard events some time or another during the 20-year period (Table 10). Some like Jamaica, the Bahamas, Antigua and Barbuda, Dominica, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines and the Cayman Islands have been impacted frequently by tropical storms and hurricanes. Trinidad and Tobago has been impacted frequently by floods. What is not known with sufficient precision is the magnitude of the negative effects of these events on capital stock.

Even though the weak capital stock additionality of gross investment might be a plausible explanation for the low correlation between gross investment rates and economic growth in the Caribbean, it does not seem to be a sufficient explanation. Other evidence points to longstanding problems of investment in-efficiency and poor quality of investment. In Caribbean Development to the Year 2000 (Bourne 1988), I drew attention to the fact that incremental capital output ratios in the Caribbean considerably exceeded those in high growth developing economies. The inefficiencies are present in both private investment and public investment since public investment, while substantial, accounts for only 18% to 26% of gross fixed capital formation in Barbados, Grenada and the Turks and Caicos Islands during 1985-2004 period and was between 36% to 38% in Guyana during the 1990-2004 period. It does appear that investment inefficiencies and qualitative deficiencies diminished the positive impact of gross fixed capital formation on economic growth.

V. THE PRODUCTIVITY PROBLEM

Arthur Lewis wrote incessantly on productivity as a determinant of economic growth and as a principal influence on the double factoral (income) terms of trade. Relatively recent empirical studies of economic growth, largely time series – cross sectional in their methodology, have attempted to identify and quantify the main determinants of economic growth to explain why some economies have grown rapidly while others have not, and to infer appropriate lines of action for policy makers (See for example Barro 1991, Mankiw, Romer and Weil 1992). Their conclusions lead to a de-emphasis of physical capital accumulation, even though it is still regarded as highly important, and recognition of the significance of technical change, factor productivity, and institutional factors such as governance in its many facets. Bosworth and Collins in their "The Empirics of Growth: An Update" (2006) concluded the following: " We find that 43 percent of the variation in growth of output per worker is associated with variations in physical capital per worker, compared with only 3 percent with education and 54 percent with TFP (total factor productivity). If the sample (84 countries) is weighted by population, the importance of education is increased and that of physical capital declines" (page 133). Education, they show, then accounts for 9% and physical capital for 37%.

There is mounting empirical evidence (World Bank 2005, Blavy 2006, Downes 2004, 2006) that low productivity is a widespread problem of Caribbean economies. The World Bank in "A Time to Choose (2005)" shows sharp declines in productivity gains between the 1980s and 1990s and that after adjustment for short-term cyclical fluctuations, the contribution of productivity gains to economic growth in the 1990s becomes negative in six of the eleven countries for which estimates are derived (Table 11). The World Bank's findings are supported by those of Blavy (2006) who analysed Jamaica over the longer period, 1960-2000, and by Downes (2004, 2006) who analysed Barbados and Jamaica. Downes (2004) estimated very low but non-negative total factor productivity growth in Jamaica 1991-2000. In his paper on Barbados (Downes 2006) he pointed to the trends in value-added per person employed which declined in Barbados 1985-2001, was stationary in Jamaica 1990-2000, declining in St. Lucia 1990-2000, and also falling in Trinidad and Tobago 1985-2000.

The inescapable conclusion is that Caribbean economic growth, certainly among the OECS 6 and the MDC 6, has been handicapped by low factor productivity. Faster rates of economic growth could have been achieved with the same investment effort if factor productivity had been higher.

VI. EXPORT-LED GROWTH

Lewis in most of his writings highlighted the positive role of foreign trade in the economic growth of countries. In "International Trade and Economic Growth," he identified five stages. "Exports are the engine of the first stage of economic growth. This can be a very prosperous stage…. . The second stage of economic development is import substitution, producing for the home market ….. The third stage is where import substitution is exhausted, and exports are once again the engine of growth. …..Stage four (is) the bottleneck breaking stage where rapid progress in food production (or in eliminating whatever else may be the bottleneck in supply) makes possible balanced (or nearly balanced) growth …..In (the) final stage of

development, the limiting factor will be again the rate at which exports can be expanded." (Lewis, Collected Papers, 1994, pages 466-472).

Even when in later writings, Lewis seems to have downplayed the role of foreign trade as the "engine of growth", it was only to counsel for less reliance on North-South trade and to advocate South-South trade. For example: "…developing countries should stop thinking of themselves as inevitably dependent on trade with industrial countries and should do more to build up a network of trade with one another" (Lewis, Collected Papers, 1994: page 1975).

The Caribbean economies are acutely trade-dependent. Leaving aside the highly exceptional cases of Guyana and the British Virgin Islands and the Cayman Islands for which no data were available, total foreign trade in 2004 varied between 102% and 150% of GDP at market price in the other 13 countries. For the same 13 countries twenty years previously, i.e. 1985, foreign trade was between 112% and 182% of GDP, except in Trinidad and Tobago where the foreign trade ratio was a mere 71%. In 1985, exports were between 49% and 90% of GDP and imports between 60% and 120%. By 2004, the range for exports was 44% - 65% and for imports 43% - 92%. In essence, there was a trend towards a reduction in trade dependence (measured by trade as a percent of market price GDP) over the 20-year period but the countries remained highly dependent on foreign trade.

Much of their economic growth performance was determined by the performance of their export sector, and much of the cross-country variations in economic growth might be explained by differences in export performance which were in turn influenced by major changes in the product composition of exports, especially the growth of services exports relative to merchandise exports.

Merchandise exports comprised between 42% and 81% of total exports in 1985 in 9 of 14 countries. Bananas were one of the principal merchandise exports from St. Vincent and the Grenadines, Dominica, St. Lucia and Grenada among the OECS 6, and from Belize and Jamaica among the MDC 6. Sugar featured prominently in merchandise exports of Barbados, Belize, Guyana, Jamaica and Trinidad and Tobago. Citrus was important for Belize and Jamaica, and rice for Guyana. Petroleum dominated the merchandise exports of Trinidad and Tobago.

Exports of sugar during the 1985-2004 periods have been severely handicapped by stagnant prices or prices which fluctuated around low trends (Figure 1). It must be remembered that Caribbean exporters are price-takers in the market for these commodities. Merchandise exports were also constrained by quota restrictions and the erosion of trade preferences which severely affected banana exports from late in the 1990s. Petroleum exports from Trinidad and Tobago, for which the country is also a price-taker, fluctuated sharply but in tandem with the behaviour of international prices. Throughout the 1980-2000 period, the annual average growth rate of merchandise exports fluctuated and was frequently negative for the commodity exporting countries (Table 12). For instance, Trinidad and Tobago experienced significant negative changes in 1980-1985 and 1995-2000, and only a small positive growth rate of exports in 1990-1995. St. Lucia, a banana exporter, experienced negative growth from 1990-2000, Jamaica in 1980-1985 and 1995-2000, and Barbados 1985-1990. Overall, merchandise exports have not provided a strong and sustained dynamic for economic growth; on the contrary, they served as a drag on the economic growth of the banana-exporting countries.

Many countries which previously specialised in merchandise exports diversified into exports of services. It was taken farthest among the OECS 6 than among the MDC 6. Among the OECS 6 services exports as a percent of total exports clustered in a 33% - 58% range in 1985 but by 2004 clustered in a 67% - 81% range. Among the MDC 6, the Bahamas had already specialised in services by 1985. In Barbados, the services proportion of total exports moved from 55% to 81% which is of the same order of magnitude as the OECS 6. Diversification was minimal in Jamaica (from 55% to 59%) and Belize (from 37% to 43%). The British Dependents not having significant merchandise exports in 1985 were already almost exclusively exporters of services.

Countries which developed exports of tourism and international financial services had faster and less volatile rates of economic growth than those which did not. In both tourism and international financial services, the Caribbean exporters are price-makers and therefore could attempt to influence export earnings by altering prices, as has happened within the tourism industry in years of short-term demand shocks such as in 2001.

Tourism is an important contributor to output and employment, except in Guyana and Trinidad and Tobago which are tentative latecomers to this industry. UNECLAC (2003-2004) reports that in 2003 the percentage contributions to output were 95% in the British Virgin Islands, 74% in Antigua and Barbuda, between 24%-31% in the other five OECS 6 countries, 55% in the Bahamas, 45% in Barbados, 32% in Jamaica and 24% in Belize (Table 13). The percentage contribution was only 10% in Trinidad and Tobago and 8% in Guyana. In the same year, the percentage contributions to employment according to UNECLAC were 95% in the British Virgin Islands, 89% in Antigua and Barbuda, between 20% and 48% in the other five OECS 6 countries, 65% in the Bahamas, 53% in Barbados, 29% in Jamaica and 21% in Belize. In Trinidad and Tobago and in Guyana, the contribution was a mere 10%.

Tourism is a high growth industry. The United Nations World Tourism Organisation forecasts that between 1995 and 2020 international arrivals will grow at annual rate of 4.1 globally, with the Americas growing at 3.8%. Arrivals in the Americas would have increased from 110 mn persons in 1995 to 190 mn in 2010 and 282 mn in 2020. By moving into tourism, countries were basing their economic growth partially on a stable, high growth industry rather than slow and unstable commodity export industries, other than carbon fuel exports where growth has been more volatile than slow. Average annual percentage changes in visitor arrivals between 1985 and 2004 were 3%-6% in three BDCs and 16% in the others (Table 14). Period average annual growth in arrivals was between 6% and 8% in Dominica, Grenada and St. Lucia among the OECS 6. It was 5% in Jamaica among the MDC 6. Growth in tourist arrivals was slower in Antigua and Barbuda (1%), St. Kitts and Nevis (2%), the Bahamas (0.3%), Barbados (1.4%) and Belize (2%). It is noteworthy, however, that according to the World Tourism Council, tourist arrivals in St. Kitts and Nevis grew at 12.8% per annum between 2000-2004 compared with zero growth in 1990-2000, that the Bahamas recovered only slightly from negative growth (i.e., 0.3% in 2000-2004 versus 0.1% in 1990-2000), and that Barbados experienced a fall in average annual growth rate from 2.4% in 1990-2000 to 0.3% in 2000-2004.

Cruise ship passengers are the latest growth element in the tourism industry. This component is largest in the Bahamas, the Cayman Islands and Jamaica, although quite substantial in Barbados, St. Lucia, Antigua and Barbuda, and Belize. In almost all the countries for which time series data could be obtained, there was tremendous growth in passenger arrivals between 1985 and 2004. The exception is St. Vincent and the Grenadines where arrivals expanded by only 50% over the 20-year period.

The British Dependent countries and the Bahamas which are the most tourism intensive could be said to have specialised on the basis of their only resource endowments, i.e. climate, beaches and coral reefs. Being deficient in quantum of human resources given their extremely small populations, the British Dependents have had to import labour to satisfy the input requirements for expansion of tourism. As a result their combined population doubled from 61,600 persons in 1985 to 123, 200 persons in 2005.

Considerable earnings are generated by tourism. For stop-over visitors alone annual average tourism expenditures in 2000-2004 were $1.8 billion (bn) in the Bahamas, $1.3 bn in Jamaica, and $713 million (mn) in Barbados (Table 15). Visitor expenditures varied from $265 mn to $454 mn in Antigua and Barbuda, St. Lucia, Cayman Islands and Turks and Caicos Islands. They were within a range of $61 mn to $139 mn in Belize, Anguilla, Grenada, St. Kitts and Nevis and St. Vincent and the Grenadines. High levels of receipts have been sustained over the entire 20-year period. Visitor expenditures grew at an annual average rate of 52% in Turks and Caicos Islands, between 10% -15% in Anguilla, British Virgin Islands, Cayman Islands, Dominica, Grenada, Jamaica and Belize, and 8%-9% in the Bahamas, Barbados and St. Vincent and the Grenadines (Table 16). Antigua and Barbuda with average annual growth of 3% and St. Lucia with 6% were relatively slow growth destinations.

Countries which specialised in tourism exports have less worry about adverse terms of trade. This is so because unit export values are high and are subject to some control by industry operators. The issue for them is more one of remaining competitive on the basis of product prices and product quality. There seems to be a greater sensitivity to price and quality considerations among the British Dependent countries than among the OECS 6 or the MDC 6 tourism economies the Bahamas and Barbados.

Tourism receipts per arrival in 2000-2004 were greater in the British Dependent countries than in the OECS 6 except Antigua and Barbuda and in Belize and Jamaica among the MDC 6 (Table 17). This is a turnaround from 1985-1989 when tourism receipts per arrival were greater in St. Lucia, Antigua and Barbuda and Barbados than in Anguilla, the British Virgin Islands, Cayman Islands and Turks and Caicos Islands. In effect, the British Dependents moved rapidly to the higher end of the tourism market while many others stayed in the middle and lower reaches. The result is that the economic contribution of tourism in the British Dependents became greater in absolute terms than elsewhere other than the Bahamas, Barbados and Jamaica. Furthermore, given their small population sizes, the per capita effect is considerably larger.

International financial services and international business services are growth industries successfully exploited by the Bahamas, Barbados and the British Dependents. In the Bahamas and the Cayman Islands, international financial services were the first export staple, followed by tourism. In the other countries, the industry was a later attempt at economic diversification. The international financial services industry in its initial period had no domestic resource base.

Limited use was made of local labour. Skills and expertise were imported, although the Bahamas developed local human resource capacity in later periods. The under-development of the local telecommunications industry in the early growth phase was not a problem since mail and telegraph were still the predominant modes of international communication. In the later phases, continued growth, even maintenance of market share, required improvements in local telecommunications capacity.

In the Caribbean, the international financial services industry reached its zenith in some countries in the 1990s when the OECD Initiative on Harmful Tax Competition dealt a damaging blow to weakly regulated jurisdictions. The industry practically disappeared in Antigua and Barbuda and St. Vincent and the Grenadines and stagnated in Barbados. However, some countries adjusted successfully. The British Virgin Islands, the Bahamas and the Cayman Islands each made legislative changes intended to strengthen regulation and oversight, devebped international alliances with other jurisdictions and intensified international marketing. As Lewis (Collected Papers, 1994, page 446) noted "the capacity of a country to adapt itself swiftly to adverse external influences" is critical.

VII. MIGRATION AND REMITTANCES

By the start of the current decade, if not earlier, migrant remittances had become a major dynamic in several Caribbean economies. The World Bank in its Migration and Remittances Factbook has provided some estimates for 2004 which are admittedly underestimates because of unrecorded flows: $1.4 bn to Jamaica, $146 million to Guyana, $100 mn to Barbados, $81 mn to Trinidad and Tobago, $26 mn to Belize and $20 mn to Grenada. These net remittances are very large proportions of GDP in Jamaica (16%), and Guyana (22%) and are sizeable in Belize (4%) and Barbados (4%). The data available from the World Bank shows much lower levels of remittances in the OECS countries other than Grenada: $18 mn (2% GDP) in Antigua and Barbuda; $4 mn (1.4% GDP) in Dominica; $3 mn (0.7% GDP) in St. Kitts and Nevis; $2 mn (0.2% GDP) in St. Lucia; and $5 mn (0.2% GDP) in St. Vincent and the Grenadines. Remittances seem to be much smaller in the BDCs. In Anguilla in 2005 according to Kirton and McLeod (2007) remittances were $13 mn (8% GDP). For Montserrat, they estimate $1 mn (2% GDP). Private net transfers could be used as a proxy for direct estimates of net remittances. These too are substantial in absolute terms and in relation to GDP.

Kirton and McLeod (2007) and Roberts (2006) correctly argue that remittances play a critical role in reducing poverty and income inequality and in helping to finance investment in Caribbean countries. It is evident from casual empiricism that remittances are an important source of income for many poor households even in countries in the middle ranks of the per capita income scale. Likewise, it is evident that some residential asset accumulation and business investment is being financed with migrant remittances.

For Guyana, the poorest country in the data set, Roberts (2006) notes on the basis of an IDB study conducted in 2005 that approximately 64% of remittance recipients earn less than $1500 per annum. On the basis of her national survey, Roberts reports that 27% of remittances are used for food, 20% for clothing, 16% for real estate, 14% for savings and 15% for education.

Kirton and McLeod (2007) also claim that remittances provide a sustainable source of foreign exchange inflows. This claim is debatable in terms of its empirical validity. There has been an upward or stable trend of directly estimated remittances over the last six years in the main recipient countries. However, because a sufficiently long time series does not exist, it is not possible to test the sustainability proposition over a period of time reasonably long for that purpose. Clues might be found in the time series behaviour of net private international transfers over the 1985-2005 periods. Net international transfers turn out to be quite unstable, instability being measured by the coefficient of variation. The coefficients of variation are very large for Antigua and Barbuda (144), Jamaica (80), Grenada (80) and St. Kitts and Nevis (68). Flows into Barbados (49), Belize (50) and Dominica (39) also exhibit substantial volatility. These empirical results suggest caution about Kirton and McLeod's policy conclusion about sustainable foreign exchange inflows.

Even if remittances were sustainable, it is troubling that they have become an element of economic growth policy in some discussions. Kirton, and various co-authors in several papers and Bascom (1990) and Roberts (2006) have appropriately addressed the challenge of maximising the economic contributions of those remittances which do occur and of reducing transactions costs to remittances. In particular Kirton and McLeod (2007) and Roberts (2006) recommended that policy be directed towards channelling remittance flows through the formal financial system and into micro finance institutions, establishing migrant remittances bureaus in countries of origin, reducing transactions cots by greater geographical dispersion of remittance transactions agencies and institutions, and allowing recipients to hold foreign currency deposit accounts. Others, however, have gone beyond concern with efficiency to advocate the instrumentality of migrant remittances in economic growth.

The emigration of Caribbean people has been motivated by the search for personal "economic betterment" (to use Beckfordian terminology) and by political push factors such as unacceptably drastic changes in the political economy paradigm (e.g. from market capitalism to democratic socialism in Jamaica in the late 1970s), communal violence (e.g. Guyana in the mid-1960s) and criminal violence (Trinidad and Tobago now). Emigration can be interpreted as outcomes of the failure of development policy in the broadest sense. Now, however, some argue that migration should become a mechanism of economic growth and development. Migration of people embodying knowledge and skills in excess demand in host countries should be sponsored or managed by Caribbean governments to maximise the inflow of net remittances (see for instance, Hosein and Thomas 2006). Some go farther and advocate deliberate over-investment in education and training to produce an exportable surplus of knowledge and skills. It has to be stressed that because knowledge and skills are embodied, people become the new export commodity in this paradigm of economic growth. Given the origins of Caribbean economies in the abhorrent trading of people as commodities, it is a sad irony that a new and modernised trans-Atlantic trade in people as commodities is seriously contemplated. Furthermore, decreasing flows of remittances per migrant cohort over time means that sustainability of net remittances can only be achieved if there are continuous flows of new emigrants. This implies a constant depletion of the stock of human capital.

The human resource losses from emigration are tremendous in the Anglophone Caribbean, especially in the MDCs and the OECS. Partial data are presented in Table 18 compiled from the World Bank Migration and Remittances Factbook. The stock of emigrants in 2005 is very large in absolute terms and as percent of national populations in Grenada, Barbados, Belize, Guyana and Jamaica. If data were available, they would probably show large population proportions for St. Kitts-Nevis and St. Vincent and the Grenadines, and small proportions for the British Virgin Islands, Anguilla and the Turks and Caicos Islands. Table 18 also reports estimates of the percentage of tertiary education persons who emigrated. It is likely that these are substantially over-estimated because the compilers included foreign-born and foreign-educated nationals in their count of tertiary educated emigrants while counting only tertiary graduates of home-country national institutions in their estimates of tertiary output. Nonetheless, even if one adjusts these estimates downwards, the finding would be that there is a quantitatively significant loss of tertiary educated Caribbean people through emigration.

Repetitive cycles of emigration also weaken family structures and as a consequence, weaken the fabric of human society. Families are often deprived of one or both parents or of siblings and other relatives who can serve as role models. Roberts (2006), page 8) notes, "Parents supporting children left in Guyana is a very common practice, therefore 16 percent of the recipients are children receiving money from their parents." While the financial flow is a positive contribution, the absence of parental upbringing might be considered negative in the family and broader societal context.

The remittances-led model of economic growth is a haemorrhagic model of economic growth in which repetitive loss of human resources is compensated by repeated infusion of migrant financial capital. It should also be evaluated in the context of the role of population size in economic growth. Small population size is disadvantageous for well-known reasons: human resource capacity and domestic market size being the more prominent. Caribbean economies are under-resourced in people. The aim should not be the export of people but the achievement of balance between population and development by improving human resource quality thereby engendering economic growth.

VIII. IMPORT SUBSTITUTION

Lewis returned time and time again to the role of the home market in the process of economic growth. He recognised that import substitution can contribute positively to economic growth at some early stage in the growth process but argued that the very success of import-substituting industrialisation in raising domestic incomes and demand would generate foreign exchange requirements that make further economic growth and price level stability growth conditional upon export growth.

Import-substitution in manufacturing and agriculture was attempted in varying degrees in Barbados, Guyana, Jamaica and Trinidad and Tobago in the 1970s and 1980s. However, these efforts soon floundered behind tariffs, quotas and prohibitions because of cost inefficiencies and foreign exchange constraints. Domestic rationing of commodities and foreign exchange ultimately proved incapable of prolonging the import-substitution phase of the 1970s and 1980s. By 1990, the home market had practically been abandoned as a dynamic of economic growth. Manufacturing when revived in the 1990s sought its fortunes either as an enclave export sector, e.g. garments in Jamaica, or in competitive regional markets and international markets.

IX. PUBLIC FINANCES AND DEBT

There are easily discerned differences among the countries in respect of their fiscal performance and public debt. The BDCs except the Turks and Caicos Islands achieved positive fiscal outturns (1%-6% GDP) on current account in each sub-period (Table 19). The Turks and Caicos Islands had a deficit of 1.6% in 1990-1994. The OECS 6 had current account surpluses of similar magnitudes but not as consistently. Antigua and Barbuda was a persistent deficit country from 1990 and St. Kitts and Nevis from 1995 onwards. For the MDC6, current account surpluses of the order of 1%-6% of GDP were achieved, but deficits when they occurred tended to be large. Deficits in the MDC6 were also as frequent as in the OECS6.

While the differences in current account fiscal outturns are not striking, those for overall fiscal balances are significant. Unlike the BDCs which had deficits in the order of 0.2%-3% GDP, the OECS 6 had overall fiscal deficits ranging between 0.3%-15% GDP, and the MDC6 (except Guyana) 0.9%-10%. In the case of Guyana overall fiscal deficit were between 5%-35% GDP.

The resource pull of public consumption expenditures (measured by the ratio of public consumption expenditures to GDP) was almost the same throughout the full set of countries. It can be concluded that the constitutionally independent countries engaged in deficit financing of capital projects to a much greater extent than the BDCs were able to do, but because of inefficiencies already noted, deficit financing of capital projects was not a strong source of economic growth.

The record with external debt between 1995-2005 is starkly different between the BDCs, the OECS 6 and the MDC 6. Among the BDCs, the ratio of external debt to GDP rarely exceeded 10%. The OECS had ratios of 35%-83%. Among the MDC 6, the external debt was between 8%-11% GDP in the Bahamas, 14%-27% in Barbados, 32%-75% in Belize, 41%-62% in Jamaica, and 12%-36% in Trinidad and Tobago. In the case of Guyana, external debt ranged between 132% and 331% GDP. External debt was a major drag on the economies of the more highly indebted countries absorbing anywhere between 2%-18% GDP in the MDC 6 and 2%-10% GDP in the OECS 6. Much more of public revenues had to be allocated to external debt service in the OECS 6 (8%-30%) and the MDC 6 (8%-64%) then in the BDCs (1%-8%). In the OECS countries, the Bahamas and Belize, debt service absorptions of public revenues increased over time.

Several countries drew substantially on domestic financial markets for deficit financing. Among the OECS6, Antigua and Barbuda increased domestic debt as a proportion of GDP from 23% between 1995-1999 to 56.8% in 2000-2004. St. Kitts and Nevis increased its domestic debt-GDP ratio from 38% in 1995-1999 to 77.6% in 2000-2004. The trend and magnitudes of domestic debt to GDP in Jamaica was quite similar to that of St. Kitts and Nevis. The Bahamas, Barbados and Guyana also had high ratios of domestic debt to GDP: 32%-45% in the Bahamas; 43%-56% in Barbados; 32%-43% in Guyana. In contrast, the BDCs had domestic debt to GDP ratios below 10%, except for Anguilla where the ratio increased from 7.8% in 2001 to 16.6% in 2005.

X. CONCLUSIONS

To conclude, there has been a remarkable shift in the relative economic situations and quality of life, including the incidence of poverty, of the Anglophone Caribbean countries between 1985 and 2005. The change in economic status reflects considerable differences in economic growth rates. The BDCs have generally grown faster than the OECS6, which themselves have generally grown faster than the larger countries which received their constitutional independence earlier. Economic growth has been more variable in the MDCs and OECS than in the BDCs.

Most countries have high gross investment ratios, the exception being Trinidad and Tobago. However, high investment ratios have not translated in high economic growth rates, possibly because of inefficiencies in the investment process, low and declining factor productivity and capital stock loss caused by natural hazard events.

Exports have been the central dynamic of economic growth. Import substitution was a largely unsuccessful economic growth strategy. Those countries reliant on primary commodity exports have been weakly propelled by the trade "engine of growth" (to use Lewis' expression), except Trinidad and Tobago episodically. Failure to adapt to adverse changes in the international trade environment would mean a further weakening of the economic growth performance of those countries. Caribbean countries which diversified in the high growth tourism and international financial services industries have had faster rates of economic growth. For them the trade "engine of growth" has worked well. The BDCs have exhibited a greater capacity for adjustment in their tourism industry and international financial services industry than have the other countries.

Migrant remittances have become significant contributors to economic activity in the slower growing economies. However, sustainability of those flows is likely to be a problem. A paradigm in which emigration and associated migrant remittances have a central role in economic growth policy is an admission of failure in Caribbean development policy and might be ultimately counter-productive in its implications for domestic human resource adequacy and social cohesion.

The significant differences in fiscal performance among the countries may be taken as indicative of differences in quality of economic management. The constitutionally independent countries, unconstrained by colonial restrictions on debt creation, handicapped their economic growth by excessive accumulation of domestic and foreign debt. The BDCs did not have that degree of freedom to err in economic management.

Other factors, not analysed in this Lecture, might no doubt also help to explain the intra-regional variations in socio-economic situations and performance. Among them might be the stability of the regulatory framework, the state of crime and security, and the quality of law enforcement and judicial administration. Although some are tempted to assert a unique relationship between these factors and political status, a better course of action is further empirical study for additional insights into the political economy of development.

References

Barro, Robert J. (1991): "Economic Growth in a Cross-Section of Countries" Quarterly Journal of Economics 106(2): 407-33.

Bascom, Wilbert O. (1990): Remittances Inflows and Economic Development in Selected Anglophone Caribbean Countries. Working Paper No. 58, Commission for the Study of International Migration and Cooperative Economic Development, Washington D.C.

Blavy, Rodolphe (2006): "Public Debt and Productivity: The Difficult Quest for Growth in Jamaica" IMF Working Paper WP/06/235, October 2006.

Bourne, Compton (1988): "Caribbean Development to the Year 2000: Challenges, Prospects and Policies." Commonwealth Secretariat/Caribbean Community Secretariat June 1988.

Bosworth, Barry P. and Susan M. Collins (2003): "The Empirics of Growth: An Update" Brookings Papers on Economic Activity 2, 2003:113-206

Downes, Andrew S. (2004): "Enhancing Productivity and Competitiveness" pages 153-205 in

Revitalizing the Jamaican Economy: Policies for Substantial Growth (Inter-American Development Bank, Washington DC, 2004)

Downes, Andrew S. (2006): "Reforming the Labour Market" pages 93-144 in Liliana Rojas-Suarez and Desmond Thomas (editors) Barbados: Meeting the Challenge of Competitiveness in the 21st Century. (Inter-American Development Bank, Washington DC, 2006).

Girvan, Norman P. (1971): "Foreign Capital and Economic Underdevelopment in Jamaica (Mona, Institute of Social and Economic Research, University of the West Indies, 1971).

Girvan, Norman P. (1997): "Reinterpreting Caribbean Development" The Second Sir Arthur Lewis Memorial Lecture, (Eastern Caribbean Central Bank, Basseterre, St. Kitts and Nevis, 1997).

Hosein, R. and C.Y. Thomas (2006): "Conceptualizing a Strategic Approach to Mode 4 and the Managed Migration of Nurses" Social and Economic Studies 55, 4, Dec 2006: 165-195.

Kirton, Claremont and Georgia McLeod (2007): "Remittances to Caricom Countries: Policy Issues and Options" Global Development Studies Vol. 4, Nos. 3-4, 2007; 91-116.

Lewis, W. Arthur (1954): "The Theory of Economic Growth" (London: Allen and Unwin, 1954).

Lewis, W. Arthur (1994 "Economic Development and World Trade" pages 446-465 reprinted in Patrick A.M. Emmanuel (ed) Sir William Arthur Lewis Collected Papers, 1941-1988, Vols. I, II and III (Barbados: Institute of Social and Economic Research, University of the West Indies, 1994)

Lewis, W. Arthur (1994 "International Trade and Economic Growth" pages 446-477 Collected Papers

Lewis, W. Arthur (1994 "The Development Process: The Lessons of Two Decades" pages 1960-2001 in Collected Papers.

Mankiw, N. Gregory, David Romer and David N. Weil (1992): "A Contribution to the Empirics of Economic Growth" Quarterly Journal of Economics 107 (2): 407-37.

Roberts, Debra (2006) "The Development Impact of Remittances on Caribbean Economies: The Case of Guyana," Paper presented at SALISES Conference, University of the West Indies, St. Augustine, 2006.

UNECLAC (2003): Economic Survey of the Caribbean.

World Bank (2005): A Time to Choose: Caribbean Development in the 21st Century (Caribbean Country Management Unit, April 2005)

Table 1: **Percentage Shares of Population and GDP: 1985 and 2004**

Country	Percent of Population in 1985	Percent of Factor Cost GDP at Market Prices in 1985	Percent of Population in 2004	Percent of Factor Cost GDP at Market Prices in 2004
Anguilla	0.01	0.1	0.2	0.3
British Virgin Islands	0.2	0.6	0.4	2.5
Cayman Islands	0.4	0.4	0.7	3.1
Montserrat	0.2	0.3	0.1	0.1
Turks and Caicos Islands	0.2	0.3	0.4	1.1
Dependents	**1.01**	**1.7**	**1.8**	**7.2**
Antigua & Barbuda	1.4	1.4	1.3	2.0
Dominica	1.4	0.7	1.1	0.6
Grenada	1.7	0.8	1.7	1.0
St. Kitts and Nevis	0.8	0.5	0.8	0.9
St. Lucia	2.5	1.2	2.6	1.9
St. Vincent and the Grenadines	2.0	0.8	1.7	1.0
OECS Independents	**9.8**	**5.5**	**9.1**	**7.4**
Bahamas	4.2	13.3	5.1	14.3
Barbados	4.6	8.6	4.3	6.6
Belize	3.0	1.3	4.5	2.6
Guyana	13.8	3.3	12.1	1.9
Jamaica	42.0	14.4	42.3	23.4
Trinidad and Tobago	21.4	51.8	20.6	36.5
Other Independents	**89.0**	**92.8**	**89.5**	**85.4**
All	**100.0**	**100.0**	**100.0**	**100.0**

Table 2: Current Price GDP Per Capita (US$) and GDP Per Capita Ranks

Country	1980		2005	
	Per Capita GDP (US$)	GDP Rank	Per Capita GDP (US$)	GDP Rank
Anguilla			13,437	5
British Virgin Islands	3,143	4	37,659	2
Cayman Islands			49,703	1
Montserrat	2,161	5	9,444	10
Turks and Caicos Islands			18,637	4
Antigua and Barbuda	1,775	6	10,511	8
Dominica	809	12	4,441	13
Grenada	845	11	4,801	12
St. Kitts and Nevis	1,118	10	9,808	9
St. Lucia	1,186	9	5,374	11
St. Vincent and the Grenadines	604	14	4,103	14
The Bahamas	6,205	1	18,990	3
Barbados	3,569	3	11,213	6
Belize	1,382	7	3,807	15
Guyana	782	13	1,090	17
Jamaica	1,213	8	3,632	16
Trinidad & Tobago	4,008	2	11,091	7

Table 3: Constant Price Per Capita GDP and GDP Per Capita Ranks

Country	1980		2005	
	Per Capita GDP (US$)	GDP Rank	Per Capita GDP (US$)	GDP Rank
Antigua and Barbuda	4,057	3	9,108	2
Dominica	1,679	8	3,722	7
Grenada	1,709	7	3,932	6
St. Kitts and Nevis	2,569	4	7,686	4
St. Lucia	2,075	5	4,313	5
St. Vincent and the Grenadines	1,322	10	3,439	9
The Bahamas	12,727	1	15,205	1
Barbados	6,764	2	9,043	3
Belize	2,035	6	3,710	8
Guyana	819	11	685	11
Jamaica	1,458	9	1,322	10

Table 4: Percent of Households with Access in 1990

Country	Piped Water	Flush Toilets	Electricity
Anguilla	80.5	80.7	89.4
British Virgin Islands	77.2	89.6	97.8
Montserrat	91.1	69.9	86.4
Antigua and Barbuda	61.8	52.9	89.1
Dominica	50.2	36.8	79.2
Grenada	63.3	36.1	68.7
St. Kitts and Nevis	72.0	55.7	81.9
St. Lucia	62.6	35.7	72.9
St. Vincent and the Grenadines	53.8	33.2	66.8
The Bahamas	77.5	74.5	87.9
Barbados	95.8	66.3	92.6
Belize	49.2	34.8	67.2
Guyana	60.8	29.5	71.6
Jamaica	59.4	40.2	64.7
Trinidad and Tobago	71.4	57.7	89.3

Table 5: Poverty Estimates: Percent Below Poverty Line

Country	Year	Percent Below Poverty Line
Anguilla	2002	23.0
British Virgin Islands	2002	22.0
Turks and Caicos Islands	1999	25.9
Antigua and Barbuda	2006	18.4
Dominica	2002	39.0
Grenada	1999	32.1
St. Kitts and Nevis	2000	30.5
St. Lucia	2006	28.8
The Bahamas	2001	9.3
Barbados	1997	13.9
Belize	2002	33.5
Guyana	1999	35.0
Jamaica	2002	19.7
Trinidad and Tobago	2005	16.7

Source: Caribbean Development Bank

Table 6: **Annual Percentage Changes in Constant Price GDP: Period Averages**

Country	1985-1989	1990-1994	1995-1999	2000-2004	1985-2004
Anguilla	12.3	5.0	5.5	3.9	6.7
Cayman Islands	9.5	6.2	6.0	1.2	5.7
Turks and Caicos Islands	n.a	8.3	7.2	n.a	7.8
Montserrat	7.0	0.0	-14.3	n.a	-3.7
Antigua and Barbuda	8.3	3.4	4.0	3.1	4.7
Dominica	4.3	3.0	2.2	-1.0	2.1
Grenada	5.5	1.9	4.9	0.4	3.1
St. Kitts and Nevis	7.1	3.9	4.3	2.8	4.5
St. Lucia	9.3	2.9	2.2	2.7	4.3
St. Vincent and the Grenadines	6.8	2.8	4.4	2.9	4.2
The Bahamas	n.a	n.a	4.4	2.9	4.7
Barbados	3.2	-1.1	3.4	1.4	1.7
Belize	6.9	5.7	3.5	7.3	5.9
Guyana	3.1	6.9	4.1	1.4	3.9
Jamaica	2.6	2.1	0.4	1.3	1.6
Trinidad and Tobago	-3.3	1.1	7.1	9.4	3.5
Arithmetic Mean	5.7	3.6	3.1	2.9	3.8

Table 7: Volatility of Annual Percentage Change in Constant Price GDP: 1985-2004

Country	Arithmetic Mean	Standard Deviation	Coefficient of Variation
Anguilla	6.4	6.0	93.8
Cayman Islands	6.0	4.2	69.1
Turks and Caicos Islands	7.1	4.2	59.7
Antigua and Barbuda	4.8	2.8	59.5
Dominica	2.2	3.2	150.2
Grenada	3.2	3.7	118.9
St. Kitts and Nevis	4.5	2.9	63.4
St. Lucia	3.9	5.1	130.6
St. Vincent and the Grenadines	4.2	3.3	77.5
The Bahamas	3.6	3.9	108.9
Barbados	1.6	3.4	221.1
Belize	5.9	4.2	72.5
Guyana	3.3	4.1	123.1
Jamaica	1.6	2.6	161.0
Trinidad and Tobago	3.5	6.2	174.9

Table 8: Period Average Percent Change in Consumer Prices

Country	1985-1989	1990-1994	1995-1999	2000-2004
Anguilla	3.2	4.1	2.1	3.9
British Virgin Islands	2.7	4.3	4.5	2.2
Cayman Islands	4.1	4.7	3.5	2.2
Antigua and Barbuda	3.0	5.4	2.0	1.7
Dominica	3.7	3.2	1.5	1.3
Grenada	2.5	2.9	1.7	1.9
St. Kitts and Nevis	2.0	2.9	4.2	2.2
St. Lucia	2.9	3.8	2.8	2.2
St. Vincent and the Grenadines	1.8	3.5	1.2	1.2
The Bahamas	5.1	4.1	1.4	2.0
Barbados	9.7	3.4	2.5	1.7
Belize	2.4	5.7	1.7	1.9
Guyana	30.5	39.4	5.1	4.6
Jamaica	13.9	41.5	14.1	9.2
Trinidad and Tobago	9.1	8.2	4.2	4.2

Table 9: **Gross Fixed Capital Formation Percent of Market Price GDP: Period Averages and Coefficient of Variation (CV)**

Country	1985-1989	1990-1994	1995-1999	2000-2004	CV 1985-2004
Anguilla	42	32	31	33	20
British Virgin Islands	33	19	25	24	25
Montserrat	43	48	45	47	22
Turks and Caicos Islands	37	31	37	29	15
Antigua and Barbuda	39	34	41	50	18
Dominica	30	30	29	25	17
Grenada	34	32	35	36	10
St. Kitts and Nevis	44	44	44	49	19
St. Lucia	24	26	25	22	11
St. Vincent and the Grenadines	28	28	32	31	11
The Bahamas	21	21	32	31	22
Barbados	12	10	10	10	13
Belize	27	27	22	22	16
Guyana	30	47	42	36	23
Jamaica	24	28	28	30	13
Trinidad and Tobago	17	15	27	18	33

Table 10: Number of Natural Disasters

Country	1980-1989	1990-1999	2000-2007
Anguilla	3	1	0
British Virgin Islands	0	2	0
Cayman Islands	0	0	4
Turks and Caicos Islands	1	1	1
Antigua and Barbuda	2	5	0
Dominica	3	3	3
Grenada	1	2	2
St. Kitts and Nevis	3	4	0
St. Lucia	5	3	3
St. Vincent and the Grenadines	4	2	3
The Bahamas	1	4	6
Barbados	3	1	4
Jamaica	7	5	14
Trinidad and Tobago	0	6	0

Source: EM-DAT: The OFDA/CRED International Disaster Database.

Table 11: Cyclically Adjusted Estimates of Total Factor Productivity: 1981-2000

Country	1981-1990	1990-2000	1981-2000
Antigua and Barbuda	6.18	2.58	3.26
Dominica	4.76	1.15	2.62
Grenada	4.50	1.17	3.51
St. Kitts and Nevis	-3.85	-1.81	-0.53
St. Lucia	4.15	-2.11	0.89
St. Vincent and the Grenadines	3.26	-1.46	1.84
Barbados	n.a	-1.19	n.a.
Belize	2.30	-2.06	0.11
Guyana	-6.17	0.75	-4.33
Jamaica	1.84	-2.96	-0.68
Trinidad and Tobago	-2.57	0.37	-0.38

Source: World Bank (2005): A Time to Choose: Caribbean Development in the 21st Century.

Table 12: Average Annual Growth Rate of Merchandise Exports (%)

Country	1980-1985	1985-1990	1990-1995	1995-2000
Barbados	13.9	-9.8	0.3	1.0
Belize	-5.4	3.1	8.3	2.8
Dominica	0.5	19.9	10.6	-4.2
Grenada	3.3	3.8	-2.8	5.0
Guyana	-15.7	6.1	15.5	0.6
Jamaica	-10.0	16.6	3.9	-2.3
St. Kitts and Nevis	-3.7	5.6	-6.9	12.5
St. Lucia	0.7	15.7	-0.7	-11.8
St. Vincent and the Grenadines	31.9	6.8	-12.0	2.1
Trinidad and Tobago	-13.7	-0.2	2.7	-11.8

Source: UNCTAD Trade and Development Statistics, 2006

Table 13: Tourism Percentage Contribution to Output and Employment: 2003

Country	Output	Employment
British Virgin Islands	95	95
Antigua and Barbuda	74	89
Dominica	22	20
Grenada	26	24
St. Kitts and Nevis	26	26
St. Lucia	48	48
St. Vincent and the Grenadines	31	28
The Bahamas	52	65
Barbados	48	53
Belize	22	21
Guyana	8	10
Jamaica	32	29
Trinidad and Tobago	10	10

Source: Table 3, UNECLAC Economic Survey of the Caribbean, 2003-2004.

Table 14: Average Annual Percentage Change in Tourist Arrivals

Country	1985/89-90/4	1990/94-95/9	95/99-2000/4	84/89-2000/4	Average Annual % Growth
Anguilla	68	21	13	124	6.2
British Virgin Islands	8	47	18	88	4.4
Cayman Islands	40	44	-19	63	3.1
Turks and Caicos Islands	47	68	69	315	15.7
Antigua and Barbuda	25	3	-5.5	22	1.1
Dominica	77	33	9	157	7.8
Grenada	54	24	16	122	6.1
St. Kitts and Nevis	40	-0.2	-1.8	37	1.8
St. Lucia	56	114	9	134	6.7
St. Vincent and the Grenadines	19	18	21		
The Bahamas	2	8	-3.1	6	0.3
Barbados	-1.5	17	10	28	1.4
Belize	48	37	-27	48	2.3
Jamaica	53	17	11	99	4.9

Table 15: **Period Average Annual Visitor Expenditures (US$mn)**

Country	1985-1989	1990-1994	1995-1999	2000-2004
Anguilla	17	39	54	61
British Virgin Islands	102	147	237	354
Cayman Islands	136	258	443	454
Turks and Caicos Islands	25	49	96	281
Antigua and Barbuda	184	282	264	295
Dominica	13	28	41	50
Grenada	43	46	60	86
St. Kitts and Nevis	46	65	70	71
St. Lucia	123	196	262	265
St. Vincent and the Grenadines	34	48	68	88
The Bahamas	1,125	1,281	1,419	1,773
Barbados	396	508	666	713
Belize	45	78	94	139
Jamaica	527	855	1,1534	1,312

Table 16: Percentage Change in Period Average Annual Visitor Expenditures

Country	1985/89-90/94	1990/94-95/99	95/99-2000/4	84/89-2000/4	Average Annual % Growth
Anguilla	122	14	14	248	912.4
British Virgin Islands	43	61	49	246	12.3
Cayman Islands	88	72	2.4	222	11.1
Turks and Caicos Islands	97	97	192	1,038	51.9
Antigua and Barbuda	53	-6.5	12	60	3.0
Dominica	115	47	23	288	14.4
Grenada	7	32	43	103	10.1
St. Kitts and Nevis	42	6	2.1	55	2.73
St. Lucia	60	33	1.5	117	5.8
St. Vincent and the Grenadines	41	42	30	161	8.1
The Bahamas	14	11	25	58	7.9
Barbados	28	31	7	80	9.0
Belize	73	20	48	208	15.4
Jamaica	62	35	14	149	12.4

Table 17: Visitor Expenditure Per Tourist Arrival (US$) Per Annum

Country	1985-1989	1990-1994	1995-1999	2000-2004
Anguilla	828	1,128	1,278	1,289
British Virgin Islands	640	852	932	1,179
Cayman Islands	721	969	1,157	1,470
Turks and Caicos Islands	633	850	998	1,737
Antigua and Barbuda	1,032	1,261	1,144	1,351
Dominica	457	567	626	703
Grenada	718	500	532	653
St. Kitts and Nevis	749	763	813	846
St. Lucia	1,064	1,092	982	984
St. Vincent and the Grenadines	743	881	1,144	1,144
The Bahamas	773	866	891	1,148
Barbados	959	1,250	1,395	1,355
Belize	337	395	346	704
Jamaica	790	837	965	990

Table 18: Emigration

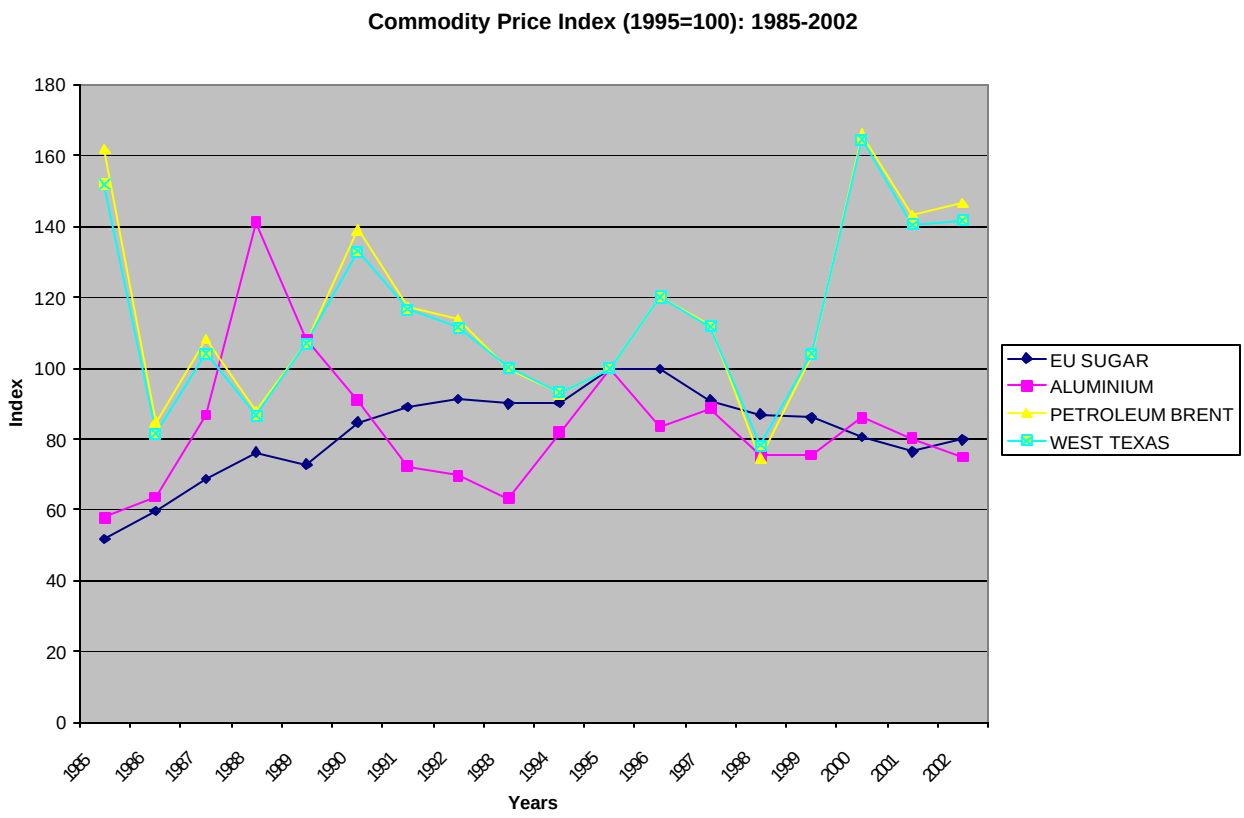
Country	Stock of Emigrantsin 2005		Percent Emigration Rate of
	No.	% Pop	Tertiary Educated in 2000
Cayman Islands	13,633	8.1	n.a.
Dominica	4,526	5.7	58.9
Grenada	71,396	69.4	66.7
St. Kitts and Nevis	n.a.	n.a.	71.8
St. Lucia	n.a.	n.a	36.0
St. Vincent and the Grenadines	n.a.	n.a.	56.8
The Bahamas	38,716	12.0	36.4
Barbados	113,628	42.2	61.4
Belize	59,110	21.9	51.0
Guyana	417,469	55.6	85.9
Jamaica	1,037.599	39.1	82.5

Source: World Bank Migration and Remittances Factbook.

Table 19: Fiscal Performance

Country	Overall Fiscal Balance % GDP Period Average				Current Fiscal Balance % GDP Period Average			
	1985-99	1990-94	1995-99	2000-2004	1985-89	1990-94	1995-99	2000-2004
Anguilla	0.3	-1.5	-0.2	-1.3	2.3	1.2	2.1	1.2
British Virgin Islands	-1.9	-2.6	2.9	-1.7	0.3	2.5	6.1	4.3
Cayman Islands	?	-0.9	-0.8	-0.9	?	1.4	2.6	1.5
Turks and Caicos Islands	2.8	-1.6	0.7	-1.4	2.7	-1.6	4.6	1.3
Antigua & Barbuda	-3.8	-2.8	-3.1	-8.1	0.4	-1.2	-1.0	-6.6
Dominica	-2.5	-7.1	-4.0	-5.3	3.2	0.3	0.9	-2.5
Grenada	-14.7	-3.5	-2.1	-7.6	-3.0	0.2	2.0	3.8
St. Kitts and Nevis	-2.7	-1.7	-6.6	-11.7	0.1	1.2	-0.0	-2.8
St. Lucia	-0.5	-0.3	1.2	-3.6	4.0	6.3	5.2	2.5
St. Vincent and the Grenadines	1.8	-2.0	-2.4	-1.7	2.7	3.2	3.7	2.9
The Bahamas	-2.0	-1.9	1.7	-0.5	0.7	1.0	0.8	0.4
Barbados	-4.2	-7.0	-1.4	-3.1	1.8	-3.4	3.7	2.2
Belize	-1.7	-4.7	-3.7	-10.0	3.1	5.7	2.2	1.5
Guyana	-35.3	-15.2	-3.8	-5.4	-12.4	-8.1	6.0	-0.1
Jamaica	-9.1	-0.2	-3.7	-5.2	4.7	6.6	-1.0	-4.6
Trinidad and Tobago	-5.4	-0.9	-0.5	0.9	-0.3	0.9	0.6	2.4

FIGURE 1


Commodity Price Index (1995=100): 1985-2002
Index
180
160
140
120
100
80
60
40
20
0
1985
1986
1987
1988
1989
1990
1991
1992
1993
1994
1995
1996
1997
1998
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2000
2001
2002
Years
EU SUGAR
ALUMINIUM
PETROLEUM BRENT
WEST TEXAS