GROWTH, DEBT AND FINANCE IN THE CARIBBEAN

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Table of contents

List of Tables

List of Figures

Abstract

This paper analyses the growth of debt in Caribbean countries. The paper sustains that mainstream explanations that focus on government spending are at most incomplete explanations. Debt dynamics in smaller economies are explained by the interaction between fiscal policies and the external sector. A solution to the debt problem must involve some type of fiscal consolidation but it should also take into account the constraints facing smaller economies. The fundamental constraint facing these economies is the foreign exchange constraint. In this sense smaller economies are balance-of-payments constrained economies. This means that their actual rate of growth is below that which is warranted by the prevailing internal conditions. One consequence of this constraint is that smaller economies cannot pursue fiscal policies (or for that matter fiscal reforms) that are independent of current external conditions. Indeed, the former must be attuned to the latter. An expansionary fiscal stance will translate sooner or later into a higher import demand and a current account deficit unless export performance improves.

Introduction

In the 1990's Caribbean countries have witnessed a significant increase in their debt stock, which is mainly attributed to increased government spending.[1]

This paper argues that the fiscal stance has indeed been expansionary for most Caribbean economies. It asserts however, that government spending cannot explain by itself a process of debt accumulation or the sustainability/unsustainability status of a given debt stock. The paper shows that a government deficit has a positive effect on profits, output and hence on growth. In this sense a government deficit can through its effect on growth finance its own debt.

According to the approach of this paper debt accumulation occurs when for a given level of investment, the current account deficit more than offsets the fiscal deficit. Thus, ultimately, the key variable determining the debt trajectory over time of a given economy is its external position.

The paper comprises six sections. The first section describes the current state of debt in the Caribbean. The second section examines the current debt strategies that have been adopted to deal with the debt problem and shows that these strategies are not feasible..

The third section presents a simple national accounts model showing that government spending can have positive effects on the rate of growth of an economy but that these are constrained by the current account position. More to the point, the model shows that a government can increase expenditure to the degree that external conditions will allow. As a result a government may run a deficit and increase its debt stock due simply to the deterioration of external performance.

The fourth section argues that the Caribbean illustrates a case where the fiscal and the current positions have deteriorated simultaneously. The behavior of the former cannot be understood without paying attention to the behavior of the latter. Indeed, the accumulation of debt is explained by the interaction of the current account and fiscal deficits. The fifth section sustains that the policy responses have aggravated the fiscal and the external positions.

Once it is understood that the accumulation of debt should be explained by taking into account both the fiscal and external performance it becomes clear that any purely 'fiscal' solution is inadequate and may in fact aggravate the debt problem.

To this end, the last section uses the logic of the national accounts model presented in the third section to argue that an external shock can not only lead to the accumulation of debt but can also place an economy into a Ponzi finance regime. Mainstream fiscal strategies can render the Ponzi regime self-reinforcing. The final reflections are found in the conclusion.

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[1] The accumulation of debt or more precisely the increase in the debt to GDP ratio can be decomposed into five components. These are (i) the primary balance or the difference between revenues and expenditures excluding interest rate payments; (ii) interest payments; (iii) output growth; (iv) a price effect and a (v) residue. A decomposition exercise shows that since the expansion in the fiscal stance began, the public debt to GDP ratio expanded 8.5% per year and that 4.5% (that is, more than half of the total is explained by the primary balance while interest rate payments explain 3.3% (or 39% of the accumulation of debt) (Sahay, 2004).

The current state of debt in the Caribbean

During the 1990's and in particular from the second half of the decade to the present day the debt stock of most Caribbean countries has increased significantly. On average the public debt to GDP ratio has increased from 62% to 85% of GDP from 1997 to 2003. When decomposed in terms of its internal and external component, the former represents 34% of GDP of the total while the latter has reached 54% of GDP.

Table 1: Public debt in the Caribbean				
Country	Total public debt as % of GDP 2003		Internal Debt as a percentage of GDP 2003	External debt as a percentage of GDP 2003
	1997	2003		
Anguilla	10.7	17.2	3.8	13.2
Antigua and Barbuda	107.0	151.7	68.9	83.1
Aruba	39.4	41.5	21.2	20.3
The Bahamas	46.0	45.0	31.5	5.6
Barbados	62.0	71.1	54.9	25.9
Belize	41.0	88.9	13.0	75.8
Dominica	61.0	127.0	39.4	87.6
Grenada	42.0	110.1	30.1	79.9
Guyana	211.0	172.0	….	172.0
Jamaica	103.0	142.0	85.4	56.5
Montserrat	26.0	16.4	2.8	13.2
Netherlands Antilles	64.6	90.2	…..	…..
St. Kitts and Nevis	86.0	162.0	75.4	86.6
Saint Lucia	36.0	66.1	19.1	46.9
St. Vincent and the Grenadines	48.0	76.7	25.6	51.4
Suriname	24.0	37.0	9.8	27.2
Trinidad and Tobago	52.0	28.0	….	13.8
Average	62.3	84.9	34.4	53.7
Source: on the basis of official data.				

Most of the economies (Antigua and Barbuda, Barbados, Belize, Dominica, Grenada, Guyana, Jamaica, The Netherlands Antilles, St. Kitts and Nevis, Saint Lucia and St. Vincent and the Grenadines) record some of highest debt to GDP ratios among emerging market economies. More specifically, Antigua and Barbuda, Belize, Dominica, Grenada, Guyana, Jamaica, the Netherlands Antilles and St. Kitts and Nevis rank among the 10 most indebted market emerging economies [2]

Standard sustainability criteria computations show that the debt levels will continue to rise over time. Table 2 shows the required fiscal surplus to stabilize the debt at its current level

[2] See Sahay R. Stabilization, Debt, and Fiscal Policy in the Caribbean. Preliminary Draft Presented at the International Seminar on Developmental Challenges Facing the Caribbean. Hilton Trinidad & Conference Center. June 11-12, 2004.

(Stability surplus boundary balance), the actual primary balance (the difference between revenue and expenditure excluding interest payments) and the difference between both (i.e., the sustainability gap). The stability surplus boundary balance was computed using Eq. (1) below,[3]

$$(1) \qquad S/Y = (r_i - g) D_i/Y + (r_e + e - g) D_e/Y$$

Where,

S/Y = stability surplus boundary balance
r_i = internal real rate of interest
D_i = internal debt
r_e = foreign real rate of interest
D_e = external debt
e = exchange rate depreciation

Table 2: Debt sustainability in the Caribbean 2003			
Country	Stability surplus boundary balance	Actual primary balance	Sustainability gap
Anguilla	0.56	-2.11	2.67
Antigua and Barbuda	4.13	-4.84	8.97
Barbados	5.01	-0.12	5.13
Belize	1.68	-6.14	7.82
Dominica	7.66	-2.61	10.28
Grenada	1.33	-4.61	5.93
Guyana	9.63	-9.18	18.81
Jamaica	11.80	12.20	-0.40
St. Kitts and Nevis	12.50	-2.01	14.51
Saint Lucia	2.41	-6.91	9.32
St. Vincent and the Grenadines	2.81	0.15	2.67
Suriname	0.92	-3.41	4.34
Trinidad and Tobago	0.12	1.13	-1.00
Average	4.28	-2.19	6.85
Note: Computations were carried out for the countries for which informational on all the required variables was readily available. Source: On the basis of official information.			

In all cases except in those of Jamaica and Trinidad and Tobago the actual primary balance exceeds the stability surplus boundary balance. In the case of Trinidad and Tobago this result is explained by the authorities' efforts to reduce the fiscal deficit and by its strong rate of growth in the recent past. In the case of Jamaica the current primary balance which is budgeted to increase to 13.4% of GDP for 2004 was achieved by a contraction in capital expenditures and

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[3] Eq.(1) is a modified version of Pasinetti's (1998) equation Pasinetti's formulation was applied to the European case and as a result took into account only internal debt. The version presented above includes also external debt. See, Pasinetti, L. "The myth (or folly) of the 3% deficit/GDP Maastricht 'parameter'." *Cambridge Journal of Economics*, January 1998, 22 (1), 103-116.

by the positive effect of the tax measures implemented in the months of May and June of 2003 on tax revenues (25% and 27% of GDP in FY's 2002 and 2003).

Current debt strategies

There are several available strategies to deal with debt accumulation. The most obvious one is to substantially increase the primary balance, that is, the difference between revenues and expenditures excluding interest payments. This policy alternative responds to an empirical fact. Since the expansion in the fiscal stance began, the public debt to GDP ratio expanded 8.5% per year. More than half of this total (4.5%) is explained by the primary balance while interest rate payments explain 3.3% (or 39% of the accumulation of debt). [4]

However, as the above analysis indicates, the effort required to reach sustainable fiscal positions may jeopardize long-term growth especially if it is achieved by curtailing capital expenditures. Current expenditure restraint can also lead to output and employment losses. More realistic recommendations can include a combination of 'fiscal consolidation, prudent debt management strategies, asset sales/privatization, reducing vulnerabilities to exogenous shocks and growth-enhancing structural reforms.' [5]

In practice, countries have dealt with the problem of debt accumulation by curtailing government expenditures and through fiscal reform. As seen in the regional overview most Caribbean countries have adopted a contractionary fiscal stance and a few such as Suriname, Jamaica, and Barbados have opted to implement tax measures in order to limit the size of their fiscal deficit and thus control their future debt path. Other economies such as the OECS and also Jamaica are contemplating the implementation of a more lasting and comprehensive tax reform.

The tax reform proposed by the OECS Tax Reform and Administration Commission envisages a revenue system endowed with the following characteristics; (i) parsimonious; (ii) growth enhancing; (iii) cost minimizing; (iv) broad based; (v) highly compliant; (vi) buoyant; (vii) reliable; and (vi) capable of generating surpluses and a stabilization fund. Table 3 below shows the target range for revenue for each of the existing taxes bearing in mind that the tax to GDP ratios should be within a range of 25% to 30%. The tax reform proposal would increase the floor of the tax range from 23.9% to 25.0% of GDP and the ceiling from 29.1% to 30%. The largest proposed increases are expected to be found in personal income, corporate income and property taxes. Declines are forecasted for trade and excise taxes. The transactions tax would maintain its current yield.

The higher tax revenue intake from income and corporate taxes results from the widening of the tax base, the reduction in exemptions and from more efficient implementation of the tax system. The decline in trade taxes responds to the full implementation of the Common External Tariff whereas the rise in property taxes responds to a long-standing proposal of the IMF.

Central to the tax proposal is the introduction of the Value Added Tax which would replace all indirect taxes including consumption and travel taxes. The VAT would have three rates 0%,

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[4] See Sahay R. 2004.
[5] Ibid.

10% and 15%. The zero rate applies to basic foods, medications, public transportations, computer hardware and software and exports. The zero rate is meant to make the tax a progressive one. The middle 10% rate applies to tourism related transactions (hotels, restaurants, yacht craters, boat cruises). The 15% rate would apply to all other transactions.

Table 3: Tax reform proposals for OECS countries			
Tax	**Existing range as % of GDP**		**Target GDP range as % of GDP**
Personal Income	0.9-4.7		4.0-6.0
Corporate income	2.7-5.2		4.0-7.0
Property tax	0.1-1.1		2.0-4.0
Trade and excise	6.0-14.4		3.0-5.0
Transactions	9.1-14.5		10.0-14.0
Total	23.9-29.1		25.0-30.0
Non tax revenue	2.0-7.5		3.0-5.0
Net impact measured in current EC$ of the proposed reform			
Country	**Direct taxes**	**Indirect taxes**	**Total net impact**
Anguilla	….	20.0	20
Antigua and Barbuda	-11.0	34.4	23.4
Dominica	0.0	2.0	2.0
Grenada	0.0	20.0	20.4
Montserrat	0.0	12.2	12.2
St. Kitts and Nevis	-4.3	16.6	12.3
Saint Lucia	-7.2	38.8	31.6
St. Vincent and the Grenadines	-8.3	6	-2.3
ECCU	-30.8	151.2	120.2
Source: On the basis of official information.			

Overall, the experience with the VAT has been relatively successful in smaller economies Table 4 below shows selected Latin American and Caribbean countries, the date of introduction of the VAT and the computed c-efficiency ratio which is high for most of these economies (i.e., above 50).[6]

Countries with a significant domestic debt stock, such as Barbados and Jamaica, have opted implicitly for using the financial system to 'liquefy' the debt. The mechanism is standard: an increase in the demand for government paper decreases its yield. In turn, when the yield declines, eventually the debt service payments also fall. This strategy was adopted in the later part of the 1990's decade in Barbados and Jamaica when the banking system started to increase and solidify its liquidity position.

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[6] The c-efficiency ratio equals the ratio of VAT revenues to GDP divided by the tax rate. Its value indicates the resulting increase in the VAT-GDP ratio when the tax increases by 1%. In the case of Barbados an increase of 1 percentage point in the tax rate would increase the VAT-GDP ratio by 1.10%.

Country	Population (millions)	Introduction of VAT	VAT rates	VAT percentage of total tax revenue	VAT Percentage of GDP	C-efficiency Ratio
Table 4: Value added tax in selected Caribbean countries						
Barbados	0.3	1997	15	32.7	9.5	110.2
Belize	0.2	1996	8			56.2
Costa Rica	3.7	1975	13		4.0	87.4
Dominican Republic	8.5	1983	12	25	4.0 (2001)	44
Jamaica	2.6	1991	15	35.8	8.8	83.5
Nicaragua	4.8	1975	15			34.6
Panama	2.7	1977	5			67.3
Trinidad and Tobago	1.7	1990	15	23.6	4.3	46.8
Sources: On the basis of official data						

In the specific case of Barbados the commercial banking system is obliged to hold a certain percentage of its assets in government debt. In addition, in the last few years the commercial banking system has increased significantly its holding of the government debt stock. In 1975, the commercial banking system held 55% of the stock of outstanding treasury bills. In 2003, it held 98% of the outstanding stock. In the commercial banks balance sheets treasury bills and other government assets have gained importance relative to other components. Between 1975 and 2003, the proportion of loans and advances as a percentage of total commercial bank assets declined from 65.5% to 42%. In contrast the proportion of Treasury Bills and other governmental assets increased from 10.2% to 18.2%.

Table 5 below shows that since the 1990's the internal debt stock of Barbados has increased as a percentage of GDP (from 29% of GDP in 1990 to 50% of GDP in 2003). The Treasury Bill rate increased from 1976 to 1995 and begun thereafter a steadily decline. Concomitantly the internal debt service as a percentage of total tax revenue declined from 11.7% in 1995 to 9.6% in 2003. It is noteworthy that this occurred roughly around the time when the fiscal stance began its upward expansion.

This strategy has important limitations as government debt absorbs liquidity that could have been used to expand output and employment. Thus, the commercial banking system prefers to lend to a secure customer such as the government, which will not default, rather than to direct its loans into more risky private sector activities. Moreover, this is ultimately a restrictive policy as it implicitly sets a floor to the decline in lending rates.

	Internal debt as % of GDP	External debt as % of GDP	Internal debt as % of total debt	External debt as % of the total	Treasury bills	Internal debt service as % of total current revenue	External debt services as % of total current revenue
Table 5: **Public debt in Barbados** **1976 – 2003**							
1976			78.4	21.6	4.5		
1980			75.1	24.9	6.19		
1985			59.2	40.8	4.58		
1990	29.7	25.0	54.3	45.7	8.06	8.4	6.7
1995	47.1	19.3	70.9	29.1	8.27	11.7	5.1
2000	43.1	20.1	68.2	31.8	3.85	11.2	4.7
2003	50.1	24.7	67.0	33.0	0.64	9.6	6.1
Note: ... not available. Source: On the basis of official information.							

Other economies such as Jamaica have outlined a detailed approach to the management of the debt. Since FY 1998/99 the authorities have adopted a debt management strategy based on the minimization of borrowing costs and have modified this strategy in FY 2003/04 to include also risk management. The main elements of the strategy are twofold. These consist mainly in isolating the debt stock from movements in interest rates and exchange rates and to develop a domestic securities market to facilitate the use of market based instruments to trade debt issues. The increase in the share of fixed rate instruments (48% of the outstanding domestic debt in March 2003 and with a target of 60% in FY 2003/04), the restriction and reduction in bonds denominated and indexed to the United States dollar (20% of the domestic debt in March 2003) and the extension in the maturity of the debt are geared to accomplish the first goal. The second goal is to be achieved by continuing with a certain amount of flexibility to place government securities in the domestic market and by anchoring traded securities to benchmark securities with higher liquidity premiums and lower carrying costs. Ultimately the success of the government in trimming the deficit will depend on growth, stability in the foreign exchange market and the monetary policy strategy.

	Domestic debt to GDP	**Treasury Bills**	**Overall weighted rate of interest**	**Exchange rate**	**Internal debt service as a percentage of current revenue**
			Table 6:		
			The behavior of debt in Jamaica		
			1992 – 2003		
1992	25.97	...	46.04	23.01	...
1993	19.9	...	49.6	25.68	...
1994	31.02	...	45.79	33.35	...
1995	29.29	34.97	48.56	35.54	...
1996	32.73	25.21	37.81	37.02	...
1997	39.28	24.63	31.93	35.59	...
1998	43.87	21.31	30.08	36.68	...
1999	59.77	18.68	24.64	39.33	39.1
2000	56.97	18.32	22.12	43.32	34.5
2001	82.44	15.7	19.46	46.19	40.1
2002	82.2	15.68	18.26	48.73	41.5

Note: ...denotes not available.
Source: On the basis of official information.

Also, as in the case of Barbados, monetary policy in Jamaica has facilitated the reduction of the debt burden. Since the middle of the 1990's the Bank of Jamaica adopted a cheap monetary policy with the explicit objective of reducing banks' operating costs and thus the cost of credit to the consumer. But at the same time it has also helped to reduce the government's debt burden. The available data presented in Table 6 above illustrates this point. From 2000 to 2002, the internal debt-to-GDP ratio rose from 57% to 82% yet the internal debt service as a percentage of current revenues increased only by six percentage points. In other words, comparatively, the government has been increasing its state of indebtedness at a lower cost due to the decline in the rate of interest.[7]

This policy can lead to unstable exchange rate movements. If the monetary authorities adopt a policy of decreasing interest rates to lower the burden of the government debt, a higher than expected deficit will mean a greater than expected decline in interest rates. In turn a greater than expected decline in interest rates will provide the basis to anticipate a larger than expected exchange rate depreciation. Holders of assets denominated in domestic currency will experience a capital loss unless they switch to assets denominated in foreign currency. Certainly holders of foreign currency will experience a capital gain.

In order to avoid capital losses and secure capital gains, agents will switch to foreign currency assets. The concomitant effects of a depreciating exchange rate on prices will force the

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[7] These findings run contrary to the standard belief, such as interest rate parity theorems, that in smaller economies Central Banks cannot affect interest rates.

monetary authority to intervene. Intervention may take the form of foreign exchange market intervention which will translate in a reduction of the monetary authorities stock of foreign reserves. This type of intervention is generally temporary and limited because the loss of reserves can result in a confidence crisis and aggravate the situation.

The alternative is to raise interest rates. However the increase in interest rates can only aggravate the fiscal situation if the bulk of the debt or a significant proportion of it is denominated in domestic currency. Hence the strategy becomes self-defeating and most likely unstable.

The general theoretical framework

Formally start with a production accounts basic national accounting identity where the level of gross national product (Y) is equal to the consumption of workers, capitalists and the government (Cw, Cc and Cg), investment (I), and net exports (X-M) less tax payments (T) (Kalecki, 1969, pp.45-52). The level of the gross national product is also equal to the sum of wages (W) and profits (Π).

(2) $Y = W + \Pi = Cw + Cc + I + (G-T) + (X-M)$

In the most simple and known case, capitalists do not consume and workers do not save. That is, Cc=0 and Cw=W. Formally,

(3) $Y = \Pi = I + (G-T) + (X-M)$

According to Eq.(3), assuming a balanced budget and balanced foreign trade, profits vary positively with investment. Alternatively an export surplus or budget deficit 'allows profits to increase above the level determined by domestic investment and consumption' (Kalecki, 1969, p.51). [8] In fact from Eq. (3) it follows that profits and output will rise (decline) as long as the sum of the government and external accounts is positive (negative). Table 7 below provides a summary of the conditions under which profits (Π) can increase above or below the level warranted by domestic investment and consumption (Πw)

In Case I, the government and the external sector run surpluses. As a result profits increase above Πw. Case IV illustrates the opposite case. Cases II and III show the conditions required for profits to increase above or below Πw. In summary $\Pi w > \Pi$ ($\Pi w < \Pi$) when (G>T) > (M<X) (expressed in absolute terms).

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[8] For Minsky,(1986, p.151) an external surplus also (deficit) induces an increase (decrease) in profits.

Table 7: Profits increase above or below the level warranted by domestic investment and consumption		
	G-T>0	**G-T<0**
X-M>0	**Case I** >0	**Case II** (i) >0 ⇔ X-M> G-T (ii) <0 ⇔ X-M< G-T
X-M<0	**Case III** (i) <0 ⇔ X-M> G-T (ii) >0 ⇔ X-M< G-T	**Case IV** <0

(4) $(\Pi - Cc) = (Cw-W) + Iw + Ic + Ig + (G - T) + (X-M)$

Eq. (3) above be used to derive the investment-savings balance, which will then be used, in turn, to obtain the accumulation accounts of the economy. That is,

(5) $(\Pi - Cc) + (W-Cw) + (T-G) + (M-X) = Iw + Ic + Ig \Leftrightarrow$

(6) $Sc + Sw + Sg + Sf = Iw + Ic + Ig$

Where,

$Sc = (\Pi - Cc) = $ savings of capitalists.
$Sw = (Cw-W) = $ savings of workers.
$Sg = (T-G) \quad = $ savings of the government.
$Sf = (X-M) \quad = $ foreign savings.

Re-arranging terms we obtain,

(7) $(Ic - Sc) + (Iw-Sw) + (Ig-Sg) = Sf$

The accumulation accounts are equal to:

(8) $(Iw - Sw) = \Delta Dw$
         $(Ic - Sc) = \Delta Dc + e\Delta Dfc - \Delta Mh$
         $(Ig - Sg) = \Delta Dg + e\Delta Dfg$

Where, D = debt (with the subscripts denoting the different sectors of the economy), Δ denoting the discrete change between t and t-1 and e the nominal exchange rate.

The accumulation accounts have a direct counterpart in the financial and foreign sectors. That is,

(9) $\Delta Mh - e\Delta Rf = \Delta Dw + \Delta Dc + \Delta Dg$
         $Sf \qquad\qquad = e(\Delta Dfc + \Delta Dfg - \Delta Rf)$

Where, Mh is money supply and Rf international reserves.

The Caribbean case

In the 1990's the fiscal deficit has increased for most Caribbean countries. The increase in the budget deficit is the result of a constant tax effort coupled with higher government expenditures.

For most Caribbean economies, the tax effort as measured by the level of the tax to GDP ratio has remained roughly constant throughout the 1990's. In the case of the OECS where a consistent data set is available from 1983 to 2002, the tax to GDP ratio has remained at the same level for two decades. The most notable exception is Barbados where the tax to GDP ratio increased from 27% to 32% following the introduction of the value added tax in 1997.

Contrarily government expenditure has risen in all of the countries. This is explained mainly by growing importance of recurrent expenditure. In the case of the OECS recurrent expenditure grew from 23% to 28% of GDP between 1985 and 2002. For Barbados recurrent expenditure increased from 29% to 32% of GDP between 1990 and 2002. In the same period it increased from 31% to 38% of GDP and from 15% to 33% of GDP in the cases of Belize and Jamaica. Jamaica experienced the biggest increase in the importance of recurrent expenditure.

The behaviour of the deficit is mirrored by the behaviour of the fiscal stance. Following Godley (1983, 2001) the fiscal stance is defined as government expenditure divided by the tax ratio (tax revenue over GDP). Formally,

(10) $FS = G /(T/GDP)$

Where,

FS = fiscal stance
G = government revenue
T = total tax revenue
GDP = Gross Domestic Product

When the fiscal stance is neutral, that is when 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. In the case of Eastern Caribbean countries the fiscal stance (FS) has been expansionary throughout the 1990's decade, as FS has always surpassed GDP (see Figure 1 below). Moreover it has increased in the second part of the decade.

Figure 1
Fiscal stance and Tax-to-GDP Ratio for the Caribbean
**1991-2003**
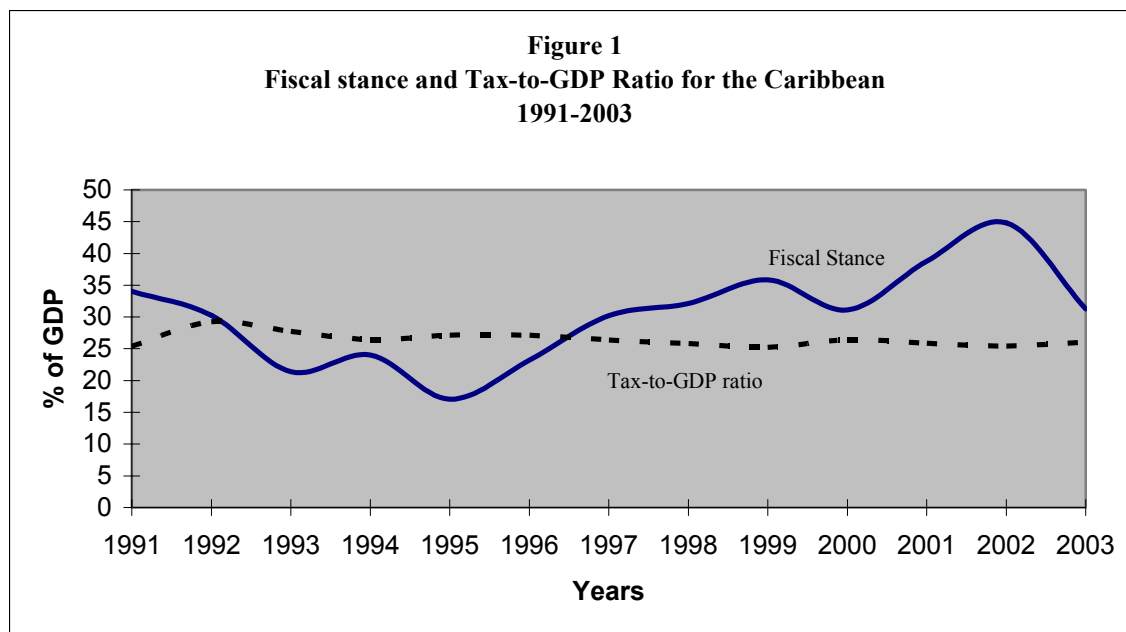
At the same time the current account position of Caribbean has deteriorated. In fact the current account started to deteriorate at the same time that the fiscal stance became expansionary. On average the current account deficit increased from -4% of GDP in 1996 to -11% in 2003 (See, Table 8 and figure 2 below).

Table 8: The current account and fiscal deficit as a % of GDP The Caribbean 1990-2003				
	Fiscal deficit		**Current account**	
Country	**1990-1997**	**1998-2003**	**1990-1997**	**1998-2003**
Antigua and Barbuda	-5.0	-8.0	-4.0	-10.4
The Bahamas	-2.0	-2.0	-3.6	-10.6
Belize	-3.0	-5.0	-4.0	-15.1
Barbados	-6.0	-11.0	2.0	-5.0
Dominica	-3.0	-8.0	-18.4	-14.8
Grenada	-4.0	-7.0	-17.2	-24.3
Guyana	-4.0	-6.0	-17.3	-14.5
Haiti	-4.0	-4.0	-1.8	-1.2
Jamaica	0.2	-9.0	-2.9	-8.0
St. Kitts and Nevis	-2.0	-11.0	-19.2	-25.9
Saint Lucia	-1.0	-3.0	-11.5	-12.8
Suriname	-4.0	-6.0	1.0	-9.0
Trinidad and Tobago	0.	-2.0	1.9	2.4
St. Vincent and the Grenadines	-1.0	-4.0	-17.8	-16.9
Source: On the basis of official data and World Bank (2005)				

Figure 2
CARICOM
Current account as percentage of GDP
1991-2003
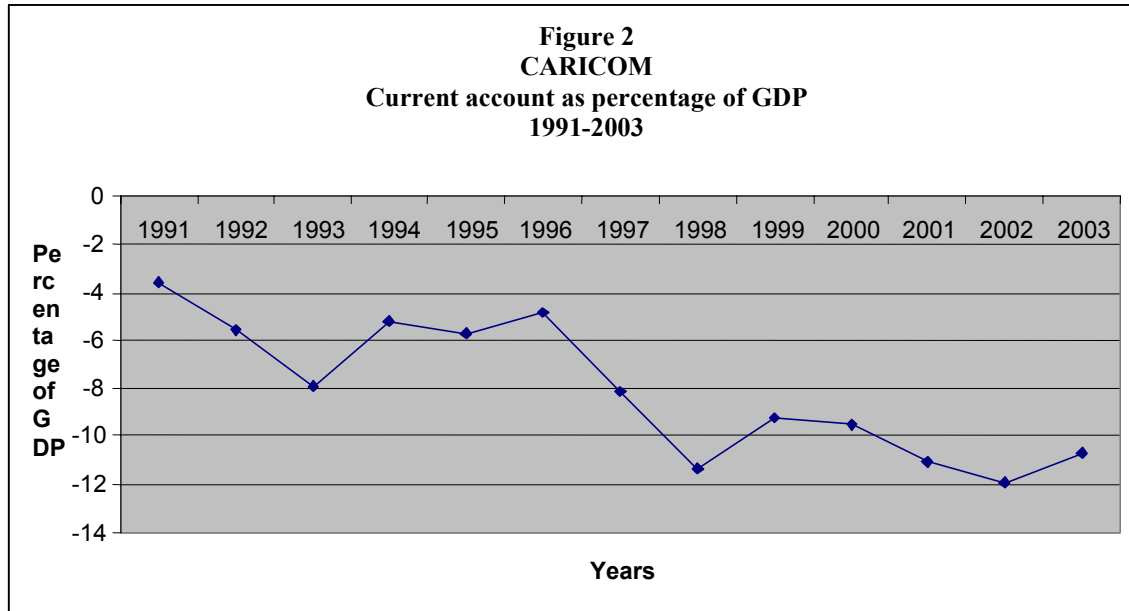
This performance responds mainly to a deteriorating export performance and to a lesser extent to a rise in import growth. That is the fiscal deficit by expanding demand could not have increased imports and hence led to a widening of the current account. The empirical data highlights the following facts:

(a)   In the case of the OECS the current account deficit increased significantly in the second half of the 1990's due both to the deterioration of export performance and the increase in imports. Exports of goods and services declined steadily from 66% of GDP in 1992 to 63% in 1995 and 54% in 2001. Imports of goods and services rose form 74% of GDP in 1992 to 75% in 1995 and to 66% in 2001;

(b)   For Barbados, the current account deteriorated from -1.4% to -8% of GDP between 1991 and 2003. Imports as a percentage of GDP exhibit an upward trend during the 1990's decade (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 2001;

(c)   In the case of Belize the current account widened from -7% to -18% of GDP between 1991 and 2003. 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 2003;

(d)   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 behavior of the current account in the case of Guyana is atypical in relation to the rest of the Caribbean 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;

(e)	In the case of Jamaica the current account result deteriorated from 0.7% to -13% of GDP between 1992 and 2003. 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 out spacing the latter (45% and 62% in 1991; 94% and 97% in 2001); and

(f)	Contrarily Trinidad increased its current account surplus from 3% to 8% 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 deteriorating export performance can be measured by the export performance ratio. It is measured by the ratio of exports to the average propensity of import (i.e. the ratio of imports to GDP). When exports are equal to imports, the export performance ratio is equal to GDP. The export performance ratio can be computed in terms of percent deviation from GDP. A value of 0 would indicate a state of external equilibrium. A value greater than 0 in percentage shows the percent deviation of the external account from its equilibrium value.

Figure 3
Export performance ratio
Average for CARICOM
1991-2003
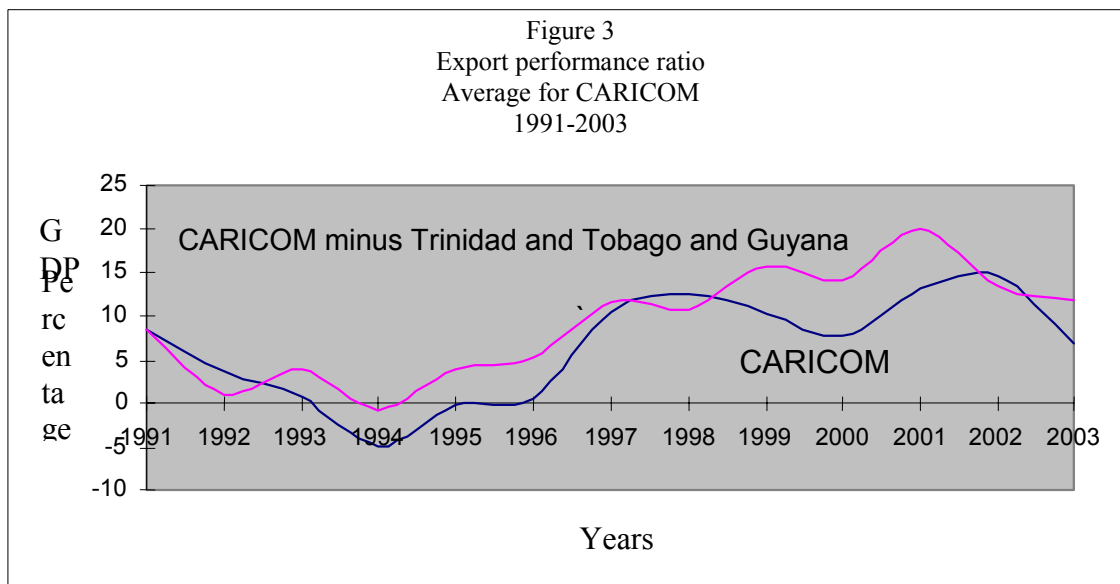
This measure was obtained for each CARICOM economy and then an average was obtained. Figure 3 above shows the export performance ratio expressed as a percentage deviation from GDP, for CARICOM as a whole and for a sub grouping excluding Trinidad and Tobago and Guyana. The export performance ratio is characterized by three movements.

The first is a decline lasting from 1991 until 1994. During this period the export performance of CARICOM economies on average improved. The year 1994 marks a point of inflection from the previous trend after which the export performance deteriorates steadily until 2002. In 1994, CARICOM economies showed, on average, an equilibrium in their balance of payments. Eight year later in 2002, their export performance had deteriorated to a value equivalent to 20% of their combined GDP. The third period shows some improvement in the export performance ratio.

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 Caribbean countries in regional trading blocs such as NAFTA and the EU (Western Europe), has decreased from 0.71% to 0.27% and from 0.15% to 0.10% respectively (See Table 9 below). It is worthy of note that the Caribbean market share has decreased in those markets that grant preferential treatment but has increased in those markets that do not grant special and differential treatment (i.e., the Andean Community).

| Table 9 CARICOM's import market share in goods in regional trading blocs (In percentages) 1985-2002					
Regional bloc	1985	1990	1995	2000	2002
NAFTA	0.71	0.43	0.32	0.24	0.27
Western Europe	0.15	0.13	0.12	0.10	…
Andean Community	0.40	0.96	0.41	0.24	0.56
Mercosur	0.30	0. 34	0.19	0.11	0.14
CACM	0.20	0.18	0.38	0.74	1.34
Note: … denotes not available. Source: Competitive Analysis of Nations (2002) and WITS (2005).					

Services exports have not also fared well. In terms of tourist services, the Hispanic Caribbean has the lion's share of tourist arrivals (70% in 2003). CARICOM's market share of Caribbean tourist arrivals increased slightly from 28% to 30% while that of the OECS has declined (7% and 5% in 1996 and 2003) (see Table 10 below).

Table 10 Market share of tourist arrivals for the English and Spanish speaking Caribbean 1996-2003			
Sub-region	1996	2000	2003
OECS	6.51	5.34	5.38
CARICOM	27.54	28.66	29.65
Hispanic Caribbean	72.46	71.34	70.35
Note: The Hispanic Caribbean includes Cancun, Cozumel, Cuba, the Dominican Republic and Puerto Rico. Source: Caribbean Tourism Organization (2004)			

An additional piece of evidence is provided by the declining trend of the coverage ratio of non-factorial services to the trade balance (See Figure 4 below). The coverage ratio decreased from 0.79 and 0.60 in 1992 to 0.50 and 0.51 in 2003 for CARICOM and the OECS respectively.

Figure 4
CARICOM and OECS
Ratio of non-factorial services balance to the trade balance
1990-2003
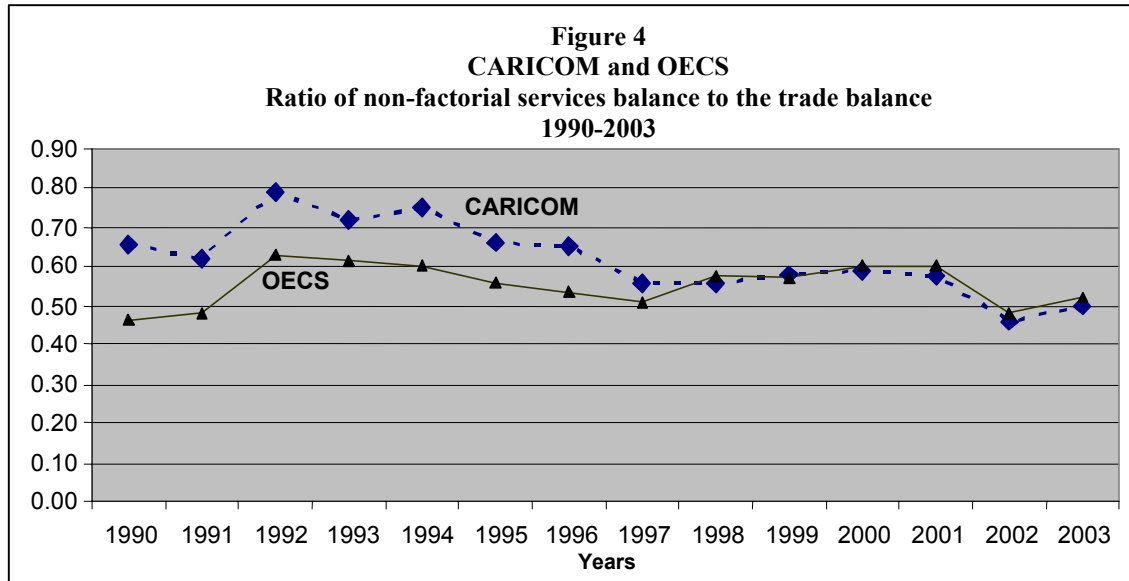
The policy response

CARICOM economies have tried to overcome the external constraint by focused efforts and policies to attract foreign exchange flows. These policies have ultimately aggravated both the fiscal and external performance.

Key to these efforts have been the policies to attract foreign direct investment. Foreign direct investment flows have evolved at an uneven pace and have only slightly increased in the past decade. For the CARICOM region, between 1990 and 2001, foreign direct investment as a percentage of GDP moved from 8% to 10%. For the OECS, foreign direct investment expanded from 11% to 13% (See Table 11 below). In the past year CARICOM countries and in particular the OECS have noted a surge in foreign investment but it remains to be seen whether the increase in investment can be sustained over time.

Table 11
Foreign direct investment (as a percentage of GDP)

	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002
Anguilla	19.7	11.3	25.6	10.1	15.0	23.7	42.1	23.8	29.8	36.3	36.4	24.9	13.7
Antigua and Barbuda	15.5	13.3	4.6	3.3	5.0	6.4	3.6	4.0	4.4	5.6	5.0	7.8	50.5
Barbados	1.2	2.0	1.7	0.1	2.3	-0.3	1.2	1.4	0.7	2.2	6.0	3.6	6.8
Belize					3.3	3.1	1.8	1.3	7.5	7.2	2.5	5.0	2.7
Dominica	7.7	8.4	10.7	6.6	10.5	24.7	7.6	10.3	3.0	8.0	4.7	6.4	4.3
Grenada	5.8	6.3	9.0	8.1	7.3	7.2	6.6	10.6	13.9	11.0	8.8	8.6	19.8
Guyana	4.1	8.0	36.9	13.6	8.8	8.6	8.4	7.0	6.7	6.7	9.5	7.9	…
Jamaica		1.4	9.8	7.3	10.2	5.5	8.1	-0.1	2.0	-0.1	6.0	12.1	5.4
Montserrat	14.3	14.4	7.9	7.8	11.3	5.0	-0.7	6.3	6.8	23.4	9.9	10.2	0.6
St. Kitts and Nevis	6.0	4.9	2.5	6.9	6.9	8.9	14.3	7.2	11.1	19.0	29.2	24.1	22.8
Saint Lucia	10.8	1.8	0.9	6.9	6.3	5.9	3.2	8.3	13.3	12.4	7.1	7.7	7.2
St. Vincent and the Grenadines	3.9	4.2	6.4	13.2	19.4	11.6	15.3	31.5	28.0	16.9	8.4	10.2	9.2
Trinidad and Tobago	2.2	2.5	3.1	8.8	10.5	5.5	6.2	17.2	11.6	5.5	8.1	6.2	7.1
Average all	8.3	6.5	9.9	7.7	9.0	8.9	9.1	9.9	10.7	11.9	10.9	10.4	12.5
Standard deviation	6.0	4.6	10.7	3.7	4.7	7.4	11.0	9.2	9.1	9.9	10.0	6.7	13.1
Average OECS	10.5	8.1	8.5	7.9	10.2	11.7	11.5	12.7	13.8	16.6	13.7	12.5	16.0
Average Larger	1.9	3.5	3.6	7.4	8.0	4.8	6.0	6.4	5.2	3.6	7.4	7.5	14.5
Average RBE with Guyana	2.1	3.5	13.3	7.5	7.6	5.7	5.5	8.5	8.6	6.5	6.7	6.4	….
Average RBE without Guyana in 1992	2.1	5.4	1.0	7.5	7.6	5.7	5.5	8.5	8.6	6.5	6.7	6.4	….
Average SBE	8.4	6.0	5.4	4.4	5.8	6.2	8.0	6.4	8.3	12.4	11.7	9.8	15.0

Note: SBE = service based economies. RBE= resource based economies. …denotes not available.
Source: ECLAC on the basis of official data.

The focus of policy on foreign direct investment has had three major consequences for CARICOM economies.

First, it has not been accompanied by a rise in domestic investment. Indeed, at the same time that, foreign direct investment inflows have increased, for some economies domestic investment as a percentage of GDP for the economies of the Caribbean have remained unchanged at the regional level, for the past twenty years, and in many country cases this ratio has decreased. The decomposition of domestic investment into its private and public component shows that at least in the case of the OECS private domestic investment has experienced a marked decline in the past twelve years (25% and 15% of GDP between 1990 and 2003).

Table 12 below shows gross domestic investment as a percentage of GDP for Caribbean economies for the past two decadal averages and for the years 1998 to 2003. In most cases, gross domestic investment as a percentage of GDP has remained roughly constant for the period under study. In average terms for the entire sample, domestic investment remained roughly around 27% of GDP for the period 1980-2000.

Table 12 Gross domestic investment (As percentages of GDP) in the Caribbean 1980 – 2003			
Country	1981-1990	1991-2000	1998-2003
Antigua and Barbuda	33.8	33.6	29.0
Barbados	18.6	15.2	15.0
Belize	23.6	25.9	19.0
Dominica	31.1	29.0	21.0
Grenada	34.0	37.0	37.0
Guyana	28.0	31.3	22.0
Jamaica	23.1	28.1	30.0
St. Kitts and Nevis	37.7	42.6	46.0
Saint Lucia	26.8	23.6	26.0
St. Vincent and the Grenadines	28.9	28.7	32.0
Trinidad and Tobago	20.3	20.7	22.0
Average	27.8	28.7	27.2
Source: World Bank (2002; 2004)			

The evidence indicates that there is a significant statistical relationship between the levels of foreign direct investment and domestic investment (the correlation coefficient is 0.53) This may reflect the fact that foreign direct investment flows have been directed to those economies that have high levels of investment. Or in other words, high levels of domestic investment may provide an incentive for the attraction of foreign direct investment. At the same time the empirical evidence shows that the statistical relationship between the changes in the levels of foreign direct investment and domestic investment is weak (the correlation coefficient is 0.09). This may provide an indication that, contrary to common belief; foreign investment may not have acted as a catalyst for growth. In fact, it may have simply replaced domestic investment. In other words, foreign investment may have crowded-out domestic investment.

Second it has reinforced a pattern of productive specialization characterized by the stagnation of the manufacturing sector and the rise of service and mining activities. The contribution of the manufacturing sector has remained stagnant during the 1990's decade at 12% while tourism has risen from 39% to 47%. For its part the contribution of agriculture has clearly declined.

Third, governments have actively promoted those activities, which are foreign exchange intensive through a gamut of fiscal incentives. This has impaired the use of taxation as tool to achieve a more equitable distribution of income or to equilibrate the budget. Fiscal policy is mainly a microeconomic tool providing incentives to develop activities in selected economic sectors. The instruments include profit tax holidays, tariff exemptions, export allowances for extra-regional exports following the expiration of the tax holidays, dividend payments, loss-carry forward, and depreciation allowances.

The cost of fiscal incentives has been exceptionally high as illustrated by some of the smaller economies of the Caribbean. Estimates based on customs data indicate that during the first part of the past decade import related tax concessions averaged between 4% and 6% of GDP for Antigua and Barbuda, Dominica, St.Kitts and Nevis, St.Lucia, and St. Vincent and the Grenadines and were above 10% of GDP for Grenada. In the first part of the present decade import related tax concessions for Dominica, Grenada, Saint Lucia, St. Vincent and the Grenadines. However a substantial increase was noted for Antigua and Barbuda, and St. Kitts and Nevis (9% and 13% of GDP, respectively).

The high opportunity cost is compounded by the fact that incentives are not correlated either with the level or change in foreign direct investment. That is, those countries that have the most significant level of incentives (measured as a percentage of GDP) do not exhibit the highest level of foreign direct investment as a percentage of GDP. In the same vein the countries that have increased their incentives are not the ones that have also experienced an increase in foreign direct investment flows. According to IMF estimates the correlation between the change in foreign direct investment flows and the increase in tax concessions is negative for Antigua and Barbuda, Dominica, Saint Lucia and St. Vincent and the Grenadines.[9]

The policy implications

The theoretical framework presented in the third section points to the fact that when the external imbalance consistently outstrips the budget deficit, government expenditure cannot sustain a given level of profits and demand. Indeed, Eq.(3) shows that when these conditions hold the rate of growth of profits and output must decline. As a corollary this implies that a widening current account gap and fiscal deficit could not have led to any other outcome than the accumulation of debt.

In other words the accumulation of debt is not a purely fiscal phenomenon but the result of the interaction of fiscal and external performance. This has a fundamental implication for policy. A fiscal solution to the debt problem is by itself inadequate and may in fact aggravate the problem. This is shown in the next section.

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[9] IMF. Tax Concessions and FDI in the ECCU. Mimeo.

Hyman Minsky distinguished between three financing regimes hedge, speculative and Ponzi finance. As he put it (1986, p. 206): "These financing regimes are characterized by different relations between cash payment commitments on debts and expected cash receipts due to the quasi-rents earned by capital assets or the debtor contractual commitments on owned financial instruments." Hedge finance consists in the expectation that the cash-flow from operating capital assets will be more than sufficient to meet present and future contractual payments. In the speculative finance regime, income is sufficient to service interest payments. In the case of Ponzi finance, cash payment commitments exceed the expected cash receipts. The amount of outstanding debt increases and as put by Minsky (Ibid.): "Ponzi units capitalize interest into their liability structure." While Minsky's focus of analysis is the firm, his financing regimes can be generalized to the aggregate level and to the relationship between an economy and the rest of the world.

Following the logic of the preceding sections start from Eq. (2). Assume a decline in the growth of exports, external demand or elasticity of exports, which translated in a deficit in the current account of the balance of payments. By national accounting identities a current account deficit is equivalent to a budget deficit. This result holds provided the imbalance is not offset by an excess of private savings over investment.

Assume furthermore that the government wants to avoid a reduction in the current rate of economic growth and that as a result the current account deficit is covered by foreign savings in the form of an increase in the external debt stock (Eqs. 8 above). By national accounting identities the increase in debt stock will also finance the government's deficit (Eq. 9 above). As a result, within the national accounts framework of the preceding sections, the current rate of economic growth, which is above that required by the balance-of-payment-constraint, can be maintained for the time being. However, the government will not be able to pay the interest and principal of its foreign debt.

Three scenarios are possible. These have a direct correspondence to Minsky's three-tiered financial typology. The first one hypothesizes an increase in external demand, which increases the rate of growth of the economy allowing the government to meet its debt commitments. This is the hedge-type financing regime. In the second one, the government is able to change the maturity structure of its foreign debt. This corresponds to a speculative-type financing regime.

In the third one, any external shock, and/or deterioration of the balance of payments position, and/or increase in government expenditure pushes the economy to a Ponzi-type financing regime. This later scenario can aptly encapsulate the situation of smaller economies, such as those of the Caribbean, which are subject to frequent external shocks and have to undertake unforeseen and unplanned additional expenditures and/or confront sudden reductions in income.

In the Ponzi scenario the focus of economic policy will turn its efforts to obtain the required liquidity to bridge the twin balance of payments-fiscal gap. While the country is not able to service its financial commitments, it will do its best to convince international lenders that it will comply with its debt obligations. In other words it will try to show that its economic policy is sustainable or more precisely that its economic policy is geared to yield sustainable

'norms'. An economic strategy that is perceived as being sustainable lower risk premia, and restores the confidence of international lenders in the borrowing country (Kregel, 2004, p.582). It also lessens the burden of interest rate payments on the government.

According to the prevailing mainstream conventional view, the sustainable norm debt-to-GDP ratio should be no greater than 0.4. Sustainability analysis states that a fiscal deficit is sustainable if the primary surplus as a percent of GDP is equal or greater than the difference between the real rate of interest and real GDP growth multiplied by the debt-to-GDP ratio. Since the analysis postulates that the real rate of interest and the rate of growth of real GDP are outside the sphere of control of the government, sustainability can only be achieved by an increase in the primary surplus. In practice it involves a contraction in government spending which works to restore equilibrium both on the fiscal and the balance of payments accounts.

The contraction in spending can easily translate in a decrease in the country's output and can also undermine its exporting capacity thus impairing its ability to pay its debt obligations. As a result risk premia rise forcing an increase in the debt stock. The strategy is self-defeating and the Ponzi financing-regime becomes self-reinforcing.

Conclusion

Caribbean countries' debt levels are high by international standards. Sustainability computations show that they are also unsustainable and that the stabilization of their debt levels would require significant tax and/or expenditure efforts. However, the reduction of their current debt levels may simply not be a feasible policy option as it may result in output and employment losses and jeopardize Caribbean countries process of economic recovery.

A long-term solution must obviously involve some type of fiscal consolidation but it should also take into account the constraints facing smaller economies. The fundamental constraint facing these economies is the foreign exchange constraint. In this sense smaller economies are balance-of-payments constrained economies. This means that their actual rate of growth is below that which is warranted by the prevailing internal conditions.

One consequence of this constraint is that smaller economies cannot pursue a fiscal policy that is independent of current external conditions. Indeed, the former must be attuned to the latter. An expansionary fiscal stance will translate sooner or later into a higher import demand and a current account deficit unless export performance, as measured by the export performance ratio improves. As a result, starting from a position where government expenditure equals revenue and in addition imports are equal to exports, an increase in government expenditure means that government is spending more than what it earns (fiscal deficit) and imports surpass exports (external deficit). In other words a fiscal stance in excess of the export performance ratio will result in a twin deficit situation (fiscal and external deficits) and in the accumulation of debt.

Figure 5
The fiscal stance and the export performance ratios
1993-2003
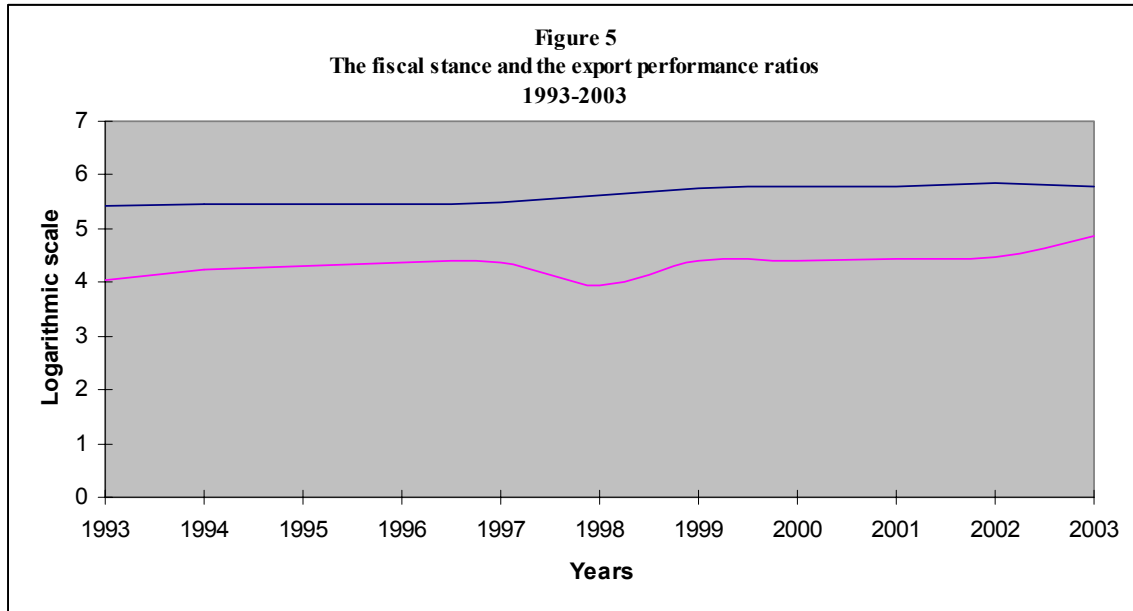
The situation described above is characteristic of most Caribbean economies. This is shown at the aggregate level in Figure 5 where it is seen that the fiscal stance is persistently above the export performance ratio in the Caribbean. Debt in Caribbean countries did not increase because governments spent 'too much' per se but rather because they spent 'too much' relative to what the external conditions could tolerate, that is relative to their main constraint. As a result within the logic of this explanation macroeconomic equilibrium means that the fiscal stance should seek to be aligned to the value of the export performance ratio. In other words, export performance is the variable that ultimately sets the limit and scope to fiscal policy. Fiscal policy can work only if the external conditions allow it to work. Thus any attempt at fiscal adjustment, reform or consolidation must also go hand in hand with efforts to develop export promotion strategies and to raise the productivity of imports. Debt reduction strategies must incorporate options to soften the external constraint.

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