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CURRENT TRENDS AND PROBLEMS IN DOMESTIC DEBT FINANCING OF CARIBBEAN GOVERNMENTS[1]

BY

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INTRODUCTION

Caribbean countries have historically exhibited dependence on foreign economies for not only the propulsion of economic activity, but also for the satisfaction of basic material needs. Dependency is observed no less in the financial sphere than in production and consumption relationships. One outcome of dependent financial relationships with the metropolitan countries, particularly within the colonial era, has been the failure of both domestic fiscal performance and local public debt finance to develop.

Since constitutional independence there have been modest attempts at improving the capacity of the domestic economy to finance government deficits. Nonetheless, as shall be evidenced in the next section, foreign financing of governments is still quite large. The post-independence era has in fact been more typified by a diversification of foreign creditors and by the introduction of new instruments than by any significant advance towards domestic financial self-sufficiency. While in the colonial period, Britain and international agencies were the main creditors, the list now includes the U.S.A., Canada, West Germany, continental European aid agencies, East European countries, and private multi-national financial enterprises. Short-term loan certificates and Central Bank foreign deposit liabilities have been added to the range of debt instruments.

Recent developments in international capital markets particularly the revival of loan demands by favoured corporate and governmental borrowers in the United States, Western Europe, and Eastern Europe, have by creating financial stringencies for Third World countries in general, given new urgency to internal mobilisational considerations[2]. Reinforcing these pressures have been the new constellations of political sensitivities and overt alliances and postures which create blockages from both the demand and the supply side to the rapid growth of foreign debt in Caribbean and other Third World countries.

This paper deals with the growth and structure of the internal public debt of four Caribbean countries, namely, Barbados, Guyana, Jamaica and Trinidad and Tobago. The central objectives of the paper are. to describe the growth and structure of the debt, and to assess the scope for further substantial expansion of the internal debt. Each of these is taken up in turn in the remaining sections of the study.

THE GROWTH OF THE PUBLIC DEBT

The money values of the gross public debt of the Commonwealth Caribbean countries under review expanded remarkably between 1965 and 1976. The historical situation is depicted in detail in Tables 1 and 2. In Barbados the gross public debt grew from B$43.2 million in 1960 to B$258.8 million in 1976. In Guyana, the nominal gross public debt increased from G$148 million in 1960 to G$1,201.7 at the end of 1976. For Jamaica over the same period, the change was from J$116.4 million to J$1,113.0 million while in Trinidad and Tobago, the debt expanded from TT$232.6 million to TT$617.5 million at 31 December 1976.

TABLE 1 GROSS PUBLIC DEBT OUTSTANDING (CURRENT VALUES) $M

Year	Barbados	Guyana	Jamaica	Trinidad
1965	43.2	148.0	137.4	232.6
1966	46.7	171.8	155.0	266.1
1967	n.a.	187.5	179.6	298.2
1968	53.9	198.4	210.2	338.2
1969	54.9	229.7	235.5	370.5
1970	61.7	267.2	275.3	392.6
1971	61.8	446.3	320.0	438.0
1972	76.8	521.5	385.0	533.1
1973	133.2	659.0	485.7	625.9
1974	179.0	689.1	660.4	628.7
1975	202.1	936.6	862.7	636.0
1976	258.8	1,201.7	1,113.0	617.5

Note: End of year values. All values are in $m of national currencies.

Sources: Barbados: *Estimates* and Central Bank of Barbados: *Annual Statistical Digest; Economic and Financial Statistics*, Guyana: Bank of Guyana *Annual Reports*, Jamaica: *Monetary Statistics*, Bank of Jamaica *Bulletin*, and Bank of Jamaica *Statistical Digest*, Trinidad: *Annual Abstract of Statistics*.

In real terms, the degree of expansion was not as sizeable, as the data in Table 2 show clearly. Utilising the retail price index as a rough deflator, one finds that while the expansions in the nominal debt were of the order of thrice to ten times the 1965 values, the increases in the real debt ranged between 86 and 346 per cent in Barbados, Guyana and Jamaica. These real increases are of course still quite large, thereby im-

TABLE 2 GROSS PUBLIC DEBT OUTSTANDING IN 1965 $m

Year	Barbados	Guyana	Jamaica	Trinidad
1965	43.2	148.0	137.4	232.6
1966	46.3	167.6	149.5	255.4
1967	n.a.	178.4	170.1	276.6
1968	47.5	183.0	188.2	292.6
1969	46.0	209.0	192.7	313.4
1970	47.9	237.9	209.8	321.0
1971	44.7	389.1	232.0	340.9
1972	49.6	426.1	255.3	384.1
1973	59.6	498.9	248.7	362.4
1974	46.5	435.6	279.8	307.0
1975	66.8	573.2	346.3	273.9
1976	80.3	659.9	417.9	236.5

plying that more fundamental determinants underpin the growth of the public debt. In Trinidad and Tobago the real debt, after expanding until 1972, returned in 1976 to approximately its 1965 value.

The rate of expansion of the nominal debt was faster than that for Gross National Product in two of the three countries for which national income data were available. In Guyana, nominal debt grew at an average annual rate of 18.5 per cent compared with 11.5 per cent for GNP. In Jamaica, the corresponding rates were 15.5 per cent and 14 per cent respectively. In Trinidad and Tobago, gross debt expanded at an annual average rate of 11.5 per cent compared with 14.5 per cent for GNP. Not surprisingly, therefore, the ratio of debt to Gross National Product has increased significantly over the period. It should be noted however that since 1971, the growth of the debt has slowed down relative to GNP.

Another feature of note is the tendency of the nominal gross debt in Guyana and Jamaica to expand at a slower rate between 1971 and 1974 and at a much faster rate in 1975 and 1976. In Barbados, in contrast, the expansion was remarkably rapid within those years. Though increasing slightly faster between 1971 to 1975 as compared to the earlier period, the public debt of Trinidad actually declined in 1976 as a result of a conscious policy of debt retirement.

In all four countries, foreign sources (governments, international agencies, and private financial institutions) contributed significantly to the gross public debt. From the data in Table 3, it is evident that though the foreign debt as a proportion of total gross debt has been diminishing over time, it still accounted for as much as 59 per cent of total gross public debt in Guyana, 40 per cent in Jamaica, 25 per cent in Trinidad and Tobago, and 19 per cent in Barbados in 1976. Large and growing foreign debts pose serious problems of repayment and foreign exchange use. The export per-

formance of the economies has not been good within the period under review, except for oil producing Trinidad, and shortlived good international prices for sugar in 1975. Continually rising import prices especially after the oil crisis in 1974 but more generally as a result of persistent inflation in Euro-America have depressed foreign exchange reserves in Barbados, Guyana and Jamaica to dangerously low levels. The difficulties of foreign debt service payments are intensified by the fact that there is now little compressibility in imports.

Guyana and Jamaica have from 1974 virtually eliminated non-essential imports and have imposed severe financial quotas on essential imported consumer and producer goods. These considerations underscore the importance as well as the urgency of domestic debt creation as a means of financing Caribbean governments.

The trends outlined above prompt at least two questions. Firstly, to what extent was the growth in the total debt a response to the financing needs of the governments? Secondly, what factors constrain or alternatively facilitate the ability of Caribbean governments to mobilise funds by internal debts? These issues are dealt with in the remainder of the paper. Though the first cannot be treated adequately within the confines of this paper, some explanations are suggested in the next section. The rest of the paper concentrates on the second issue.

TABLE 3 FOREIGN DEBT AS A PERCENTAGE OF GROSS PUBLIC DEBT

Year	Guyana	Jamaica	Trinidad	Barbados
1965	71.9	45.8	53.6	n.a.
1966	66.2	47.3	51.2	n.a.
1967	66.2	46.1	48.1	n.a.
1968	63.3	43.9	46.4	n.a.
1969	61.8	41.9	45.3	n.a.
1970	60.0	39.5	40.3	n.a.
1971	66.7	35.8	37.4	n.a.
1972	63.7	35.2	37.4	30.8
1973	55.6	34.9	40.8	42.1
1974	59.6	34.9	38.4	23.6
1975	59.2	38.4	34.4	21.5

Sources: Same as for Table 1

EXPENDITURE GROWTH AND FISCAL REVENUE INSUFFICIENCY

No attempt is made here to document fully the several factors contributing to the debt financing requirements of the governments. Nonetheless, it seems possible to explain the growth of debt financing needs in terms of a few fundamental factors.

Firstly, in all countries of the Commonwealth Caribbean, rising social aspirations and constitutional advances have created pressures for rapid growth in government expenditures. In Barbados, Guyana, Jamaica, and Trinidad and Tobago respectively total nominal government expenditures increased at annual average rates of 18.3 per cent, 14.5 per cent, 15.5 per cent and 11 per cent between 1965 and 1973.

Most of the growth in expenditures can be attributed to the expansion of the bureaucracy, defence expenditures in Guyana, economic development expenditures of an insfrastructural kind, and salary revisions notably in Trinidad and Barbados. Partly under the influence of domestic price inflation, the increases in government expenditures have been even greater in Jamaica, Guyana and Trinidad and Tobago over the last four years of the period. However, price inflation alone cannot account for the average annual rates of expansion of 23 per cent and 41 per cent experienced in those countries.

Secondly, the tax structures of even the constitutionally independent countries are not conducive to fiscal revenue self-sufficiency. The fiscal base has historically been quite narrow, with taxes on foreign trade and on personal and corporate incomes contributing most of fiscal revenues since 1950.

Within the past decade, especially within the last five years, some degree of fiscal innovation has been attempted, the most notable being the development of consumption taxes. New tax instruments have been introduced. Among these have been compulsory savings levies in Guyana and Jamaica, defence taxes in Guyana, and consumption taxes in all four countries. These reforms have been *ad hoc* and piecemeal, without the benefit of any systematic examination of the tax structure and the desirability of introducing new, more widely based taxes, such as turnover taxes.

Nonetheless, as the details in Table 4 show, the bulk of fiscal revenues are still generated by import duties, excise duties and income taxes. In 1970 these three groups of taxes together accounted for 82.5 per cent of recurrent revenues in Jamaica, 81.6 per cent in Guyana, 65 per cent in Trinidad and Tobago and 63.6 per cent in Barbados. In 1974, the corresponding proportions were 75.5 per cent, 52.5 per cent, 76.7 per cent and 61.4 per cent for those countries. The declines were due mainly to the new taxes such as the consumption taxes and the Defence Levy and the Sugar Levy introduced in Guyana in 1969 and 1974 respectively.

Import duties have grown more slowly than recurrent and total expenditures in all four countries since 1965. Likewise for income taxes in Guyana and Barbados; and for excise duties in Jamaica, Barbados and Guyana. (Details are given in Table 5). In Guyana and Trinidad, export duties have risen substantially between 1973 and 1974 largely in response to favourable price developments in the markets for petroleum and sugar. In Trinidad and Tobago, roylaties on petroleum have contributed to the maintenance of high annual growth rates of income taxes (30 per cent between 1965-1974; and 83 per cent between 1971 and 1974).

In real terms, there has been a slowing down in the growth of the main fiscal bases identified above, thereby creating an additional source of revenue difficulty. Practically all the independent countries, whether motivated by acute balance of

payments problems or by general developmental considerations, have been pursuing a policy of import substitution. Moreover, efforts at economic integration which involve the replacement of dutiable imports from third countries by CARICOM imports have accelerated. These have been reinforced by measures of fiscal harmonization. However laudable these developments are in a long run sense, they imply in the short run a weakening of a major source of fiscal revenues.

Income tax revenue generation is hampered by widespread tax evasion and by collection lags. The fiscal machinery of government, partly because of inadequate numbers and quality of staff, and because of bureaucratic inertia, has been unable to

TABLE 4 STRUCTURE OF RECURRENT GOVERNMENT REVENUES

Country and year	Import Duty		Excise Duty		Income Tax		Total Revenue
	$m	%	$m	%	$m	%	$m
Jamaica							
1965	27.8	28.0	21.2	21.3	34.0	34.2	99.4
1970	41.2	23.4	39.0	22.2	65.0	36.9	175.9
1973	54.9	19.3	54.6	19.2	122.6	43.1	284.4
1974	64.0	18.4	64.7	18.6	133.6	38.5	346.9
Guyana							
1965	28.0	36.2	8.9	11.5	24.9	32.2	77.3
1970	40.3	30.3	18.1	13.6	50.1	37.7	133.0
1973	30.2	18.9	30.5	19.1	57.1	35.7	160.0
1974	33.2	10.4	54.8	17.2	79.0	24.9	317.8
Trinidad and Tobago							
1965	47.0	29.1	14.7	9.1	75.4	46.7	161.3
1970	55.8	17.8	25.3	8.1	122.6	39.1	313.2
1973	68.0	14.3	36.6	7.7	202.0	42.4	476.0
1974	75.7	6.2	29.2	2.4	828.7	68.1	1217.2
Barbados							
1970	21.8	24.8	4.3	4.9	29.8	33.9	87.9
1973	31.6	25.3	3.8	3.0	42.0	33.6	125.1
1974	29.4	18.5	3.8	2.4	64.5	40.5	159.2

Sources: Computed from following data sources:

Guyana: Bank of Guyana, *Annual Report;* Jamaica: *Monetary Statistics,* Department of Statistics; Trinidad and Tobago: Central Bank of Trinidad and Tobago *Annual Report;* Barbados: Central Bank of Barbados *Annual Statistical Digest.*

TABLE 5 ANNUAL AVERAGE PERCENTAGE RATES OF GROWTH OF SELECTED VARIABLES – 1965-1973

	Total Recurrent Revenues	Total Recurrent Expenditures	Total Expenditures	Import Duties	Excise Duties	Income Taxes	Gross National Product
Guyana	9.5	13.0	14.5	1.0	16.5	10.0	8.0
Jamaica	14.0	15.0	15.5	9.0	12.0	17.5	12.0
Trinidad	11.0	11.0	11.0	5.0	12.0	13.5	10.0
Barbados*	15.3	19.1	18.3	13.5	–2.1	9.4	n.a.

* Annual averages of rates of growth of tax components are for the years 1969-1974.

cope with the tasks of efficient tax administration. Moreover widespread tax evasion suggests the absence of an appropriate morality in fiscal matters among the populace.[3]

As a consequence of the factors outlined above, fiscal revenue generating capacity has lagged behind government expenditures. In terms of elasticity measures, the income elasticities of total government expenditures exceed the income elasticities of total fiscal revenue. Though one should not attach too much significance to the actual estimates, the following tentative findings from regression analyses are illustrative. For Guyana, revenue and expenditure elasticities with respect to GNP were estimated to be 1.37 and 1.49 respectively for the period 1960 to 1974. For Jamaica the elasticities of revenue and expenditures with respect to GNP are 1.31 and 1.47 for the same period.

MARKET CONSTRAINTS ON THE GROWTH OF THE INTERNAL DEBT

As an introduction to the discussion of market constraints on the internal debt, it is worthwhile to describe the asset-type composition of the debt. Details are given in Tables 6, 7, 8 and 9.

TABLE 6 PERCENTAGE SHARES OF SELECTED ASSETS IN GROSS INTERNAL DEBT: GUYANA (YEAR END)

Year	Treasury Bills	Debentures	Savings Certificates and Bonds	All
1965	4.4	80.0	6.8	100
1966	10.6	70.0	5.3	100
1967	16.5	76.1	5.0	100
1968	23.4	70.8	2.9	100
1969	20.4	63.2	2.0	100
1970	24.4	63.3	2.9	100
1971	41.1	54.5	2.0	100
1972	44.3	54.7	1.0	100
1973	46.5	45.9	0.6	100
1974	37.3	59.1	0.6	100
1975	42.4	55.1	0.1	100

Source: Computed from data in Bank of Guyana *Annual Reports.*

It is important to note that throughout the period, Treasury Bills and debentures accounted for over 80 per cent of the gross internal debt in all four countries. As a result, the following analysis concentrates on these two debt categories. In Guyana and Barbados within recent times the share of Treasury Bills has tended to rise and that of

TABLE 7 PERCENTAGE SHARES OF SELECTED ASSETS IN GROSS INTERNAL DEBT: JAMAICA (END OF MARCH)

Year	Treasury Bills	Local Registered Stock	Bonds	All
1965	29.9	65.5	4.3	100
1966	29.0	66.3	4.4	100
1967	28.6	66.3	4.9	100
1968	24.8	70.5	4.5	100
1969	19.8	74.0	5.6	100
1970	18.3	74.9	5.4	100
1971	19.6	71.5	5.5	100
1972	20.2	70.1	5.5	100
1973	16.2	75.3	5.2	100
1974	16.5	74.8	5.3	100
1975	15.6	68.3	6.4	100

Sources: Computed from data in *Monetary Statistics*, Department of Statistics various issues, and in Bank of Jamaica *Statistical Digest*, various issues.

debentures to decline. This tendency reflects difficulties confronting attempts at expanding the long-term internal debt, and the corresponding recourse to the somewhat easier mechanism of finance through the banking system.

A major obstacle to internal debt financing is the persistence of a very narrow ownership structure of the debt. For both the long-term and the short-term debt, ownership is concentrated among financial institutions and governmental or quasi-governmental agencies. Holdings by non-financial enterprises and by individuals are relatively minimal.

These observations are supported by the data on the percentage shares of various types of holders in Treasury Bills and debentures. In Jamaica, at 31 December 1975, commercial banks accounted for 49 per cent of Treasury Bills, the Bank of Jamaica for 34 per cent and quasi-governmental bodies for the remainder. This represented no improvement from the situation in, say 1967. The Treasury Bill market in the other three countries is no less skewed. In Trinidad and Tobago, at 31 December 1975, the commercial banks accounted for 82 per cent of the total stock of Treasury Bills outstanding, the insurance companies and pension funds for 10 per cent and Sinking Fund provisions for seven per cent. In Guyana at the same point in time, the banks held 60 per cent, the Central Bank 18 per cent, and other financial institutions a further five per cent. In Barbados also at the end of 1975, commercial banks held 55 per cent, the Central Bank 29 per cent, and quasi-governmental and statutory bodies the remainder.

TABLE 8 – PERCENTAGE SHARES OF SELECTED ASSETS IN GROSS INTERNAL DEBT: TRINIDAD (END OF YEAR)

Year	Treasury Bills	Treasury Bonds	Debentures	All
1965	30.0	9.6	60.4	100
1966	37.8	8.0	54.2	100
1967	34.6	6.8	58.6	100
1968	29.7	6.1	64.2	100
1969	28.1	5.5	66.4	100
1970	31.4	4.7	63.9	100
1971	29.4	3.9	66.6	100
1972	29.9	3.2	66.9	100
1973	27.8	n.a.	n.a.	100
1974	25.1	n.a.	n.a.	100
1975	24.6	n.a.	n.a.	100

Sources: Computed from data in Central Statististical Office *Financial Statistics;* Central Bank of Trinidad and Tobago *Statistical Digest.*

TABLE 9 PERCENTAGE SHARES OF SELECTED ASSETS IN GROSS INTERNAL DEBT: BARBADOS (END OF YEAR)

Year	Treasury Bills	Debentures	Commercial Bank Loans	All
1972	15.3	68.0	13.6	100
1973	10.9	71.4	9.7	100
1974	34.5	46.9	7.9	100
1975	36.5	51.5	6.0	100

Sources: Computed from data in Central Bank of Barbados *Economic and Financial Statistics*

Clearly then private holdings of the short-term debt are almost entirely confined to the commercial banking industry. The Treasury Bill market can be described as a bilateral monopoly, with the monetary authorities being the sole sellers and the commercial banks the sole buyers. There are at least two significant consequences of this market structure. First, the fact that given the regulatory framework, transactions are determined largely on the basis of strength of need. Second, the impossibility of transferring the debt to third parties. Each is dealt with in turn. Even though minimum legal reserve requirements do constitute a built-in bias towards Treasury Bill accumulation by the banks, and have in fact been several times revised upwards in Jamaica in pursuit of debt financing objectives,[4] the persistence of a strong tradition of excess liquidity makes the governments more dependent on the commercial banks as a source of demand, than the commercial banks on the governments as a source of interest-income yielding liquid assets. For this reason Treasury Bill rates of interest can be said to be determined by the excess demand for Treasury Bills. Judging from repeated statements in the reports of the Central Banks, this view prevails among Central Bankers.[5]

The essential point to be made here, however, is that as a result of the bilateral monopoly character of the market for short-term government securities, any attempt at rapid expansion in the private sector's holdings of Treasury Bills is likely to involve substantial increases in interest costs. Whether or not such cost increases seriously constrain governments depends on their cost-consciousness, their attitudes towards the income redistributional implications of debt service payments, the scope for financing debt charges, and the alternatives to debt finance.

No general statement about the cost-consciousness of governments is possible. In Section II, it was argued that the fiscal capacities of the governments are limited. It is unlikely therefore that the governments would be insensitive to any additions to their recurrent expenditures which might have to be financed out of fiscal revenues. Furthermore, in a structurally dependent economy the scope for financing debt by money creation is restricted by high import propensities, and by the need to conform to foreign, private and institutional lenders' conventions with respect to deficit financing. The experience of the past decade does not suggest that the income distributional consideration carries much weight with Caribbean governments.

The second consequence of the market structure is the impossibility of shifting the stock of debt on to any third party. By implication, there is no possibility of maintaining private sector holdings in the face of a determined attempt by commercial banks to reduce their holdings. Moreover, the Central Banks have the function of developing money and capital markets. One aspect of this function is the prevention of drastic deterioration in the willingness of the commercial banking sector as well as other holders to acquire government securities. For this reason, the monetary authorities act largely as a residual buyer and seller concerned with preventing large capital value movements in either direction but especially in the downward direction, and concerned with avoiding manifestations or presumptions of "lock-in effects". The problem which arises is that the commercial banks may wish to unload government securities at times of acute financing need for the governments. This seems to have been the case in Jamaica, Barbados, and Trinidad and Tobago in 1973 when the commercial banks, confronted with high and rising deposit rates of interest did not find Treasury Bills attractive assets. In those instances, the Central Banks and quasi-governmental bodies served as residual holders of the debt.

Even when there is no tendency towards disinvestment, the narrowness of the market for short-term government securities has a further limiting influence on government financing by means of debt creation. Expansion of the debt is dependent on economic changes within a particularly narrow subset of the economy. Specifically, the scope for increases in the short-term debt is heavily influenced by the temporal growth of the banks' total assets (or liabilities) and by the stability of their asset portfolio preferences. Though no categorical statements can be made as yet, my preliminary investigation of statistical demand functions for Treasury Bills by the commercial banks indicate that the two main non-regulatory influences on the demand for Treasury Bills are total deposit liabilities (which are closely correlated with total assets) and the share of bank loans and advances in total assets. Treasury Bill holdings vary directly with the former, and inversely with the latter. From data for the years 1967 to 1975 in the cases of Guyana, Jamaica and Trinidad and Tobago, and for 1968-1975 for Barbados, it can be established that the rate of growth of commercial bank assets have declined considerably in Jamaica and Barbados, while exhibiting the opposite trend in the other two countries.[6] It can be therefore stated that the growth of capacity to absorb Treasury Bills has been slowing down in the former two countries.

With respect to portfolio shares, Treasury Bills have grown relatively from 2.8 per cent in 1967 to 30.4 per cent in 1975 in Guyana, largely as a consequence of central banking regulations and efforts. In Barbados, Treasury Bills increased from 1 per cent in 1970 to 6.9 per cent in 1975, for the same reasons. Trinidad and Jamaica experienced declines in the shares of Treasury Bills in total commercial bank assets from 8.9 per cent to 6.5 per cent and from 6.6 per cent to 4.4 per cent respectively for the years 1967 and 1975. In Trinidad, the share of Treasury Bills expanded substantially between 1969 to 1973 when it averaged 12 per cent but fell heavily thereafter as the Government kept the short-term debt constant. It is noteworthy that the decline in Jamaica has occurred despite several increases in the liquid assets ratio since 1972. Two offsetting forces at work were the declining rates of growth of commercial bank assets as well as the reduced willingness of commercial banks to hold Treasury Bills under conditions of high loan demands elsewhere in the system and sticky Treasury Bill rates of interest.

An important inference is that in Guyana, the capacity of the commercial banks purely from the standpoint of portfolio composition must be close to full exhaustion. In the other three countries there is evidently scope for debt financing by expansion of the shares of Treasury Bills in the commercial banks portfolios of assets. Much depends on the regulatory framework and on moral suasion since Treasury Bills are not competitive with other earning assets.

Turning now to the market for long and medium term internal public debt, very much the same kinds of observation can be made. Financial institutions are the predominant demanders of the debt, followed by statutory bodies. In Barbados, at 31 December 1975, commercial banks held 20 per cent, insurance companies 12 per cent, the Barbados Savings Bank 27 per cent, and statutory boards 28 per cent. The remainder was distributed between the Central Bank and other holders. In Jamaica, at the same point in time, the commercial banks held approximately 13 per cent of local registered stocks (the major longdated security) pension funds 18 per cent, building societies 16 per cent, and insurance companies 7 per cent. Statutory bodies and sinking funds accounted for a further 62 per cent; and other institutions for 15 per cent. Individual holdings amounted to roughly eight per cent of the total outstanding local registered stock.

In terms of trend analysis, the major changes have been the decline in the percentage shares of the commercial banks from 27 per cent in 1967, and the growth of the National Insurance Fund (NIF) as the major holder. In December 1966, the NIF accounted for only eight per cent of local registered stocks. In effect, governmental agencies have taken up the slack left by the established financial institutions. The role of national insurance funds in converting the security payments of workers into credit to governments has been noted by Reviglio [4] who attests to its importance in economic development financing. In the Caribbean there is still scope for the expansion of national insurance since its introduction is of recent origin; many workers (especially the self-employed) are still not contributors, and large numbers of the labour force are unemployed.

Complete details are not available on the ownership structure of the longer-term internal debt in Guyana, nor in Trinidad and Tobago. From the data available for Guyana, financial institutions' holdings appear to be on the decline. At 31 December 1973, the commercial banks accounted for 4 per cent, domestic insurance companies for 5 per cent, the Post Office Savings Bank for 8 per cent, and the Central Bank for 2.5 per cent. No data is available on the holdings of foreign owned insurance companies which dominate the industry. In Trinidad and Tobago, insurance companies are large holders of the long-term debt, accounting for roughly 29 per cent at 31 December 1971.

The ability of the governments to expand the long-term debt is facilitated by the preference of certain financial institutions, notably pension funds and life insurance companies for long-term debt as a means of matching long-term, predictable liabilities. The interest rate factor has not been an important influence within recent years, largely because of regulatory and moral constraints which minimise the scope for acquisition of foreign long-dated securities.

It is not to be concluded that long-dated government securities form a quantitatively very important part of financial institutions' asset portfolios and that there is no scope for expansion. In Jamaica commercial banks have held on average only 2 per cent of their total asset portfolio in local registered stock between 1967 to 1975. The portfolio share of life insurance companies has declined from 25 per cent in 1967 to 15 per cent in 1975. In Barbados, longer term government stock accounted for roughly 7 per cent of commercial bank assets at 31 December 1975, despite an upward trend since 1970. In Guyana, commercial banks' portfolio shares have also been declining, from 8 per cent in 1967 to 2 per cent in 1975; domestic insurance companies held between 7 per cent and 9 per cent of their portfolio in long term government stock between 1970 to 1974; while building societies held at the most 5 per cent of

their assets in that form. For Trinidad and Tobago, the share of longer term government stock in commercial banks' asset portfolios amounted to 6 per cent in 1965, but has declined since then. Life insurance company portfolio shares have been the highest, ranging between 18 to 24 per cent since 1968. Thrift institutions have held a declining proportion of their assets in government securities, the share falling from 12 per cent in 1965 to 5 per cent in 1975.

It is in the interest of easier debt financing to reverse the trends in portfolio composition described above. The potential for regulatory action exists; but regulations might not be sufficient or desirable in a dynamic context. Efforts should also be directed towards increasing the marketability of the debt by broadening its ownership structure to individuals and non-financial enterprises. Two important limiting factors in these respects are, firstly, the low and slowly growing levels of personal incomes; and secondly, the fact that not only are corporate retained earnings generally inadequate for the expansion requirements of the enterprises themselves, but also that the expected rates of return would generally greatly exceed the rates of interest obtainable on long-term government securities. None of these constraints can easily be relaxed in the short-run.

Institutional holdings of the debt should rise over time as the capacity to acquire debt increases. However, the capacities of the financial institutions have not exhibited any tendency to grow at an increasing rate over recent years. On the contrary, for commercial banks, life insurance companies and thrift institutions, the annual average rates of growth of assets and premium incomes have slowed down since 1970. The implications for growth in long-term debt of the slowing down in the life insurance industry are particularly serious, since life insurance companies are among the major specialist demanders of long-term assets.

Reference was made earlier to the virtual absence of a secondary market. The poor state of the 'retail' market for government debt is manifested by at least two things: first, the very fact of the predominance of the financial institutions and governmental bodies in debt holdings; secondly, by the small number of transactions (most of which are confined to the private financial sector and the Central Banks). Even in the corporate securities market, trading is very limited. In Trinidad and Tobago, for instance, the total number of transactions in the secondary market for long dated corporate stock was 450 in 1972, 594 in 1974 and 720 in 1976. The absence of a secondary market imparts a pronounced degree of illiquidity to government securities. This itself discourages holdings except by those investors whose portfolios have an inbuilt long-term bias. Illiquidity or virtual non-marketability might well explain the low demands for longer dated stock by private enterprises and individuals. In the absence of a viable secondary market, these assets effectively have to be held to maturity thereby preventing their use as short-term to medium-term absorbers of temporarily idle cash balances.

The portfolio behaviour of households reveals a strong bias towards liquidity. One indication of the strength of their liquidity preferences is the reluctance of most individual holders of commercial bank savings deposit accounts to switch to time deposits despite the much higher rates of interest on the latter, and despite the presence of a large, stable core in their deposit balances. Intense desire for liquidity seriously constrains efforts which aim at *widening* the ownership structure of the debt, at lengthening the maturity structure of the debt, and at expanding the outstanding stock of the debt by increasing substantially the number of market transactors.

A further difficulty in enlarging the public debt holdings of individuals is posed by seemingly widespread lack of confidence in government's financial viability. Fears of this sort are often *reinforced* by ignorance of financial markets and debt instruments. Most Caribbean peoples have some notion of financial instruments such as commercial bank deposits and life insurance policies; very few, including businessmen, have the *faintest* understanding of securities markets. Some governments, notably Jamaica, attempt to disseminate the necessary knowledge and to develop capital markets. Some have also resorted to quasi-fiscal methods which deduct incomes at source in exchange for financial assets such as compulsory savings certificates, defence bonds, and National Housing Trust bonds as a means of expanding the corporate and household sectors' contribution to medium and long-term public debt finances.

The view has been advanced that political divergences within the Commonwealth Caribbean and increased government involvement in the economy of Guyana undermine the value of the above analysis in two ways. First, by reducing its general applicability; second, by making a market analysis of the Guyanese economy misleading. There is little objective basis for that view. Not only did the divergences appear towards the end of the period studied, but they have also not been sufficiently significant in the field of public finance other than in the realm of rhetoric to warrant separate analytical treatment nor to yield qualitatively different results. Furthermore, government ownership of the financial sector was only partial. Accumulation of personal wealth and financial intermediation are still central features of the Guyanese political economy.

GENERAL MACROECONOMIC CONSTRAINTS

Even if the internal demand for the public debt was insatiable, some general economic considerations would limit the growth of the debt. Most of these have been so well established in the literature[7] that an extensive discussion is not justified at this time. Nonetheless, it is necessary to review at least a few of the important ones in the specific context of the Caribbean countries under study.

To begin, the issuing authorities have to be mindful of the effects of rapid debt increases on overall credit in the economy. They also have to be concerned with the effect of a large stock of liquid debt on the efficacy of legal reserve requirements as instruments of credit control. The growth of the short-term debt, if it results in excess liquidity within the banking system may vitiate legal reserve requirements. The commercial banks in these situations, in order to finance their desired loans to the private sector, have the option of reducing their stock of short-term government securities by not replacing those which mature or by selling their stock to the Central banks. Given

the monetary authorities' other concerns for preventing destabilisation of the government securities market and too great increases in the interest costs of the debt, they are unlikely to resist with any notable degree of persistence such offers of sale. One possible solution – already attempted by Jamaica – is to increase periodically the liquid assets requirements to which the commercial banks must conform.

Another important consideration is the effect of the debt on the supply of credit to the private sector. The issue pertains not only to the conventional forms of the debt. It is necessary to take account also of commercial banks' and other financial institutions' direct loans to the government which, except in Barbados, are *not included* in the National Debt statements. These forms of credit have been rising quite substantially in some Caribbean countries within the past five years, as is shown in Table 10. The basic premise underlying any concern with the growth of public debt *vis-à-vis* private debt is the argument that financial institutions are substituting claims on government for claims on the private sector. As such there is first an empirical question to be settled for the Caribbean countries under review.

TABLE 10 COMMERCIAL BANK LENDING TO GOVERNMENT ($m AND PER CENT OF TOTAL ASSETS) 1970-1975

	Guyana		Jamaica		Trinidad	
End of Year	$	%	$	%	$	%
1970	13.8	9.4	9.2	2.1	9.4	1.9
1971	14.1	8.1	10.0	1.9	19.3	3.1
1972	13.3	6.4	14.7	2.3	30.6	4.0
1973	21.3	8.5	19.6	2.6	89.1	9.8
1974	58.5	20.0	18.1	2.0	72.9	6.2
1975	59.6	14.1	16.9	1.7	70.4	4.5

Sources: Computed from data in *Annual Reports* and *Statistical Bulletins* of the Central Banks

Note: Trinidad data refer to loans to the total public sector.

Information has been presented on the shares of government securities in the asset portfolios of commercial banks and other financial institutions. From the further details on bank loans to the government sector as proportions of total bank assets in Table 10 which by being based on end of-year figures understate the true year round percentages, it appears that only in Guyana has there been a *substantial relative* displacement of bank credit to the private sector by bank credit to the government sector. Slight displacements are evident in the other three countries. Altogether, it appears that only *in the commercial banking industry* has there been a pronounced displacement of credit to the private sector. The shift has been most substantial in Guyana where government ownership of the means of production and larger scale distribution has made the government sector the largest client of the financial system.

The second aspect of the thesis is that such displacements are suboptimal for the conomy. The validity of the thesis depends on the employment of the funds by the rivate borrowers and by the government. There is no basis for the presumption that governmental use of bank credit is less socially beneficial than private sector uses in an economic system in which historically the allocation of bank credit has fostered import dependence, and rigidity in production structures, and by neglect has frustrated the emergence of potentially high growth industries.

Rapid expansion of the internal government debt, if financed by credit creation, can lead to significant short period deterioration in the balance of payments unless there are compensatory adjustments in private sector import expenditures. If the expansion is financed by a shift in the private sector's or the financial sector's portfolio composition, the existence of balance of payments effects depends upon the differences if any, between the private sector's and the public sector's import propensities. The negative impact on the balance of payments derives quite straightforwardly from the high import dependence of the economies. Despite a decade of attempted import-substitution, the ratio of imports to gross national product in 1974 was .36 in Trinidad, .50 in Jamaica, and .63 in Guyana. The short period foreign exchange constraint is a serious one in these economies under present circumstances in which foreign exchange receipts are at best stagnating as a result of problems in the tourism and primary product industries. Over the long run, depending upon the expenditure effects of the debt on import substitution and import displacement, and on foreign exchange earnings, initial negative balance of payments effects can be overcome. However, very little government expenditures make a direct contribution to conservation of and earnings of foreign exchange.

Two additional constraints will be mentioned in this section. First, an expansion of the public debt has as its concomitant an increase in the level of debt charges. The growth of debt charges as depicted in Table 11 shows an expansion in Trinidad and Tobago from 1966 to 1969, but relative stability with a hint of decline thereafter. In Guyana, debt charges as a percentage of total government expenditures declined from a high of 13 per cent in 1969 to 9 per cent in 1971, only to rise again to about 14 per cent in 1974. In Jamaica, debt charges have been a more or less stable proportion of total expenditures since 1967. In Barbados, there has been a discernible increase in the proportion of total government expenditures going towards debt service payments.

The macroeconomic significance of an upward trend in the share of debt charges in total government expenditures depends on several factors. Among these is the expenditure propensities of holders of government debt *vis-à-vis* non-holders since interest payments on the debt constitute a form of income redistribution from non-debt holding tax payers to debt-holding tax payers. In view of the predominance of institutional debt-holders in the countries analysed here, there is likely to be a not inconsiderable credit-expenditure effect, though profit repatriation by foreign-owned financial and nonfinancial enterprises would modify its magnitude.

The significance of debt charges also depends upon the expenditure effects of alternative financing methods, notably taxation. It is likely that fiscal revenue

TABLE 11 – DEBT CHARGES ($m AND AS % OF TOTAL GOVERNMENT EXPENDITURES)

	Guyana		Barbados		Jamaica		Trinidad	
	$	%	$	%	$	%	$	%
1965	12.1	11.4	2.8	7.1	8.0	6.9	19.8	7.9
1966	13.0	10.8	3.2	7.1	9.2	7.2	17.8	6.7
1967	14.1	10.1	3.4	6.7	10.7	7.8	22.9	8.4
1968	17.9	13.0	3.9	6.8	4.5	2.6	31.6	10.4
1969	16.6	10.9	3.6	5.9	5.0	2.4	36.4	11.2
1970	17.2	9.7	4.0	4.9	5.4	2.3	39.9	8.6
1971	18.3	9.4	3.1	3.0	25.2	9.0	43.0	9.2
1972	25.3	12.1	4.6	4.0	27.2	8.4	47.7	8.6
1973	47.8	15.3	9.3	7.2	32.7	8.8	n.a.	n.a.
1974	53.5	14.5	12.1	6.8	44.5	9.9	n.a.	n.a.
1975	63.7	12.0	13.9	6.7	n.a.	n.a.	n.a.	n.a.

Sources: Compiled from data in Budget *Estimates, Monetary Statistics* (Jamaica) and Central Bank statistical bulletins.

financing has a greater depressing influence on private expenditures and hence on total expenditures since, whereas taxation reduces disposable incomes, debt accumulation influences the allocation of disposable income.[8]

As a final consideration, one might mention the old issue of the burden of the debt on future generations. If debt finance is adopted as an alternative to the fiscal financing of current public consumption programmes, the present generation consumes at the expense of the future. However, debt proceeds might equally well be used to preserve the social fabric (e.g. crash programmes for mass employment), and to create the basis for future growth, the benefits of which accrue to future generations. An ultimate judgement therefore depends on the use of debt proceeds and its empirical relationship to current consumption and growth.

CONCLUSIONS

After many years of neglect, recourse must now be had to domestic financing of the public debt. However, important constraints beset attempts at rapid expansion of the internal debt. These include the narrow ownership structure of the debt and especially the predominance of a few types of financial institutions, the deceleration in the growth of the major holders, and their weak portfolio preference for government debt. Other market constraints include the strong liquidity preference of households and non-financial enterprises, as well as the absence of any significant secondary market for government securities. Several macroeconomic factors are also pertinent to the scope for internal debt finance. Those deserving of attention in Caribbean economies are the influence of debt expansion on credit control, the displacement of credit to the private sector, the effect of debt creation on the balance of payments, the influence of debt payments on government and total domestic expenditures, and the implications of debt accumulation for future generations.

FOOTNOTES

[1] I wish to thank the conference participants for comments. I am especially indebted to DeLisle Worrell and Maurice Odle for written comments and advice, some of which could not be incorporated because of the confines of time and space. Responsibility for remaining errors is solely mine.

[2] For evidence see for example the discussions by representatives of several prominent Euro-dollar banks in *EuroMoney*, October 1976 pages 44-97; and L.J. Brainard [1].

[3] The point needs to be stressed that tax morality or attitudes is related to the public's perceptions of the performance of the public sector. There may be general dissatisfaction with the efficiency of the public sector; the feeling that non-delivery of public services is likely; and doubt that beneficiaries will actually benefit from the fiscal outlay.

[4] In Jamaica, increases in the liquid assets ratio from 17.5 to 18.5 in July 1972, then to 21 per cent in November 1973, and finally to 23.5 per cent in May 1974 have coincided with periods of acute budgetary and foreign loan financing difficulties as well as with a trend towards dis-investment (relative and sometimes absolute) by the commercial banks.

[5] See for instance, Bank of Jamaica *Annual Reports:* 1963, p. 4, 1971, p. 2, and 1973, p. 22.

[6] Annual average growth rates are as follows:-

(a)	Trinidad and Tobago	1967-1971:	18 per cent;	1971-1975:	26 per cent
(b)	Jamaica	1967-1971:	23 per cent;	1971-1975:	18 per cent
(c)	Guyana	1967-1971:	14 per cent;	1971-1975	24 per cent
(d)	Barbados	1968-1971:	26 per cent;	1971-1975:	12 per cent

[7] See for instance Nevin [2], Rolph [5] and Ott and Ott [3].

[8] We are for present purposes, ruling out distributional effects stemming from the possibly different financial asset portfolios.

REFERENCES

[1] BRAINARD, Laurence J., "Financing Eastern Europe's Trade Gap: The Euro-market Connection", *Euro Currency*, January 1976.

[2] NEVIN, Edward, "Debt Management – A General Report" *Public Finance*, 16 1961.

[3] OTT, David J. and Attiat F. OTT "Fiscal Policy and the National Debt" in W.L. SMITH and R.L. TEIGEN (eds.), *Readings in Money, National Income* and *Stabilization Policy*, Illinois, Richard D. Irwin, 1970.

[4] REVIGLIO, F., "Social Security: A Means of Savings Mobilisation for Economic Development", *IMF Staff Papers*, July 1967.

[5] ROLPH, Earl R., "Debt Management: Some Theoretical Aspects", *Public Finance*, 16, 1971.