

## **DEBT IN CARICOM: ORIGINS AND CONSEQUENCES FOR GROWTH AND ECONOMIC DEVELOPMENT**

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### *ABSTRACT*

*This paper examines the origins and consequences of the accumulation of debt in CARICOM during the 1990s. The paper contends that the analyses of debt based on the government budget constraint provide no information about the rest of agent's constraints and can only provide an incomplete analysis and misleading police recommendations. Such an analysis cannot explain the accumulation of debt which is a dynamic phenomenon unless it assumes that the government is always 'overspending' which is a simplistic explanation. Contrarily, this paper posits that when all relationships within an economy are considered and made visible and are shown to be consistent with one another, it becomes clear that the accumulation of debt can only be explained by the mutual interaction of the fiscal and the external constraint. Furthermore, it argues that, in fact, the limit to fiscal policy is set by external performance. Within the logic of the analysis provided in the paper the accumulation of debt beyond a certain point has a fundamental implication that goes beyond the traditional focus on expectations. According to the logic of the paper, the accumulation of debt changes the role of institutions and of economic policy in a fundamental way. The management of the debt becomes the overriding focus of economic policy and institutions. Economic policy and institutions become in fact divorced from their roles in the development of real sector activity and turn their focus to the development of the financial sector. Dichotomizing of the real and financial (monetary) sectors is an important obstacle of economic development.*

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## 1.0 Introduction

During the decade of the 1990s the public debt stock of most CARICOM economies increased significantly. This is especially the case of the Member States of the Organization of Eastern Caribbean States (OECS).<sup>2</sup>

Between 1990 and 2005, the debt stock rose on average from 65% to 84% of GDP for CARICOM.<sup>3</sup> For the OECS, the debt stock expanded from 75% to 105% of GDP between 2000 and 2005. Also, with the exclusion of Trinidad and Tobago, the economies that have witnessed a decline in their debt stock to GDP ratios (Guyana and Jamaica) still maintain debt levels that surpass 100% of GDP.

As it stands CARICOM economies are among the most indebted emerging market economies in the world. By standard criteria the debt levels are unsustainable.

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- 2 The Member States of the OECS include Anguilla, Antigua and Barbuda, the British Virgin Islands, Dominica, Grenada, Montserrat, St. Kitts and Nevis, St. Lucia and St. Vincent and the Grenadines. The analysis presented here covers all member States with the exception of the British Virgin Islands. These states form a currency union and fall under the monetary authority of the Eastern Caribbean Central Bank (ECCB).
  - 3 The treaty establishing CARICOM (1973) provided for the creation of two distinct entities: the CARICOM Community and the Common Market. The CARICOM Community (CARICOM) has 15 member states (Antigua and Barbuda, The Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Haiti, Jamaica, Montserrat, St. Kitts and Nevis, St. Lucia, St. Vincent and the Grenadines, Suriname and Trinidad and Tobago). The Bahamas is not a member state of the Common Market. CARICOM has five associate members (Anguilla, Bermuda, British Virgin Islands, Cayman Islands, and Turks and Caicos Islands). Aruba, Mexico, Venezuela, Colombia, the Netherlands Antilles, the Dominican Republic, and Puerto Rico are observers. Six member states are considered more developed countries (Bahamas, Barbados, Guyana, Jamaica, Suriname and Trinidad and Tobago) and eight countries are considered less developed countries (Antigua and Barbuda, Belize, Dominica, Grenada, Haiti, St. Lucia, St. Kitts and Nevis, and St. Vincent and the Grenadines).

CARICOM economies have contracted their debt mainly from external sources. However, in some cases, notably Barbados, Jamaica and St. Kitts and Nevis, countries have increasingly sought funding in domestic financial markets.

Debt flows take mostly the form of multilateral and bilateral loans and supplier credit. However, commercial bank loans are becoming important in some economies representing up to a quarter of total debt obligations.

The accumulation of debt has been shown to be detrimental to growth and welfare. The 'mainstream' transmission channels include, among others, uncertainty, increases in the cost of finance, expectation of higher taxes, crowding out of public and private investment, and the effects of debt overhang on the rates of return.<sup>4</sup>

From my point of view, the accumulation of debt has one overriding effect. It changes the role of institutions and the focus of economic policy in a fundamental way. Debt accumulation leads to a situation where debt management becomes the main objective of economic policy. All other objectives are rendered captive to debt management. In particular, this entails the separation of government from its traditional functions such as the provision of public goods and services. It also means the creation of a financial system for the purpose of recycling government paper. Ultimately, debt accumulation dissociates the financial from the productive sphere in such a way that the development of productive activity ceases to be the focus of economic policy.

The analysis of the generation and accumulation of debt is generally carried out using a budget constraint or a current account identity. The results are well known.

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4 See, R. Blavy, *Public Debt and Productivity: The Difficult Quest for Growth in Jamaica*. IMF Working Paper. WP/06/235. October 2006.

This first approach leads inevitably to placing the burden of the adjustment on governments. The government is the responsible party. Within this approach sustainability implies that the rate of interest does not exceed the rate of growth of the economy and that budgets are balanced.<sup>5</sup>

Placing the focus on the external sector leads to the conclusion that debt accumulation depends rather on export performance. In this case debt sustainability is achieved when the rate of growth of exports does not exceed the interest rate and the trade balance is in equilibrium.

When all relationships within an economy are considered and made visible and are shown to be consistent with one another, it becomes clear that the accumulation of debt cannot be explained solely by recourse to the budget constraint or the external sector, in isolation from one another. Rather, debt is explained by the interaction and relationship between the budget constraint and the external sector. As debt accumulates, debt levels become eventually unsustainable.

The starting point is a monetary one. The development of smaller economies depends to a great extent on the acquisition of a means of payments accepted in international transactions, which they themselves

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5 A budget deficit is said to be unsustainable when it leads to uncontrolled increases in the public debt or when interest rates are perceived as being too much of a burden as they are imposed on taxpayers through excessive tax rates or unequal distribution of the burden of the debt. Within the budget constraint approach the concept of fiscal sustainability is examined using an equation that relates four variables: government expenditures, government revenues, rate of growth of real GDP, the real interest rate and the outstanding public debt. More specifically the equation says that the primary budget surplus as percentage of GDP equals the difference between the real interest rate and real GDP growth multiplied by the share of public debt to GDP. There are several approaches to sustainability. Two of the most common approaches found in the literature include the accounting approach and the present value constraint approach. See, N. Chalk, and R. Hemming (2000) "Assessing Fiscal Sustainability in Theory and Practice" IMF Working Paper 00/81. The most common practical methods to compute sustainability in the case of developing economies include: (i) the method of the fiscal deficit-growth gap, (ii) the financial gap method; (iii) the intertemporal budget restriction; (iv) the constant patrimony method; (v) the primary fiscal gap method.

cannot issue. Smaller economies can only build their economic infrastructure and develop by importing capital and raw materials as well as technology. It follows that countries must earn the foreign exchange required to finance their imports. In other words, they must export or, more to the point, their export potential must be commensurate with that of their import capacity.

As a result, over the long run countries must maintain equilibrium in the balance of payments or at least in the basic balance. Countries can only grow over the long run at rates of growth compatible with their external position. In this sense countries are said to be balance-of-payments constrained. Or to put it another way “countries’ performance in overseas markets, and the response of the world financial markets to this performance, constrain the rate of growth of the economy to a rate which is below that which internal conditions would warrant” (McCombie and Thirlwall, 1994).<sup>6</sup>

Debt increases when the fiscal stance exceeds the limits imposed by this fundamental constraint, that is, governments do not spend too much or too little in relation to the constraint. Rather they over or under spend according to the limits imposed by the external sector. This implies that debt can increase because government is spending or because the performance of exports is deteriorating and net capital flows cannot fill the gap or because of a combination of both.

This has far reaching policy implications. For one thing fiscal policy objectives and targets have to be commensurate with the existing possibilities of the external sector. Also any fiscal reform that does not take into account the performance of the external sector is bound to fail. Finally, achieving a ‘sustainable’ debt position is a difficult task. It requires the combination and synchronization of short-term objectives mainly related to fiscal policy with long term ones which pertain to the external sector.

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6 J.S.L. McCombie and A.P. Thirlwall, (1994) *Economic Growth and the Balance of Payments Constraint* (New York: St Martin’s press).

The aim of this paper is to present an analysis of debt by using a consistent stock-flow framework and to apply it to CARICOM's case. In this sense it follows in the tradition developed by Wynne Godley and Wynne Godley and Francis Cripps (1983).<sup>7</sup>

The paper presents the stylized facts of public debt in CARICOM. It then derives the conditions for debt accumulation and debt sustainability. These are that the fiscal stance of the government should not exceed the export performance ratio and that the present value of interest payments should be less than the future discounted stream of income flows. It proceeds to test these conditions in relation to CARICOM. Finally it addresses the consequences of debt accumulation and debt reduction strategies.

## 2.0 The Public Debt and its Stylized Facts

The public debt stock in CARICOM has, with a few exceptions (Guyana and Trinidad and Tobago), steadily increased in the past three decades, especially in the case of the smaller economies of the region, namely in the Member States of the Organization of Eastern Caribbean States (OECS), see Table 1.

In the past decade the stock of outstanding debt for the larger-sized economies has increased on average, from 60% in 1995 to 79% of GDP in 2005. Among these, Jamaica and Guyana exhibit the highest indebtedness ratios (144% and 140% of GDP, respectively, for 2005).

In the case of the smaller economies the stock of debt increased from 26% to 106% of GDP for the same period. St. Kitts and Nevis, Dominica, and Grenada exhibited the highest debt to GDP ratios (173%, 107% and 109% respectively for 2005).

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7 W. Godley, and F. Cripps, (1983) *Macroeconomics*. New York: Oxford University Press.

Table 1. Selected CARICOM Countries Total Debt as a Percentage of GDP 1980-2005

Total Debt as % of GDP	1980	1990	1995	2000	2005	1990-1995	1995-2000	2000-2005
Anguilla	...	13.3	11.6	15.1	25.3	13.2	11.2	19.6
Antigua and Barbuda	...	75.4	57.9	119.7	103.4	63.8	68.7	117.6
Aruba	...	...	...	28.5	46.3	42.6	35.1	41.8
Barbados	10.1	62.7	43.6	71.4	74.6	34.7	68.8	83.0
Belize	...	...	...	51.6	84.3	...	19.9	68.8
Dominica	...	49.5	46.9	114.9	106.9	48.4	54.4	119.1
Grenada	...	39.7	34.7	58.2	109.4	36.7	36.1	91.7
Guyana	100.7	459.3	330.8	167.4	139.6	440.9	217.2	155.3
Jamaica	56.4	131.1	96.6	107.8	143.5	124.9	92.2	141.2
Netherlands Antilles	...	...	...	72.8	84.4	...	70.2	77.9
St. Kitts and Nevis	...	25.1	23.2	114.4	173.0	24.5	48.9	152.7
St. Lucia	...	16.9	20.7	40.5	65.1	19.1	25.1	56.3
St. Vincent & the Grenadines	...	28.1	33.5	70.0	78.7	31.6	40.8	73.9
Suriname	...	...	...	54.3	22.4	...	9.0	35.7
The Bahamas	8.2	29.0	43.6	37.6	46.2	40.5	41.7	42.0
Trinidad and Tobago	10.2	...	34.2	20.6	8.9	5.7	26.5	15.2
Average	...	...	64.8	71.6	82.0	71.3	54.1	80.7
Average OECSa/	...	...	25.8	75.0	105.6	25.1	38.3	94.3
Average CARICOM	...	...	64.8	74.5	84.4	73.7	54.3	83.7
Average CARICOMb/	...	...	40.6	67.4	80.1	40.3	41.8	78.2

**Note:** a/Includes data for domestic debt from 2000 to 2005 for the OECS. b/ Excludes Guyana.

**Source:** On the basis of official information.

On a closer inspection, the analysis of the available data shows that most countries were able to reduce or maintain fairly constant debt levels in the first half of the 1990's, but that the second half saw unprecedented levels of expansion for all economies with the exception of Guyana and Trinidad and Tobago, see Figures A1-A8 in Appendix 2.

Trinidad and Tobago was able to reduce its debt due to the good performance of the oil sector which is the mainstay of the economy. Guyana managed to reduce its debt stock mainly as a result of the Highly Indebted Poor Country (HIPC) initiative which was launched in 1996.

According to the HIPC initiative a country could qualify for debt relief if its GNP per capita was equal or less than \$695 and if its debt burden was unsustainable (a net present value of the debt-export and debt-government revenue ratios in excess of 200-250% and 280% respectively). The sustainability criteria were revised and reduced to 150% of exports and 250% of government revenue later on in 1999.<sup>8</sup> Guyana qualified for the HIPC initiative in 2007 and as a result its debt obligation payments (3% of GDP) and interest rates (roughly 1%) are one of the lowest in CARICOM.

With a few exceptions (notably Bahamas, Barbados, Jamaica and St. Kitts and Nevis) the debt is mainly financed from external sources, that is public debt is equivalent to external debt. According to the available information, the bulk of the external debt is held by the central government representing more than 80% of the total.<sup>9</sup>

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8 The HIPC initiative granted debt relief to the 'world's poorest and most indebted countries to reduce the constraint on economic growth and poverty reduction.' The HIPC initiative granted debt relief after a three-year proven reform record. In 1999, developed countries introduced the enhanced HIPC which, besides lowering the sustainability threshold, also provides greater debt relief and access to it. Currently 28 countries benefit from the HIPC initiative.

9 The decomposition of total debt by borrower category is not available in the cases of the Bahamas, Belize, Jamaica, Guyana, Trinidad and Tobago and Suriname). Bahamas and Belize provide data for the decomposition of public sector debt. In both cases, the central government account for 85% and 95% of total public debt.



The decomposition of external debt by creditor category shows that multilateral sources are the main source of debt finance. (See Appendix A1 and A2). However, their importance has declined over time. On average OECS Member States financed more than half of their public debt through multilateral institutions in 1990 but roughly a third in 2005. Bilateral sources have also lost importance (26% and 14% of the total in 1990 and 2005). Contrarily commercial banks have gained (4% and 26% of the total in the same period).

For the OECS Member States, where the data are available, the rise in importance of commercial banks as a source of finance closely coincides with the increase in interest payments and in debt accumulation. The correlation coefficient between both is statistically significant. This may be indicative of the fact that economies with higher debt levels have a higher risk of default and thus pay a higher risk premium. As well the greater the risk premium the greater the debt stock. The feedback between debt stock levels and interest rates is obviously conducive to a financial 'Ponzi' type regime.

As indicated previously, not all economies have turned to external sources in order to finance their debt. The Bahamas, Barbados, Jamaica and St. Kitts and Nevis have made explicit attempts to finance their debt from internal sources and, in fact, the stock of domestic debt represents more than 50% of the total. This is shown in Figure A9 in Appendix 2 for Barbados, Jamaica, and St. Kitts and Nevis.

For Jamaica, at the end of 2005, the domestic debt stock was held mainly in short term instruments (82% of the total with a 1-5 year maturity profile) denominated in local currency (73% of the total). Moreover, more than half of the domestic debt instruments had a variable interest rate. In the case of Barbados, the domestic debt is held in long term instruments with a fixed rate denominated in domestic currency.

In the case of the OECS, domestic debt consists of Treasury bills and commercial bank loans (30% and 40% on average). Also, in the case of Antigua and Barbuda, unpaid contributions represent an important part of the domestic stock. Treasury bills are placed in the Regional Government Securities Market.

The rise in the stock of debt has been accompanied by an upward trend in debt service payments, particularly for Belize and the OECS. In the case of the OECS, debt service payments represented on average

2% and 3% of GDP and 13% and 35% of exports in 1990 and 2005 respectively. The decomposition of the debt service into interest payments and principal shows that the former account for the bulk of the increase (see Figure A10 in Appendix 2).<sup>10</sup> Interest rate payments increased generally around the period that commercial banks began to play an important role as creditors to the OECS governments. For Belize, the rise in interest payments is accounted for by the evolution of the principal.

On the contrary, in the cases of the Bahamas, Barbados, Jamaica and Guyana, debt service payments declined. This was in response to the HIPC initiative in the case of Guyana and to adjustment efforts in the cases of the Bahamas, Barbados, and Jamaica that date to the beginning of the decade of the 1990s.

The decomposition of the debt service into its different components shows a reduction in amortization and interest rate payments. In the case of Jamaica, interest payments as a percentage of exports of goods and services declined from 13% in 1990 to 5% in 1993 and have remained around that level.

### 3.0 The Analysis of Debt:<sup>11</sup> Some Preliminaries

The starting point for this analysis is that of a full steady state. In a full steady state or stationary equilibrium, all stock and flow variables are constant (full equilibrium). In the case of a closed economy this means that the government budget must be in balance. In other words, the government's financial balance ( $FB_g$ ) must be equal to zero,

$$FB_g = 0, \quad (1)$$

In the case of an open economy this condition also applies to the external sector, that is, a full steady state in an open economy requires that the fiscal accounts and the external sector be balanced. That is,

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10 The computations of Figure 10 are based on official data from the Eastern Caribbean Central Bank (ECCB).

11 The analysis follows Godley and Cripps (1983).

$$FB_g = 0 \text{ and } FB_{es} = 0 \quad (2)$$

where,  $FB_{es}$  is financial balance where the external sector.

In a case where stock variables are constant but flow variables can change, equilibrium requires that the budget deficit be equal to the external sector deficit where  $S_t$  is the stock variable. In other words,

$$FB_g = FB_e \quad (3)$$

As pointed out by Oates (1966, p.493), in such a situation the stock of net financial assets is equal to zero and ‘whatever financial assets are being injected into the system by the budget deficit are simultaneously drained out by the deficit in the trade balance.’<sup>12</sup> It follows that from Eq. (3) the level of income is,

$$FB_g = FB_e \Leftrightarrow C_g - T = M - X \quad (4)$$

where,  $C_g$  is government consumption,  $T$  is taxes,  $M$  is imports and  $X$  is exports.

Assuming that the government’s income and imports depend on income (i.e.,  $T = \theta y$  and  $M = \mu y$ ), it can be shown that,

$$FB_g = FB_e \Leftrightarrow C_g - \theta y = \mu y - X \Leftrightarrow C_g + x = \mu y + \theta y \Leftrightarrow y = (C_g + X) / (\theta + \mu) \quad (5)$$

The derived expression in Eq. (5) is termed the Augmented Fiscal Stance (AFS). It determines the level of income coexistent with stock equilibrium. This level is dependent on government expenditure and the average tax rate and on exports and the average propensity to import.

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12 W.E. Oates, “Budget Balance and Equilibrium Income: A Comment on the Efficacy of Fiscal and Monetary Policy in an Open Economy.” *The Journal of Finance*, Vol.21, No.3. (Sep., 1966), pp. 489-498.

Eqs. (4) and (5) can be used to derive the conditions for the generation and accumulation of debt. This task is undertaken in the following section, using as a starting point, the budget constraint as is customary in the literature on the subject. The analysis can be undertaken as well using the external sector as a starting point. Ultimately, in the Section, the adoption of a quasi steady state implies that the budget and external sector constraints are affected by the same variables.

#### 4.0 The Generation and Accumulation of Debt

The budget constraint states that the difference between government expenditure and income must be ‘financed’ by debt or the issue of fiduciary currency. That is,

$$C_{gt} - T_{gt} + (1+i_t)D_{t-1} + (1+r_t)e_t D_{t-1}^* = \quad (6)$$

$$D_t + e_t D_t^*$$

where,

- $C$  = government consumption
- $T^g$  = Tax Revenue
- $i_t^g$  = interest rate on the domestic currency denominated debt
- $r_t$  = interest rate on the foreign currency denominated debt
- $D_t$  = stock of domestic debt
- $D_t^*$  = stock of foreign debt
- $e_t$  = nominal rate of exchange.

Assuming that uncovered interest rate parity holds and that  $e_t=1$ , Eq. (6) can be expressed as,

$$B_t = (1+r_t) B_{t-1} + (C_{gt} - T_t) \quad (7)$$

where,

$$B_t = D_t + D_t^*$$

Taking into account that tax revenues and imports are a function of income ( $T = \theta y$  and  $M = \mu y$ ), the level of income is given by the quasi steady state developed in the previous section, Eq. (7) becomes,

$$B_t = (1+r_t) B_{t-1} + (C_{gt} - \theta (C_{gt} + X_t))/(\theta + \mu) \quad (8)$$

The variables in Eq. (8) can be standardized in relation to nominal income ( $P_t Y_t$ ) with the help of simple algebra. That is,

$$\begin{aligned} B_t/P_t Y_t &= (1+r) (B_{t-1}/P_t Y_t) + \\ &(C_{gt} - \theta (C_{gt} + X_t))/(\theta + \mu) (1/P_t Y_t) \end{aligned} \quad (9)$$

where  $P_t$  = price level  
 $Y_t$  = real output

Further manipulation of yields,

$$\begin{aligned} (\mu y + \theta x_t) + (\mu + \theta) (1+r_t - \pi_t - y_t) b_{t-1} &= \\ b_t (\mu + \theta) \end{aligned} \quad (10)$$

where,  $\pi_t = P_t - P_{t-1} / P_{t-1}$  and lower case letters for  $C_{gt}$ ,  $X_t$  and  $B_t$  refer to each of these variables standardized by nominal income.

From Eq. (10) it can be easily seen that the government is able to meet its debt if the limit of the mathematical expectation of the debt is equal to 0 as  $t$  tends to infinity.

$$\lim_{t \rightarrow \infty} E(b_t (\mu + \theta)) = 0 \Leftrightarrow (\mu + \theta \lim_{t \rightarrow \infty} E(b_t)) = 0 \quad (11)$$

$t \rightarrow \infty$

Two necessary and sufficient conditions satisfy Eq. (11). These are:

$$(\mu g_t - \theta x_t) < 0 \Leftrightarrow \mu g_t < \theta x_t \Leftrightarrow C/\theta < X_t \mu \quad (12)$$

and

$$r - \pi - y_t > 0 \Leftrightarrow r < y_t + \pi \Leftrightarrow r < (Y_t - Y_{t-1})/Y_{t-1}$$

$$\Leftrightarrow r < ((Y_t/Y_{t-1}) - 1) \Leftrightarrow Y_t > (1+r)Y_{t-1} \Leftrightarrow Y_{t-1} < Y_t / (1+r)$$

The analysis developed indicates three important facts relating to debt generation, stabilization and accumulation. First, an increase in debt occurs when both the fiscal accounts and the external sector are in a deficit position. Alternatively this can be reformulated by stating that an expansion of the fiscal stance above GDP and a deterioration of the export performance ratio are two preconditions for the increase in debt.<sup>13</sup>

As stated earlier, the fiscal stance is defined as government expenditure divided by the tax ratio (tax revenue over GDP). Formally,

$$FS = G / (T/GDP) \quad (13)$$

where,

$$FS = \text{fiscal stance.}$$

$$G = \text{government revenue.}$$

$$T = \text{total tax revenue.}$$

$$GDP = \text{Gross Domestic Product.}$$

When the fiscal stance is neutral, tax revenue covers government expenditure,  $G=T$  and the fiscal stance is equal to  $GDP$  ( $FS=GDP$ ). The fiscal stance is said to be expansionary when  $G>T$  and  $FS>GDP$ . It is restrictive if  $G<T$  and  $FS<GDP$ .

For its part, the export performance ratio is measured by the ratio of exports to the average propensity to import (i.e. the ratio of imports to GDP). Formally,

$$EPR = X / (M/GDP) \quad (14)$$

where,

$$EPR = \text{export performance ratio.}$$

$$X = \text{exports of goods and services.}$$

$$M = \text{imports of goods and services.}$$

$$GDP = \text{Gross Domestic Product.}$$

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13 The consideration of a non quasi steady state does not alter this analysis fundamentally.

When exports are equal to imports, the export performance ratio is equal to GDP ( $EPR=GDP$ ). Export performance will improve when  $X>M$  and  $EPR>GDP$ . The  $EPR$  will deteriorate when  $X<M$  and  $EPR<GDP$ .

The fiscal stance and the export performance ratio can be computed in terms of percent deviation from GDP. A value of 0 would indicate a state of external (fiscal) equilibrium. A value greater than 0 in percentage shows the percent deviation of the fiscal and external accounts from their equilibrium positions.

A positive (negative) deviation for the fiscal stance determines the extent to which it is expansionary (contractive) relative to a balanced position. Moreover, a positive (negative) deviation for the export performance ratio shows the extent to which the surplus (deficit) in the current account exceeds its balanced position.

Second, the analysis shows that an economy will be able to liquidate its debt over time if the fiscal stance is less than the export performance ratio. The economy will accumulate debt over time if the fiscal stance exceeds the export performance ratio. In addition, the economy will maintain its current debt levels if the fiscal stance equals the export performance ratio.

Third, the analysis shows that an economy will exhibit sustainable debt levels if the rate of interest is less than the rate of growth of output. In other words the future streams of income flows must exceed the present ones by value of the interest payments of that income flow. From the point of view of this paper unsustainability follows from debt accumulation. As a result the first condition is the crucial one.

It is important to note that these conditions could have been derived as well by starting from the financial balance for the external sector. As stated by Eq. (5) above, in a quasi steady state the government and external sector balances are equal. The change in perspective would not modify the conclusions regarding the conditions for debt stabilization stated in this section.

## **5.0 Testing for the Stock-Flow Debt Conditions:**

### **The Evolution of the Fiscal Stance**

In the case of most CARICOM countries the fiscal stance ( $FS$ ) has been expansionary throughout the decade of the 1990s, as the  $FS$  has

always surpassed GDP (see Figures A1-A8 in Appendix 2). Moreover, it has been increasingly expansionary throughout most of the latter half of the decade of the 1990s.

All countries with the exception of Antigua and Barbuda, St. Kitts and Nevis, and St. Vincent and the Grenadines adopted an increasingly expansionary fiscal stance roughly close to the second half of the decade of the 1990s. Antigua and Barbuda, St. Kitts and Nevis, and St. Vincent and the Grenadines increased their fiscal stance in the middle of the 1980s. Further, all countries witnessed an acceleration of the fiscal stance towards the end of the 1990s.

The behaviour of the fiscal stance was sustained in most cases by increases in both current and capital expenditures. Capital expenditures played an important role in the cases of Belize, Dominica, Grenada, St. Kitts and Nevis, and St. Vincent and the Grenadines. In these cases the government opted to expand capital expenditures as a policy decision to boost aggregate demand and growth.<sup>14</sup>

It should also be taken into account that increased capital expenditures in St. Kitts and Nevis's represented reconstruction outlays to offset the damage inflicted to the economy by Hurricanes Luis and Marilyn (1995) and Georges (1998). For its part, Dominica's capital expenditure increased as part of a policy of structural adjustment and change.

Current expenditures played a significant role in Antigua and Barbuda, Dominica, St. Kitts and Nevis and St. Vincent and the Grenadines in the case of the OECS and in Barbados, Guyana and Jamaica. In the case of Antigua and Barbuda, interest payments on the stock of debt which began to cumulate in 1996 were the main factor behind the rise in current revenues and indeed of the fiscal position of the government. Interest rate payments widened the fiscal disequilibrium and fed into the debt stock. In turn, the higher the debt stock contributed to larger interest payments.

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14 St. Vincent and the Grenadines embarked on a series of infrastructure projects during the late 1990's including the Canouan Airport, the central highway, a vegetable market and banana irrigation. See, WTO, TPR, SVT, 2001.



A similar story can be told in the case of Dominica with the difference that in the case of Dominica, capital expenditures to transform and diversify the economy resulted in a higher debt stock, interest payments and hence current revenues.

St. Kitts and Nevis and St. Vincent and the Grenadines' current expenditures were driven by increases in the wage bill.<sup>15</sup>

Barbados' expansionary fiscal stance is explained by a reduction in tax revenues lasting from 1996 to 2000, and the rise in current expenditures thereafter. The reduction in tax revenues coincides with the introduction of the value added tax in 1997. The rise in current expenditures is mainly attributed to higher wages meant to compensate for salary cuts that took place a decade earlier.<sup>16</sup>

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15 St. Kitts and Nevis' current expenditures also responded to expenses related to the St. Kitts Sugar Manufacturing Corporation, and the duplication of government services. Also, available information indicates that in the late 1990s the government increased public sector wages by 10%.

16 In 1991 Barbados implemented a stabilization package centered on restraining the growth of aggregate demand in order to reduce the pressure on the balance of payments. Demand was curbed by monetary and fiscal means. On the fiscal expenditure side nominal wages were cut and frozen and public employment reduced. On the revenue side a surtax termed the "stabilization tax" was introduced in addition to consumption taxes and levies and at the same time the authorities reduced the rate of CARICOM's common external tariff. The Valued Added tax was introduced on January 1, 1997. It replaced 11 taxes including a consumption tax, a stamp duty tax, and surcharges. The VAT included a number of tax exempted items. According to Howard (2001, p. 234) the Barbadian government projected a fall in the revenue yield as a consequence of the introduction of the VAT. The 'strengthening' of social expenditures has been one of the policy development goals of Barbados since the 1960s. Social expenditures represented a third of government's total expenditure in 1960, increasing to half of the total in 1998. See M. Howard, (1992) *Public Finance in Small Open Economies: The CARICOM Experience* (Westport: Praeger Publishers); M.V. Williams, (2001) *Managing Public Finances in a Small Developing Economy: The Case of Barbados* (Westport: Praeger Publishers).

In the case of Jamaica the rise in current expenditures was associated with the expansion in nominal wages to counteract the effect of rising prices on public servants' purchasing power. The rise in debt service payments also contributed to the overall result.

Finally Guyana's fiscal performance was determined by transfers to state-owned firms and higher than expected utility costs.

## **6.0 Testing for the Stock-Flow Debt Conditions: The Evolution of the Export Performance Ratio**

At the same time as the fiscal stance expanded, the current account position of CARICOM countries deteriorated (see Figures A9 to A16 in Appendix 2). In fact the current account started to deteriorate at the same time that the fiscal stance became expansionary. On average the current account deficit increased from 11% of GDP in 1991 to 18% in 2005.

In the case of the OECS the current account deficit increased significantly in the second half of the 1990s mainly due to the deterioration of export performance. Exports of goods and services declined steadily from 62% of GDP in 1992 to 58% in 1995 and 51% in 2005. The decline in exports more than offset the decrease in imports (71% of GDP in 1992 to 70% in 1995 and to 67% in 2005).

For Barbados, the current account deteriorated from 1.4% to 8% of GDP between 1991 and 2005. Imports as a percentage of GDP exhibited an upward trend during the decade of the 1990s (43% and 57% in 1992 and 2001). Exports rose between 1991 and 1996 from 49% to 61% of GDP and declined thereafter to 53% in 2005.

In the case of Belize the current account deficit widened from 7% to 18% of GDP, between 1991 and 2005. Exports of goods and services as a percentage of GDP declined steadily from 68% to 54% between 1991 and 2003. For their part imports decreased from 80% to 57% between 1991 and 1998, and then reversed its trend, increasing to 67% in 2005.

Guyana witnessed a steady decline of both exports and imports as a percentage of GDP. Between 1992 and 2001 exports and imports of goods and services decreased from 151% and 180% to 115% and 133% of GDP respectively. The behaviour of the current account in the case of Guyana is atypical in relation to the rest of CARICOM countries since

the country managed to actually reduce its current account deficit which had reached levels above 40% of GDP in the late 1980's and early 1990's due to the prevailing dire economic conditions.

In the case of Jamaica the current account deteriorated from 0.7% to 10% of GDP between 1992 and 2005. As in the case of some of the other countries, Jamaica also experienced both a decline in exports and imports expressed as a percentage of GDP, with the former far exceeding the latter (45% and 62% in 1991; 94% and 97% in 2005).

In contrast, Trinidad and Tobago increased its current account surplus from 3% to 9% of GDP between 1993 and 2003. The country saw an increase in both exports and imports of goods and services (42% and 32% of GDP in 1993; 54% and 44% of GDP in 2001, respectively).

The deterioration of the current account can be captured by the export performance ratio. This measure was obtained for each CARICOM economy. Inspection of Figures A9 to A16 in Appendix 2 revealed that the export performance ratio remained roughly stable in the first part of the decade and deteriorated in the second half.

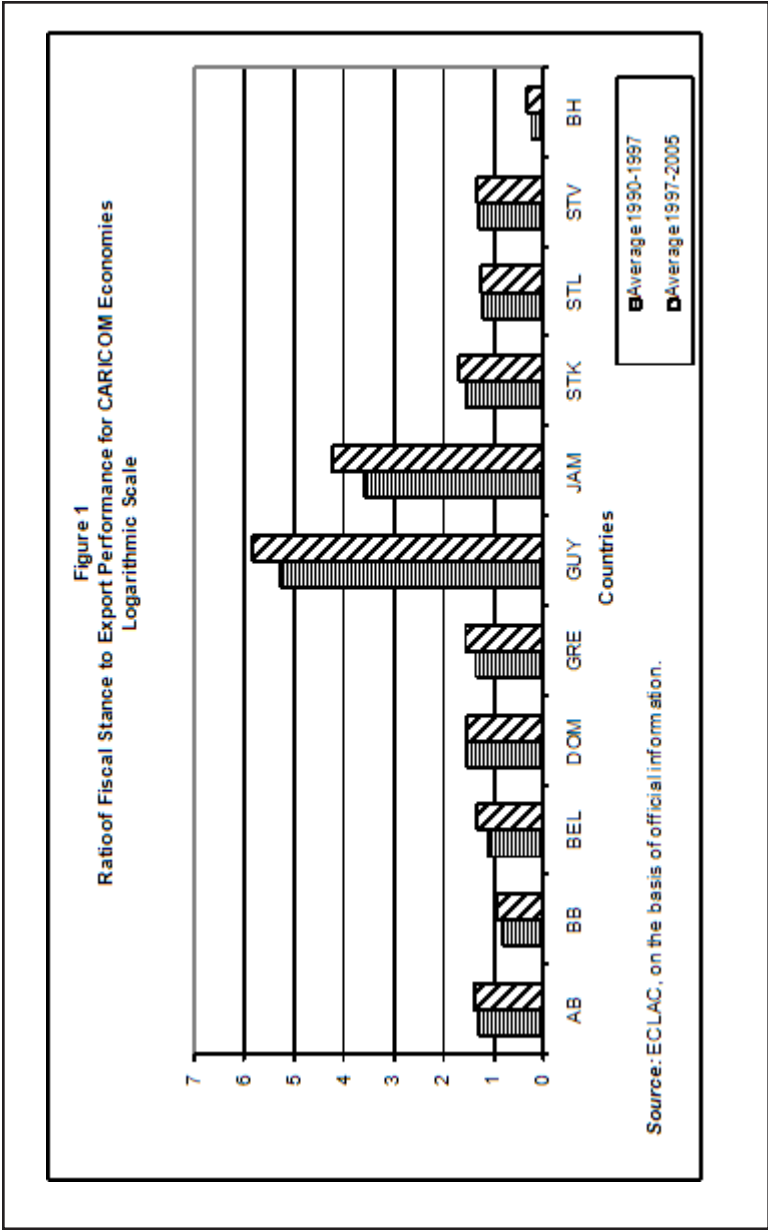
The worsening of CARICOM's export performance is reflected in the loss of market share in its major export markets both in goods and tourist services. Between 1985 and 2002, the export market share of CARICOM countries in regional trading blocs such as NAFTA and the EU (Western Europe), decreased from 0.71% to 0.27% and from 0.15% to 0.10% respectively.<sup>17</sup> It is also noteworthy to indicate that the deterioration in export performance reflects both the goods and services sector.

## **7.0 The Relationship between the Fiscal Stance and the Export Performance Ratio**

The fiscal stance has exceeded the export performance ratio for all economies with the exception of Trinidad and Tobago. This is shown in Figure 1 which plots the ratio of the average fiscal stance to the export performance ratio for CARICOM economies for which data are available for two periods 1990-1997 and 1997-2005.

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17 See for example, E. Pérez Caldentey, (2005) Export promotion policies in CARICOM Main issues, effects and implications. ECLAC, Working Paper Series, International Trade. No.56. Santiago, Chile.



The figure shows that for both periods under consideration and in all cases considered the ratio is greater than one. In other words, the fiscal stance has surpassed the export performance ratio. Thus the conditions for debt accumulation have been present since the beginning of the decade.

Also the figure shows that the ratio is greater for those countries that have the highest debt stocks to GDP ratios, Guyana and Jamaica followed by St. Kitts and Nevis. Finally as shown in Figure 1, the ratio of the fiscal stance to the debt stock as a percentage of GDP is greater for most economies for the second period under consideration, that is, for the 'debt accumulation period.'

This hypothesis is validated more generally for all CARICOM economies through a simple cross-sectional regression for the 'debt accumulation period (1997-2005)'. Simple regression analysis shows that the relationship between the debt-to-GDP ratio and the ratio of the fiscal stance is positive. The adjusted  $R^2$  is equal to 0.57 and the coefficient is positive (0.21) and significant at the 95% level of confidence (the  $t$  statistic is 3.79 which is greater than the 1.65 critical value).

## 8.0 The Sustainability Condition

The second condition derived from the stock-flow model is that in order for an economy to stabilize its debt levels, the rate of growth of output must be greater than the rate of interest. As shown in Figures 2 and 3 below, countries for which data are available complied with the sustainability condition during the period 1990-1997. However, during the second period, 'the debt accumulation period', the opposite phenomenon occurs. The rate of interest exceeds the rate of growth of output and as a result the debt levels have become unsustainable.

## 9.0 The Implications of Debt Accumulation

Debt accumulation cannot proceed indefinitely. Highly indebted countries are exposed to higher risk premia, currency instability, financial fragility, and lower levels of investment and growth.

Figure 4 below captures the inverse relationship between debt accumulation and real GDP per capita growth through a scatter plot and

**Figure 2**  
**Debt sustainability conditions for the OECS (1991-1997)**

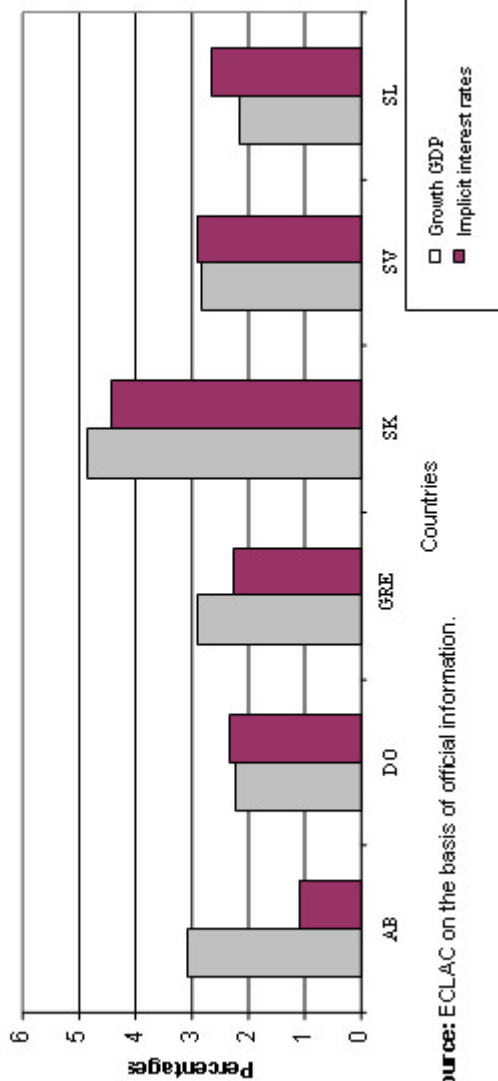
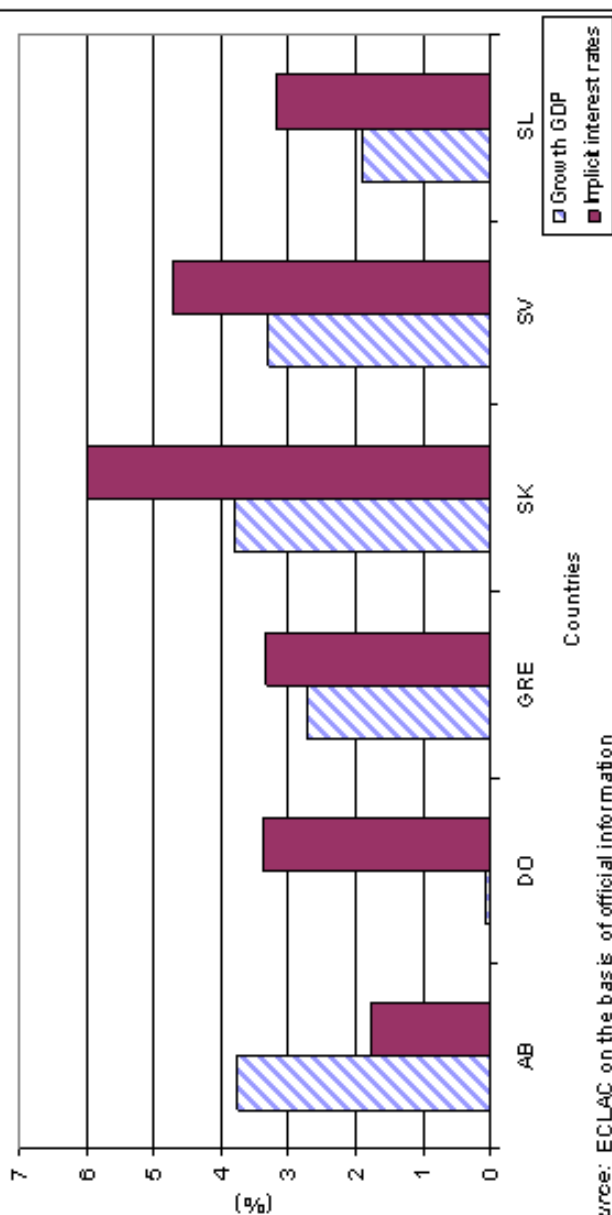


Figure 3  
Debt Sustainability Conditions for the OEC S (1997-2005)



Source: ECLAC on the basis of official information

regression analysis. The relationship between both variables is negative, indicating that an increase in the debt stock measured as a percentage of GDP is inversely related to GDP per capita growth. The regression analysis yields an adjusted  $R^2$  of 0.32 and a statistically significant coefficient of -0.03 that is, when the debt stock to GDP ratio increases by 1%, the GDP per capita growth declines by 0.3%.

The transmission channels through which debt accumulation affects growth performance include, among others, uncertainty, increases in the cost of finance, expectation of higher taxes, crowding out of public and private investment, and the effects of debt overhang on rates of return.

It also has been argued that the structure of output is also a reinforcing factor of the effects of debt on economic growth. Low levels of diversification, higher levels of concentration of production in enclaves with little spillovers to the rest of the economy and a larger sized informal economy are also characteristics that render an economy more vulnerable to the detrimental effects of debt on growth.<sup>18</sup>

The accumulation of debt has a more important effect: It changes in a fundamental sense the role of institutions and the direction of economic policy. Under conditions of accumulating debt, debt management becomes the overriding goal of institutions and of economic policy. All other objectives are subsumed and actually become captive to the debt management objective.

In CARICOM there are three manifestations of this phenomenon which can be illustrated mostly with the case of Jamaica. The first is that the government's role is divorced from the provision of public goods and services and from functional finance. The government spends its resources in managing its debt.

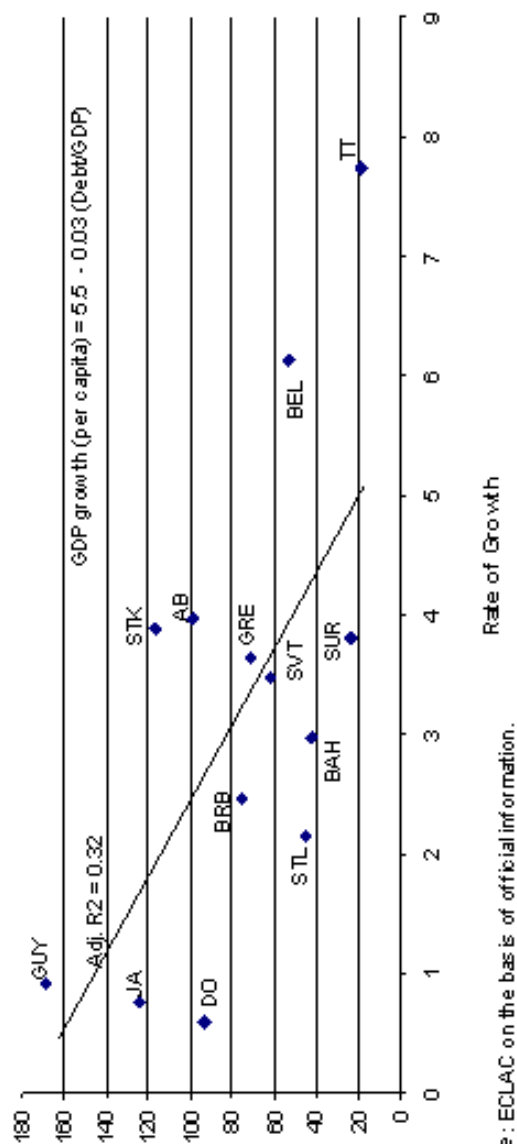
Expenditures related to debt management grew from 40% to more than 60% of the total between 1988 and 2005. During the same period the combined expenditures for education, health, housing and water supplies declined from 20% to 14% of the total. The IMF (2006) shows that public investment represented 25% of the total in 1988, and less than 5% in 2005.

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18 See, Blavy (2006).



Figure 4  
Debt Stock as Percentage of GDP and Growth of GDP Per Capita  
1997-2005



Source : ECLAC on the basis of official information.

Second, the financial sector ceases to be the provider of liquidity to the private sector. The financial system recycles debt and invests in government paper. As pointed out earlier, commercial banks have become one of the main sources of finance for the governments of the OECS, representing in some cases a quarter of the total. In the case of Jamaica, the commercial banking system holds most (roughly more than 40% of the total) of its investments in Treasury Bills and government debentures.

Third, when the domestic component of the debt stock is important, as in the case of Barbados or Jamaica, monetary policy can easily be driven by the needs of fiscal policy.<sup>19</sup> In the case of Jamaica the decline in interest rates translates into a commensurate decline in yields on government paper, which lessens the burden of interest payments. The correlation coefficient between central bank and Treasury bill and government interest rate payments is equal to 0.88 for the period 1996 to 2005.<sup>20</sup>

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19 In addition the government through the ministry of finance ‘has ultimate responsibility for the conduct of monetary policy’ (WTO, 1996). The Bank of Jamaica implements monetary policy but under the authority of the Ministry of Finance. The Ministry appoints the governor and some members of the board of directors. The Ministry of Finance manages credit policy and open market and foreign exchange operations. Finally, the central bank is the banker of the government. WTO (1996). Trade Policy Review of Jamaica, 1996. Mimeo.

20 Jamaica’s efforts at controlling government expenditure have been reinforced through a wage freeze (incomes policy). The Memorandum of Understanding (MOU) is an agreement signed between the government and the Jamaica Confederation of Trade Unions seeking to reduce the wage bill through a two-year policy of public employment and wage restraint effective April 1 2004 until March 31 2006. A new Memorandum of Understanding with the Jamaica Confederation of Trade Unions was signed in May 2006. According to this agreement wage adjustment should not exceed 20% plus an agreed provision of the government’s wage bill for 2006-2008.

This has important implications for monetary policy. For one thing, the authorities are compelled to adopt a managed float. In order to maintain the international equivalence of real rates of return on alternative assets, the nominal exchange rate must depreciate in line with the reductions in interest rates. Also, the Central Bank must accumulate reserves in order to guarantee the credibility of its policy, to effectively intervene in the money market and to undertake foreign exchange operations in order to avoid interest rates hikes when there are unwarranted movements in the nominal exchange rate.

Finally, this type of monetary policy which is eventually conducive to higher levels of economic growth is dependent on the compliance of announced fiscal targets. If the government cannot meet an announced fiscal target the stability of the currency may be undermined. This forces the monetary authorities to intervene in the foreign exchange market, provided they have an adequate level of reserves. If the central bank does not have the required reserve level or if foreign exchange interventions prove to be too costly then interest rate increases become the only option to maintain the stability of the currency. Higher interest rates compromise further the meeting of sound fiscal targets and at the same time have contractive effects on the economy.

## **10.0 The Debt Strategies: Debt Renegotiation**

CARICOM countries have addressed debt reduction through two strategies: renegotiation, including debt restructuring and forgiveness and through an increase in the primary surplus. Both were ultimately unsuccessful as they failed to address the main problem, that is, the relationship between the fiscal stance and the export performance ratio. Guyana, Grenada and Belize provide failed attempts at debt renegotiation.<sup>21</sup>

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21 There are other countries that have re-negotiated their debt. Antigua and Barbuda and Trinidad and Tobago are cases in point. Antigua and Barbuda renegotiated the terms and conditions of its high interest paying debt to domestic banks. The Antiguan government also managed to normalise gradually its relation with external creditors and to secure a significant debt write off with an European Creditor (Italy). As a result of the measures pursued by the government, the debt stock, which had been slashed by 50% in 2004 experienced further reduction in 2005. Also in

Guyana is one the beneficiaries of a recent initiative undertaken by the G-8 (London, 11 June 2005), the Gleaneagles Proposal, to cancel the debt owed by 18 Highly Indebted Poor Countries (HIPC) to the World Bank, the International Monetary Fund (IMF) and the African Development Bank.

As things stand, the G-8 initiative will result in a cancellation of debt amounting to 283 million US\$ (65\$ million to the IMF and 218\$ million to IDA). In addition, Trinidad and Tobago and the OPEC Fund for International Development granted further debt relief (123 million US\$ and 5 million US\$ respectively). Trinidad and Tobago's initiative is meant to assist with activities related to natural disaster recovery and rehabilitation.

The available data show that Guyana has a positive net resource transfer (see Table 2 below). Its net resource transfer was equivalent to 28% of GDP in 2005. In so far as the Gleaneagles initiative provides debt relief by reducing the debt service ratio which is the smallest component

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an effort to improve its debt management and to avoid continued increase in its debt stock, the government re-instituted the National Debt Co-ordinating Committee. In 2006, the government attempted to retire expensive and at the same time stimulate growth through the issue of three regional treasury bonds worth 19 million US\$ dollar The Treasury bills have a maturity date of 91 days with a 6.5% discount rate. For its part Trinidad and Tobago took advantage of the favourable external environment to its oil industry to reduce its debt stock from 48% to 41% of GDP. The government refinanced its debt obligations denominated in domestic currency by issuing low yield bonds with a value of 800 million TT\$ and a maturity of ten years. The government also repaid existing loans to the European Investment Bank and especially the Inter American Development Bank. In 2006, the government is planning to continue reducing its debt stock by repaying one Eurobond and six bilateral and multilateral loans totalling 232 million dollars. The government also expects to be debt free by the year 2030.

of the Net Resource Transfer equation, the overall impact may not be very significant (see Table 2 below).<sup>22</sup>

**Table 2. Guyana Net Resource Transfer as Percentage of GDP**

Year	Net Re-source Transfer	New Lending	Grants	Port- folio Equity	FDI	Debt Service
2002	13.3	5.7	8.2	-2.3	6.0	4.3
2003	11.5	9.1	5.8	-3.6	3.5	3.3
2004	12.4	6.9	6.5	-2.0	3.8	2.8
2005	27.9	14.2	8.5	0.0	9.8	4.6

- 22 Highly Poor Indebted Countries (HPIC) have received three debt relief initiatives. The first two focused on forgiving debt and providing a longer time frame for the repayment of the remainder of the debt. The Gleanegles proposal focuses on the forgiveness of all debt owed to three multilateral agencies (the International Monetary Fund, the World Bank and the African Development Bank). This is equivalent to 55 billion US\$ dollars in the stock of debt and roughly less than 2 billion dollars in debt service (which amounts to 0.01% of the GDP of OECD economies).

The debt relief initiative is part of the instruments to achieve the millennium development goals. However, the debt relief initiative does little to improve growth or welfare prospects. According to Arslanalp and Henry (2006) this is due to the fact that it has an insignificant impact on the net resource transfer of HIPC countries. The net resource transfer is equal to the sum of new lending, grants, portfolio equity and foreign direct investment minus the debt service. HIPC countries have a small debt service (for HIPC countries it reaches 3% on average. In the case of Guyana it is equal to roughly 1% of GDP) and receive, according to these authors, capital flows that are close to 15% of GDP. That is, HIPC countries receive more capital than they pay out.

$$NRT = NL + Gr + PE + FDI - DS \quad (15)$$

In 2005, Guyana's debt stock increased despite the Central Bank's efforts to mop up the excess liquidity through the issuance of Treasury bills bought mainly by the commercial banks. The total outstanding stock of Treasury bills increased by 4%. As well, their maturity structure shifted towards longer term maturities (79% of the total). External debt operations did not register any significant changes other than small multilateral and bilateral disbursements. These include loans provided by the People's Republic of China to finance the modernization of the sugar sector and by India for the construction of a cricket stadium to host World Cup games.

Grenada suspended payments on its external debt obligations at the end of 2004 due to the devastation caused by Hurricanes Ivan and Emily in September 2004 and 2005 (200% and 12% of GDP). In September 2005, the authorities announced an offer to exchange newly issued bonds denominated in foreign and local currency for half of its external and domestic bonds, commercial loans and guaranteed debt. The new bonds offered have a nineteen-year maturity period (i.e., until 2025) and a step-up coupon rate structure from 1% (2005 to 2008) to 9% (2018 to 2025). The interest payments began in March 2006.

Notwithstanding these efforts the external debt stock increased. This is explained by the effects of additional multilateral loans and bilateral loans granted by the government of Trinidad and Tobago. Also, as a result of the debt restructuring operations, guaranteed government debt and capitalised interest rate charges were included as part of the outstanding debt stock.

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Where,

<i>NRT</i>	=	net resource transfer
<i>NL</i>	=	New lending
<i>Gr</i>	=	grants
<i>PE</i>	=	portfolio equity
<i>FDI</i>	=	foreign direct investment
<i>DS</i>	=	debt service

See, S. Arsalalp and P.B. Henry (2006) "Policy Watch: Debt Relief". *The Journal of Economic Perspectives*. Vol.20, No.1. pp.207-220.

Belize also increased its debt stock by placing in March 2005 two bonds in international capital markets worth 137 million US\$. However, due to its low levels of credit worthiness, the country was forced to incur charges and financing fees equivalent to 1% of GDP. The fiscal situation has remained precarious and in August 2006, the authorities defaulted on their debt obligations payments (representing 27% of the government's fiscal revenue).<sup>23</sup>

### 11.0 Debt Strategies: The Increase in the Primary Surplus

The second policy alternative of slashing government expenditure, is the preferred one by the mainstream economic literature. This policy alternative is instrumentalized through cuts in public employment and/or public works in order to expand the primary surplus. The government cannot control directly interest payments. It can control at most and only partially its domestic component.

As a result, the primary surplus is viewed as a signal of the commitment of the authorities to meet their financial obligations. In this way it has become a sign of a government's solvency and a vehicle to influence agents perception of a country's fiscal solvency. Larger primary fiscal surpluses lead to country risk upgrades and to lower risk premia.

In the case of CARICOM the debt accounting exercises carried out by the IMF that champions this view show that more than half of the increase in the public debt to GDP ratios is explained by the 'deterioration of primary fiscal balances' and 39% is accounted for by the effects of interest payments and output growth<sup>24</sup> (see Table 3 below).

If an economy-wide perspective is adopted as proposed in this paper, the contraction in government expenditure may not be able to reduce the debt stock. Indeed, the contraction in government expenditure can redress the fiscal imbalance but not necessarily close the current account gap.

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23 See, Government of Belize. Most recently Belize has announced a debt renegotiation.

24 See, R. Sahay, (2005) "Stabilization, Debt and Fiscal Policy in the Caribbean". *IMF Working Paper*. WP/05/26.

Table 3. Debt Accounting for Selected CARICOM Countries

Year	Total Public Debt as % of GDP	Public Debt Accumulation	Primary Fiscal Balance Without Grants	Primary Fiscal Balance With Grants	Interest Payments	Output Growth	Price Effect	Events and Measurement Errors
<b>Very highly indebted CARICOM Countries (average)</b>								
1991-1997	72.4	0.0	0.7	-0.9	3.2	-1.7	-1.6	1.0
1998-2003 Change	123.3 50.9	8.5 8.5	4.5 3.9	2.7 3.6	5.4 2.2	-2.0 -0.3	-1.2 0.4	3.7 2.7
<b>Antigua and Barbuda</b>								
1991-1997	102.1	-1.7	-1.5	-1.9	7.2	-3.1	-2.8	-1.2
1998-2003 Change	114.3 12.2	2.0 3.8	4.0 5.5	3.4 5.3	4.5 -2.7	-3.2 -0.1	-1.2 1.6	-1.5 -0.3
<b>Belize</b>								
1991-1997	41.1	2.3	5.6	4.3	1.6	-1.3	-0.6	-1.7
1998-2003 Change	93.2 52.1	8.7 6.4	8.8 3.3	7.6 3.4	2.9 1.3	-4.2 -2.9	0.1 0.7	2.3 4.0
<b>Dominica</b>								
1991-1997	61.1	-1.1	4.7	0.7	2.3	-1.5	-2.3	-0.3
1998-2003 Change	122.0 60.9	10.1 11.2	8.2 3.4	3.5 2.9	4.6 2.3	0.8 2.2	-1.2 1.0	2.4 2.8



Table 3. Debt Accounting for Selected CARICOM Countries - Concluded

Year	Total Public Debt as % of GDP	Public Debt Accumulation	Primary Fiscal Balance Without Grants	Primary Fiscal Balance With Grants	Interest Payments	Output Growth	Price Effect	Events and Measurement Errors
<b>Grenada</b>								
1991-1997	41.5	-2.1	3.5	0.6	2.4	-2.0	-0.2	-3.0
1998-2003	108.5	11.2	7.5	4.0	3.1	-1.4	-1.5	7.0
Change	67.0	13.2	3.9	3.3	0.7	0.5	-1.3	-9.9
<b>Jamaica</b>								
1991-1997	103.0	-2.2	-8.5	-8.5	3.0	0.0	-2.3	5.6
1998-2003	142.0	6.5	-8.3	-8.3	11.8	-1.3	-0.5	4.8
Change	39.0	8.7	0.2	0.2	8.8	-1.4	1.8	-0.8
<b>St. Kitts and Nevis</b>								
1991-1997	85.6	4.5	0.1	-0.5	2.7	-2.4	-1.8	6.5
1998-2003	159.7	12.3	6.9	5.9	5.3	-2.7	-3.2	7.0
Change	74.1	7.9	6.7	6.4	2.6	-0.3	-1.4	0.5

**Source:** (2005).

The reduction in government expenditure can alter the relationship between the export performance and fiscal stance such that the export performance exceeds the fiscal stance. However, it does not guarantee that this relationship will not change over time as changes in external demand, for example a reduction in external demand, can force the government to contract its expenditures further. In a situation such as that of CARICOM where export performance has continually deteriorated since 1992, the government would be forced, in order to avoid an increase in debt, to contract its expenditures on a continual basis.

## **12.0 Conclusion**

During the second half of the 1990's CARICOM countries witnessed an unprecedented increase in their debt levels. CARICOM countries rank among the most indebted emerging market economies in the world.

The accumulation of debt beyond a certain point has a fundamental implication. It changes the role of institutions and of economic policy in a fundamental way. The management of the debt becomes the overriding focus of economic policy and institutions. Economic policy and institutions become in fact divorced from their roles in the development of real sector activity and turn their focus to the development of the financial sector.

The mainstream literature centers its analysis of the debt on two concepts: the government budget constraint and 'debt sustainability.' According to this view, debt is a by product of government spending relative to its revenue. Leaving aside debt restructuring, the recommendation to reduce debt is to increase the primary surplus.

Looking solely at the government budget constraint provides no information about the rest of the agent's constraints and can only provide an incomplete analysis. Moreover, the analysis cannot explain the accumulation of debt, which is a dynamic phenomenon, unless it assumes that the government is always 'over spending' which is a simplistic explanation.

This paper argues that the debt phenomenon should be analyzed from an economy-wide perspective. The approach taken is that of stock-flow models pioneered by W. Godley because of its transparency and because it provides a consistent picture of the economy. The approach

requires that all constraints be consistent, which is an important element missing from the mainstream approach.

The paper shows that debt is not a by-product of government overspending relative to its earnings. Rather, debt is the result of government spending relative to what the external sector allows. In other words, the real constraint of the government is not its 'budget constraint' but the constraint of the 'external sector.' Once governments are able to accumulate debt through a fiscal-external sector interaction (i.e. fiscal-external dynamics) the debt stock eventually becomes unsustainable.

The approach followed here recognizes an obvious fact. CARICOM economies are balance-of-payments constrained. More precisely, as shown in this paper, any attempt to reduce debt that does not take into account the relationship between the fiscal and the external accounts may simply fail. Debt re-structuring operations and the contraction in government expenditures are two cases in point.

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## APPENDIX

Table A1. Structure of Public Debt and Debt Indicators (Selected Countries), 2005  
(in percentages)

	Anti- gua & Bar- buda	The Baha- mas	Bar- ba- dos	Belize	Domi- nica	Grenada	Guyana	Jam- aica	St. Kitts & Nevis	St. Lucia	St. Vin- cent & the Gren- adines	Suri- name	Trini- dad & Tobago
<b>Externat Debt</b>													
Multilateral	4.5	22.0	32.4	22.3	61.2	30.2	89.0	23.9	34.7	53.0	36.3	14.7	...
Bilateral	14.5	...	1.2	16.0	19.1	16.2	9.3	14.8	12.0	7.8	13.7	83.9	...
Commercial	20.6	78.0	64.6	61.4	17.7	0.4	1.0	61.3	32.2	39.1	43.6	...	...
Export Credit	6.3	...	...	...	...	0.5	...	...	0.2	0.0	1.7	...	...
Other	60.3	...	1.8	0.3	2.0	53.1	0.8	...	21.1	0.0	6.4	1.4	...
<b>Domestic Debt</b>													
Government													
Securities	19.1	95.5	88.4	50.0	...	...	99.0	80.6	...	76.6	47.9	...	100

Table A1. Structure of Public Debt and Debt Indicators (Selected Countries), 2005- Cont'd  
(in percentages)

	Anti- gua & Bar- buda	The Baha- mas	Barba- dos	Belize	Domi- nica	Grenada	Guyana	Jam- aica	St. Kitts & Nevis	St. Lucia & the Gren- adines	Suri- name	Trini- dad & Tobago
Bank Loans	28.6	0.5	0.5	50.0	...	...	1.0	2.1	...	8.1	30.9	...
Unpaid Contributions	37.8	...	...	...	...	...	...	...	...	...	...	...
Supplier Credits	7.8	...	...	...	...	...	...	...	...	...	...	...
Other	11.7	4.0	11.2	...	...	...	...	21.5	...	15.3	21.2	...
External debt Service/GDP	3.5	...	3.7	19.4	3.4	1.8	3.1	9.1	9.8	4.3	4.5	1.9
External Debt Service/Exports	6.1	2.8	9.9	56.0	...	7.9	5.3	14.4	22.2	7.0	10.7	2.3
External Debt Service/Revenue	168.4	1.9	11.4	81.2	10.5	6.5	8.7	...	20.4	16.8	17.0	7.1

Table A1. Structure of Public Debt and Debt Indicators (Selected Countries), 2005 - Cont'd  
(in percentages)

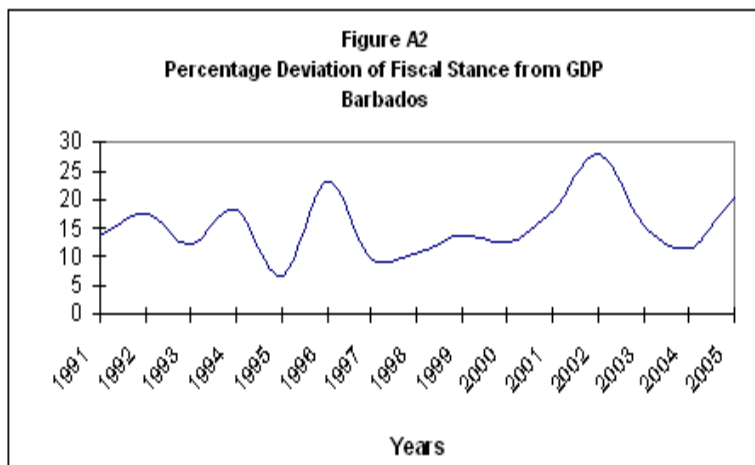
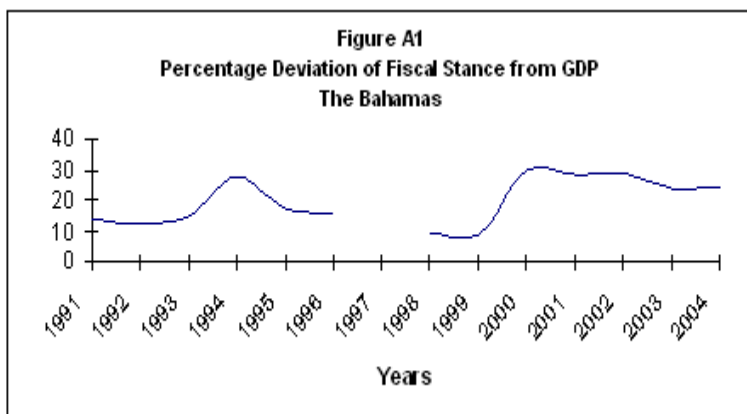
	Anti- gua & Bar- buda	The Baha- mas	Barba- dos	Belize	Dom- nica	Grenada	Guyana	Jam- aica	St. Kitts & Nevis	St. Lucia	St. Vin- cent & the Gren- adines	Suri- name	Trini- dad & Tobago
Domestic Debt Service/GDP	...	...	...	2.1	...	...	1.9	27.5	...	...	...	...	...
Domestic Debt Service/Revenue	...	...	...	4.5	...	...	5.3	98.1	...	...	...	...	...
Domestic Debt/ Total Debt	65.4	71.3	63.9	13.0	34.3	26.4	23.5	58.0	63.6	35.2	29.9	...	52.7
<b>Effective Average Interest Rate</b>													
Domestic Debt	...	...	5.5	81.4	...	...	...	36.9	...	...	...	...	...

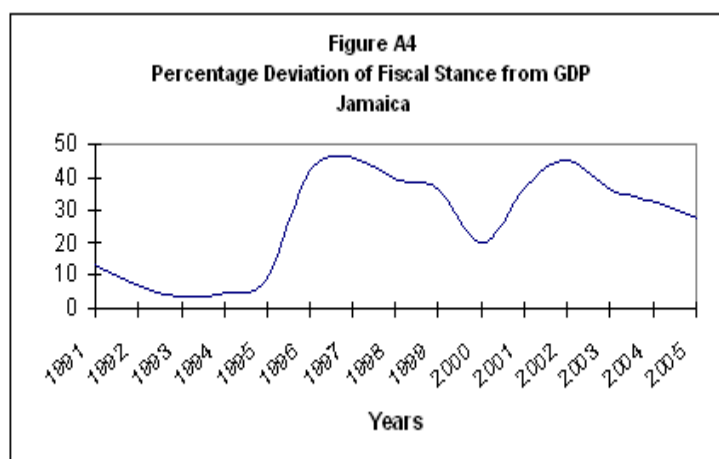
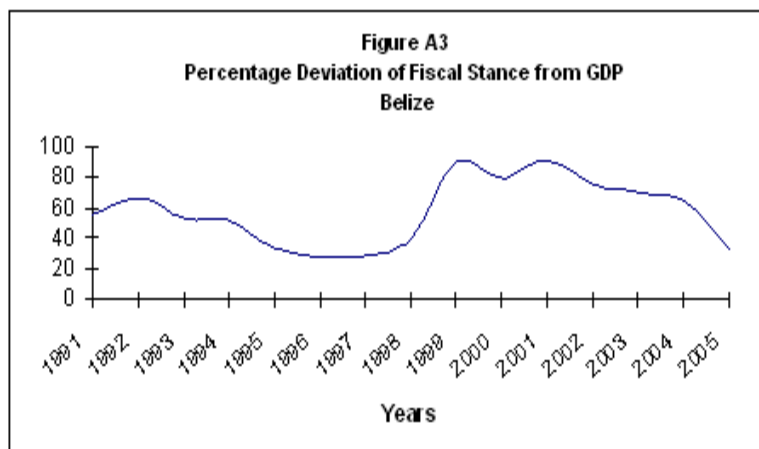
Table A1. Structure of Public Debt and Debt Indicators (Selected Countries), 2005 - Concluded  
(in percentages)

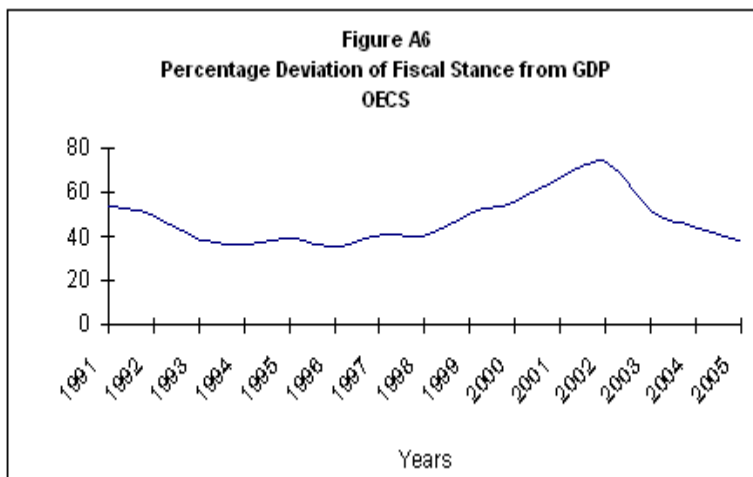
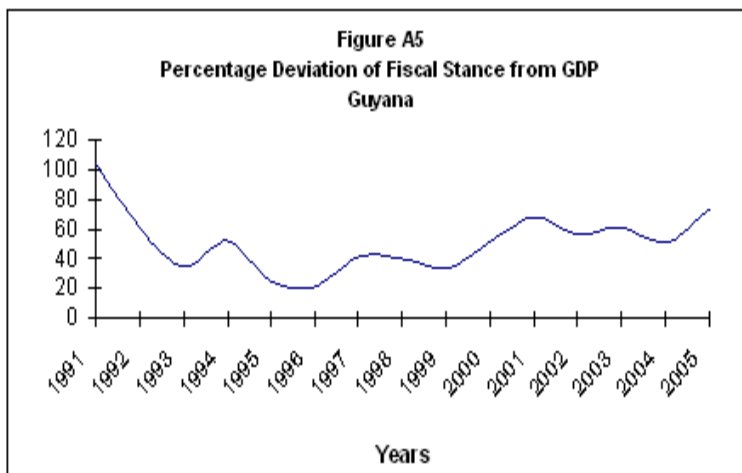
	Anti- gua & Bar- buda	The Baha- mas	Barba- dos	Belize	Domi- nica	Grenada	Guyana	Jam- aica	St. Kitts & Nevis	St. Lucia	St. Vin- cent & the Gren- adines	Suri- name	Trini- dad & Tobago
External Debt	3.2	5.4	6.6	31.2	1.9	0.8	36.6	38.0	6.8	5.4	3.4	...	7.1
<b>Interest Pay- ments/Revenue</b>													
Domestic	6.9	...	8.9	3.7	3.1	8.8	5.2	36.7	10.3	3.7	4.8	...	...
External	11.2	1.9	5.6	26.2	7.1	7.7	7.7	12.8	11.2	8.5	6.0	6.5	...

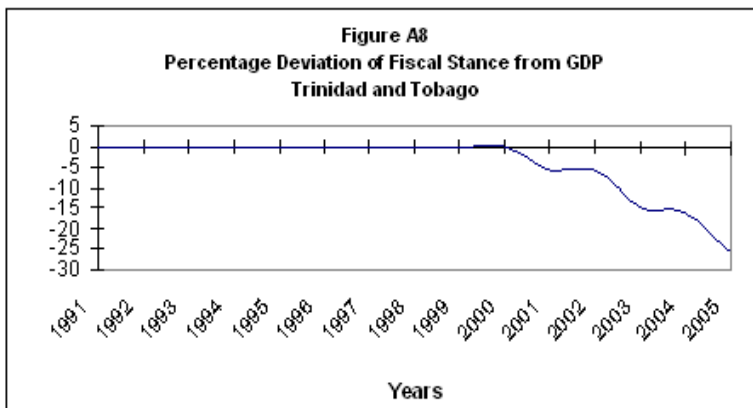
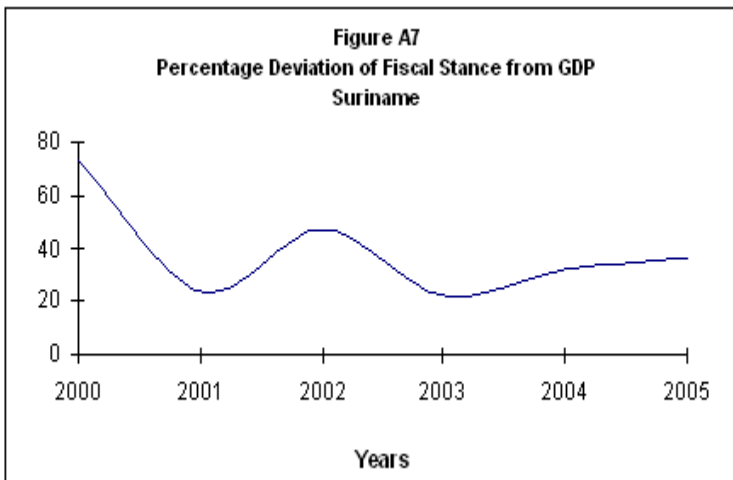
**Source:** ECLAC on the basis of official data.



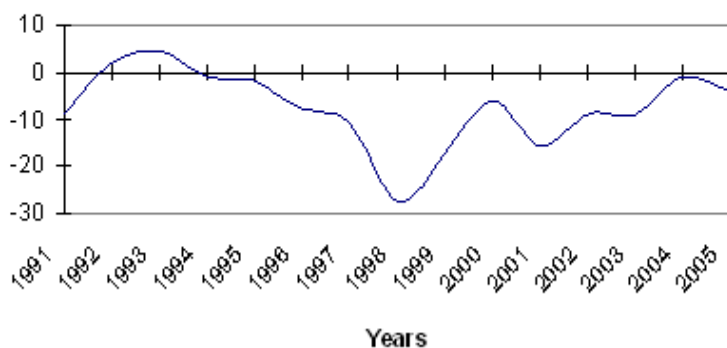








**Figure A9**  
**Percentage Deviation of External Current Account to GDP**  
**The Bahamas**



**Figure A10**  
**Percentage Deviation of External Current Account to GDP**  
**Barbados**

