

ADJUSTMENT AND EXTERNAL DEBT IN ECCB MEMBER STATES*

BY

Arthur M. Williams

and

Joseph Carlton Augustine

(Research Department, Eastern Caribbean Central Bank)

The adjustment experience of the ECCB member states has begun to reveal differences in the impact of micro-economic measures on the macro-economic performances including those related to the management of debt. In fact, the size of the countries blurs the distinction between conventional micro-economic approaches to adjustment and macro-economic policy issues for two sets of reasons. The first is the constraints to monetary and fiscal policy represented by membership of the currency union and of CARICOM. The second is the fact of size in which specific activities assume a large proportion of total activity. Both sets of factors have concentrated attention to the acceptance of external price relationships and to the need for policies that are directed to adjustment of domestic factor relations. There is therefore reference in this paper to specific aspects of the external environment that have relevance to the ECCB member states and to the relation of the twin deficits - the overall fiscal deficit and the deficit on the balance of payments - that have begun to assume importance in the debt management policies of the ECCB member states. This paper, in the following section recalls features of the external environment to which the ECCB member states adjusted in the 1979 to 1986 period. In the section on Adjustment, the relationship between the twin deficits and the external debt are causally examined.

* There are now eight countries that comprise the membership of the Eastern Caribbean Central Bank. These are Anguilla, Antigua and Barbuda, Dominica, Grenada, Montserrat, St. Kitts and Nevis, St. Lucia and St. Vincent and the Grenadines. Seven of the eight members comprise the Organisation of Eastern Caribbean States (OECS) and the OECS and ECCB Area are sometimes used interchangeably. However Anguilla which joined the ECCB in April 1987 is not a full member of the OECS but has observer status.

THE EXTERNAL ENVIRONMENT - AND ECCB MEMBER STATES PROSPECTIVE

During the period from 1979 to 1983 the economies of the leading industrial countries were faced with three problems - high and accelerating inflation, low growth and large external imbalances - which had serious implications for both the industrial and developing countries. The rate of inflation as measured by the GNP deflator rose from an average of 6.5% for the leading industrial countries between 1967 and 1976 to 9.1% in 1980 before declining to 4.8% in 1983. In the early part of this period the policy prescription of the industrial countries concentrated primarily on measures to combat inflation and these resulted in lower growth and higher unemployment. Real GNP for the leading industrial countries rose on average by 3.6% during the period 1967 to 1976 and recorded a modest expansion up to 1978 with rates exceeding 4%. In 1979 growth was hesitant and slowed considerably in the following years becoming negative in 1982 before recovering to 2.5% in 1983. Efforts to combat inflation concentrated on monetary rather than fiscal measures with the result that holdings of narrow money expanded by 6% in 1979 compared with 11% in the previous year. A weighted composite of annual growth rates of the narrowly defined money supply (M1) and used by the International Monetary Fund found that in the seven industrial countries M1 recorded an average growth of 10% per annum during the period 1976 to 1978 compared with 6.5% during 1979 to 1981.* In 1982 the rate of growth increased to 8.5% largely as a result of the increase in M1 in the United States. For the broadly defined money supply (M2) the trend was somewhat similar. Restrictive monetary policy put pressure on interest rates and the average short-term nominal interest rates which in 1981 reached 15% remained high during 1982 before falling to 9.25% by mid 1983.

The reduction in growth rates together with the high interest rates led to lower investment levels with the result that unemployment became an increasingly urgent problem. Unemployment in the combined labour force of the seven leading industrial countries rose from 5% in 1979 to 9% in mid 1983.

* Annual Report 1984 International Monetary Fund.

For the individual countries the situation was much worse with rates in all of the countries except Japan close to or above 10%. In 1982 growth in unemployment was particularly severe corresponding with the decline in aggregate demand.

Further effects of the recession in the industrial countries were that world trade weakened and the financing of non-oil developing countries was constrained. Growth in the volume of world trade slowed significantly in 1980 and ceased in 1981 but recorded some expansion in 1983. The only buoyancy in trade during 1981 came from the imports of the oil exporting countries. In real terms, the imports of the industrial countries declined by 2.5% in 1981 with almost the entire decline being accounted for by a 12% drop in volume of oil imports. This reduction in oil imports was due to weakness of economic activity together with conservation and fuel substitution.

The problems caused by the recession in the industrial countries were repeated in the non-oil developing countries but because of the fragility of the economies of some of these countries the effects were more pervasive. In 1980 growth for the group increased by less than 5% compared with 6.5% in 1981. The recession also inhibited the expansion of export volume thereby putting downward pressure on commodity prices. Exports which had grown in volume by an average 9% between 1976 and 1979 was curtailed to 5.5% in 1980 and 4% in 1981. (By 1983 the economic condition of this group was severely affected by the intensification of the worldwide recession). This weakness in export markets together with the continuing decline in commodity prices reduced export receipts. The terms of trade of the non-oil developing countries deteriorated over this period adding to the negative influence associated with weakening demand in the industrial countries.

During the late 1970s and the early 1980s the countries of the ECCB region suffered two types of shocks to the economy. The first was external in nature and was caused by the worldwide recession of 1981 to 1983 with the effects of weak demand for primary commodities outlined above for developing countries. The decline in the prices and volumes of the agricultural exports,

together with increases in the prices of oil and manufactured imports, led to a deterioration in the terms of trade facing the ECCB countries. The second type of shock related to natural disasters such as hurricanes and volcanic eruptions which affected several of the islands in recent times causing serious damage to agriculture and the infrastructure. The result of these disasters was that governments were forced to increase borrowing to rehabilitate the agricultural sector and replace damaged infrastructure. The economies of the ECCB member countries are primarily dependent on agriculture, although there has been some effort at diversification towards tourism and light manufacturing. As such, these islands were significantly affected by external and domestic developments and some of these developments are outlined with respect to primary agricultural products.

Bananas

The banana industry is vital to the Windward Islands sub-group and as the main source of foreign exchange provides employment for a number of small farmers. In 1979 all four producing countries suffered some type of damage to output. Volcanic eruptions in St. Vincent resulted in the suspension of exports which when resumed found large quantities of fruit being rejected because of poor quality. In Dominica damage by hurricane also led to a suspension of exports for the remainder of the year. Grenada and St. Lucia, while experiencing some damage their shipments to the United Kingdom remained unaffected. The results of these developments were that banana exports in 1979 declined by 25% in volume compared with 1978 while export earnings fell by 14%.

In 1980 exports were further reduced by 33% compared with 1979 but recovered substantially in 1981 while still remaining below the output of 1978. The depreciation of the pound sterling, in which banana prices are quoted, by 12.3% between 1980 and 1981 adversely affected local currency earnings. This depreciation, together with the declining price on the United Kingdom market in effect reduced the price to producers from EC\$0.19 per pound in early 1981 to EC\$0.12 per pound at year-end. Even though there

was an increase in the average price in 1982 this was not reflected in local currency earnings due to the continued depreciation of the pound during that year so that a 3% fall in the volume of exports from the previous year translated into a 7% fall in value. By 1983 a recovery in exports of 11.6% caused earnings to rise by 18%.

There were three main factors associated with the 1981 recovery. The first was that a simultaneous rehabilitation programme was undertaken by the islands assisted by financing from the Caribbean Development Bank, the United Kingdom Government and the European Development Fund. Secondly the weather pattern, while unusual was quite favourable facilitating growth during the normally dry months. The third factor related to increased efforts to produce a high quality of fruit and retain preferential status in the United Kingdom market.

Cocoa

Grenada produces a premium quality cocoa which is its primary foreign exchange earner. Exports increased significantly during the period 1977 to 1979 but more important was the increase in the world market price which saw Grenada's export earnings rise from EC\$8.9m in 1977 to EC\$27m in 1979. However price volatility reversed some of this gain in 1980 when export earnings declined 33%. Despite a 47% increase in exports in 1981, to the highest level since 1976, the weak world price restricted export earnings to a modest 5% increase over 1980 as the price per pound fell from EC\$5.07 in 1979 to EC\$3.24 in 1981 to 1982.

Nutmegs

The demand for and price of nutmegs, of which Grenada is the sole regional producer, was similarly affected by volatility during the period 1979 to 1983. Export earnings which in 1977 stood at EC\$16.2m fell to EC\$10.7m in 1978 before rising to EC\$11.9m in 1979. The two years to 1979 saw both output and price decline. An over supply by Indonesia which produces 62% of world output - compared with Grenada's 32% - depressed world

market conditions reducing Grenada's exports by 34% and export earnings by 30%. An effort by Grenada at co-operation with Indonesia to stabilize the market was unsuccessful. The period 1981 to 1983 saw steady increases in exports which were not matched by export earnings. In 1981 export volume increased by 2% over 1980 but export earnings fell by 2% while a 13% increase in 1982 provided virtually no change in export earnings over 1981. A similar situation existed in 1983 when exports increased by 27% but export earnings went up by a comparatively modest 7%.

Sugar

Sugar in the region has been produced by Antigua, Grenada, St. Vincent and St. Kitts but only in St. Kitts is it produced for export mainly to the United Kingdom and the United States. Like other primary commodities sugar was subjected to wide fluctuations in price. Production in 1979 compared favourably with that of the previous year but both the volume and value of exports fell below their respective values for 1978. Despite a decline in output by 13% in 1980 compared with 1979 and a corresponding 18% reduction in the volume of exports earnings rose by 22%. The decline in output was attributed to a number of factors which included storm damage and the effects of smut disease while the increase in earnings resulted from higher world market prices together with an appreciation of the pound sterling against the dollar.

Poor yield, the residual of the smut disease and mechanical problems reduced output further in 1981 by 7% and exports by 5% but a better average price put earnings up 7% above the 1980 level so that earnings were better than in any of the previous years. The world market price actually declined from £310 per ton at the beginning of the year to £160 at the end but more important was the sale of sugar to the United States at the prevailing market price. By the end of August 13,380 tons of sugar had been exported to the United States at a cost of EC\$22.6m compared with earnings of EC\$13.2m for exports of 12,491 tons exported to the United Kingdom. The world market price continued to decline in 1982 so that while production and exports increased by 11% and 4% respectively earnings fell by 21.3%. This however reflected reductions in exports to the United States. In 1983 production

declined further by 21% to its lowest level in the six-year period from 1978 but exports were only marginally below the 1982 level. However, export earnings fell by 12% to its lowest level since 1978.

During the period the sugar industry faced serious financial difficulties. Both St. Vincent and Antigua re-introduced production to supply the respective domestic markets but poor yields and higher than estimated capital costs led to substantial losses and the eventual abandonment of these projects. In St. Kitts the industry also faces financial difficulties as production costs exceed earnings. A number of measures have been taken to reduce production costs. However, some problems are likely to persist because of competition from beet sugar in Europe which threatens the preferential status on the United Kingdom market and the increasing popularity of corn syrup in the United States as a sweetener in beverages and confectionery.

Tourism

Tourism, which has always been an important sector for most Caribbean economies became increasingly important in the region as weakness developed in the traditional activities and more countries sought to diversify. This sector was as sensitive as primary commodities to the external shocks and individual countries recorded significant changes in arrivals in response to the 1979 recession, the appreciation of the dollar and political instability. The figures for the region were modified as losses in some countries were offset by gains in others and intra-regional travel increased.

The overall trend in arrivals of stay-over visitors, which have the greater impact on earnings, reflected the economic conditions in the industrial countries. In 1979 arrivals increased by 6.3% following which there were two years of decline by 3.8% and 6.2% respectively in 1981 and 1981. Two years of recovery saw arrivals rise by 3.3% and 10.7% but arrivals in 1983 were only 3.2% above the 1979 peak level.

There was a similar trend for arrivals of excursionists and cruise ship passengers but with a lag effect. The increase in arrivals of excursionists carried over into 1980 when they were up by 21% compared with a 75% increase in 1979. The decline which set in 1981 continued, though with declining severity until 1983 when arrivals were 44% below the 1980 level. Despite fluctuations in visitor arrivals estimates of earnings from tourism increased in each year except 1982 when they were down 3.5% compared with the previous year.

ADJUSTMENT

Let us look at the balance on the external accounts (See Table 1). In 1979, the year of the most serious natural disasters, the level of Goods, Services and Private Transfers contracted considerably with declines in both exports and imports. The Capital Account transactions were, however, large enough to cover the reduced current gap and to result in the accumulation of \$24 million in reserves. In 1980 recovery was sharp. Both exports and imports expanded but an already worsening external environment did not accommodate capital transactions large enough to cover the current gap, thereby putting pressure on the external reserve position. Drawings from the International Monetary Fund became necessary.

In the 1981 to 1983 period, the average nominal level of the aggregates in the external transactions did not vary much from those in 1980. The average value of exports in that period was a mere 4% above that in 1980 while the percentage increase in imports despite rehabilitation and repair needs was only 2% higher. Tourism receipts in 1981 to 1983 averaged no more than 5% above those in 1980. Capital inflows remained on average at their 1980 levels and recourse to reserves continued to be necessary. Borrowings from the I.M.F. rose a yearly average of \$18 million. Given the inflation levels of between 5 and 7% it was evident that the depression had impacted with considerable severity on the OECS islands. (See Table 1)

Balance of Payments of the OECS countries
(Summary Accounts)

	1979	1980	1981-83 Average	1984-86 Average	Av.81-83 over 1980	Av.84-86 over Av. 81-83
(In millions of Eastern Caribbean dollars)						
Goods, services and private transfers	-209.8	-324.0	-323.7	-268.4	+0.3	+55.3
Trade balance	-608.3	-744.7	-755.3	-896.2	-10.6	-140.9
Exports	(278.1)	(456.6)	(474.1)	(563.8)	(+17.5)	(+89.7)
Imports	(-886.4)	(-1201.2)	(-1229.4)	(-1460.6)	(-28.1)	(-230.6)
Tourism (net)	251.4	294.3	310.2	496.0	+15.9	+185.8
Other services (net)	8.1	-13.2	-45.3	-49.9	-32.1	-4.6
Private transfers (net)	139.1	139.6	166.7	181.7	+27.1	+15.0
Capital account	230.3	289.7	302.1	361.6	+12.4	+ 59.5
Official grants	73.7	114.8	96.4)		-18.4	
of which: capital grants	(53.5)	(91.8)	(88.2))		- 3.6	
Net public borrowing	58.1	42.9	94.2)		+51.3	
Gross public borrowing	(61.8)	(56.2)	(118.4))		(+62.2)	
Amortisation	(-3.8)	(-13.2)	(-24.2))	361.6	(-10.9)	
Change in arrears	1.1	1.6	12.9)		+11.3	
Commercial banks	-9.5	4.6	-11.6)		-16.2	
Private direct investment and errors and omissions	106.9	125.8	110.2)		-15.6	
SDR allocation	3.0	4.1	1.3	-	-2.8	-1.3
Overall surplus or deficit	23.5	-30.2	-20.3	93.2	+9.9	+113.5
Financing	-23.5	30.2	20.3	-93.2	-9.9	-113.5
Change in ECCB Reserves	-28.4	22.1	3.5	-82.2	-18.6	-85.7
Change in Govt. foreign assets	3.0	0.5	-0.9	-0.5	-1.4	+0.4
IMF borrowing (net)	7.8	7.6	17.7	-10.5	+10.1	-28.2

Source Appendix Table 5

Note: 1. Goods, services and private transfers do not, strictly speaking,

constitute the Current Account. To arrive at the Current Account Balance we should include Grants. Such a large part of the Grants however, are capital in nature and finance investments in infrastructure that Official Grants are included in this table in the Capital Account.

2. An increase in reserves is shown with a minus sign, representing an outflow to a foreign bank account. A decrease is shown with a plus, indicating money coming back in.

It is in the subsequent period that the external environment permitted a return to growth that had slowed since the disasters of 1979. Exports of merchandise rose sharply relative to 1981 to 1983, by almost 20%. Most of this increase resulted from the expansion in volumes of banana exports originating largely in St. Lucia. There were also increases in the prices of bananas and of sugar, in part the result of the depreciation of the U.S. dollar. More remarkable still was the estimated average annual increase of tourism of about 60%. In fact, tourism receipts were almost double their annual level in 1981 to 1983. There were also sharp increases in the growth of imports with annual levels that were 20% higher than during the 1981 to 1983 period. In respect of adjustment, it can be noted that some of this increase can be attributed to higher levels of capital imports for the further rebuilding of infrastructure, particularly in Dominica and in Grenada, as well as for the construction of hotels and condominiums, more so in Antigua and Barbuda than in any other territory. From the data, it is also discernible that there were sharp increases in imports of consumer goods especially in Antigua and Barbuda, in Grenada and in St. Lucia.

The experience in relation to Capital Account transactions led to a concerted effort to augment capital account transactions by higher rates of public borrowing - for hydro-electric facilities in Dominica and in St. Vincent and the Grenadines, for hotels development in Antigua and Barbuda and for land acquisition in St. Kitts and Nevis. The performance in respect of reserves improved markedly. I.M.F. loans were repaid at the rate of \$10½ million per year, reversing the average annual drawings of \$18 million in the 1981 to 1983 period by about \$28 million.

In terms of the analysis of this paper, what is significant is the size of these shifts of the balance of payments in relation to the gross domestic product. The current account deficit rose from 22% in 1981 while the overall external balances shifted from a surplus of 2.5% of GDP to a deficit of almost 3%. By 1986, the improvement analysed in Table 1 had reduced the current deficit to as low as 18% of GDP, and the overall balance had swung into a surplus of 7% of GDP.

The constraints resulting from the arrangements governing the ECCB have contributed to an external adjustment policy of borrowing and of seeking grant finance. There has therefore been a very close interdependence between the deficits on the external account and the accumulation of the external debt of the ECCB member states in those situations where grant finance have not been readily available. In such situations, it has been perceived that the commercial nature of the ventures did not qualify them for such concessionality in the terms of raising external assistance.

Another consequence of the various shocks was the persistence of fiscal deficits over the period 1981 to 1986. The current revenue for the entire ECCB member states increased from an equivalent of 36.4% of GDP to an equivalent of 42% of GDP over the period. On the other hand, total expenditure (capital and current) varied between 50.8% of GDP and 57.5% of GDP between 1981 and 1985. However, total expenditure increased sharply to an equivalent of 62.4% of GDP in 1986. This was due largely to an increase in expenditure in Antigua from an equivalent of 39.8% in 1985 to an equivalent of 86.3% in 1986 (Table 6).

On a territorial basis, only St. Vincent and the Grenadines showed any tendency towards a significant narrowing of the fiscal deficit. This resulted from a significant contraction of public sector activity and a very considerable restructuring of public sector finances. In that territory a surplus equivalent to 1.1% of GDP was realised in 1983. The sharp rise in the fiscal deficit for the group was mainly on account of Antigua and Barbuda where the deficit rose from an average of 10.4% of GDP in the previous five years to 47% of GDP in 1986. This increase reflected large outlays of infrastructure (airport extension, etc.) and investment in hotel construction. In contrast, the fiscal deficit in Dominica narrowed to 2.9% of GDP in 1986 after averaging 20.5% of GDP in the period 1981 to 1985. Fiscal deficits were also quite substantial in Grenada averaging about 36% of GDP in the period 1981 to 1986. In St. Kitts and Nevis, St. Lucia and St. Vincent and the Grenadines the fiscal deficits averages between 8.1% and 8.7% of GDP over the period.

Fiscal deficits in the ECCB are financed through two sources. First - foreign currency financing; second - domestic financing, that is ECCB credit, bank credit and non-bank credit (Mc.Intyre, 1985). With regard to domestic financing statutory limitations exist which govern ECCB credit to member states. In addition certain structural features limit the other sources of domestic credit. The end result is that ECCB member states resort mainly to external financing.

Over the period 1981 to 1986 external financing accounted for some 74% to 95% of the overall deficit. The major form of this financing has been grants, accounting for about 53% of total external financing or 8.3% of aggregate GDP for the area. Concessionary loans are the next most attractive source of finance for fiscal deficits in ECCB member countries. The terms of these loans have generally involved lower than market rate of interest, a substantial grace period and a usually long maturity. The major suppliers of this type of financing have been the Caribbean Development Bank (CDB), other international institutions and governments. The resort to concessionary loans by the ECCB member states have partly been responsible for the accumulation of the area's external debt.

The main point to emerge here is that the twin deficits have in some way been responsible for the accumulation of the area's external debt. Although the two deficits have been analysed separately there are some feedback effects between the two deficits. The following analysis attempts to illustrate that point.

$$M \equiv N.F.A + DC \quad (1)$$

where

M_s = money supply

NFA = Net foreign assets

DC = Domestic credit

$$DC = DC^P + DC^G \quad (2)$$

where the superscript P refers to private, while G refers to Government.

Now a fiscal deficit can be financed by the Government either by borrowing locally or overseas, that is

$$G-T \equiv \Delta DC^G + \Delta NFA^G \quad (3)$$

by rearranging equation (1) we can determine that a change in NFA is equal to a change in the money supply minus the change in domestic credit.

$$\Delta NFA \equiv \Delta M_s - \Delta DC \quad (4)$$

substituting (2) and (3) into (4) we obtain

$$\Delta NFA \equiv \Delta M_s - \Delta DC^P - G + T + NFA^G \quad (5)$$

Equation (5) implies that a change in the government's fiscal position, under a situation where the deficit is financed mainly by overseas borrowing, will initially lead to a change in net foreign assets.

From equation (1) this implies that the money supply would also increase (we assume here that domestic credit remains constant). Assuming that agents now have excess money balances, the resulting portfolio imbalance will lead to increased expenditure on imports. The latter would impact unfavourable on the external accounts, resulting in a decrease in net foreign assets. This contrasts with the situation where the deficit is financed mainly through domestic credit, in which case there is no initial increase in net foreign assets.

Furthermore the burden of servicing the debt in future years may aggravate fiscal deficits. Also the outflow of funds to service the external debt would affect the external accounts.

The foregoing suggest that on examination of the data there should be some correlation between the twin deficits. This is indeed the case, since in the year 1981 and 1982 the largest deficits are recorded on the current account of the external and public sector accounts. (Tables 5 and 6). For the years 1983 - 1985 there is a levelling off, afterwards both increase significantly. In other words over the period 1981 - 1986 the two sets of data tend to move together.

In summary therefore the ECCB member states accommodated the various shocks that the economies were subject to in 1979 and the early 1980's by running up twin deficits on the external accounts and on the public sector accounts. These were financed mainly through external sources. Part of this external finance consisted of loans, resulting in a build up of the external debt of the ECCB member states.

External Debt of the ECCB Member States

Figures on the total public and publicly guaranteed external debt outstanding for the ECCB member states are given in Table 7. These figures represent the amounts of disbursed loans inclusive of drawings from the IMF and are net of repayments.

The table shows that over the five-year period 1981 to 1986 external debt outstanding for the ECCB member states has increased from US\$153.4m to US\$324.4m at an average annual rate of growth of 16.1%. The outstanding debt of the individual countries has however grown at varying rates. The slowest has been that of St. Lucia, which increased at an average annual rate of 4.9% while the highest was that of Antigua which increased at an average annual rate of 23.5%. Antigua's debt had been virtually stagnant from 1981 to 1985, but it rose sharply in 1986 when several large development projects financed from commercial sources were undertaken. Consequent to this sharp rise Antigua's share in the ECCB group's total debt, has increased from 30% in 1981 to 41% in 1986. The volume of debt outstanding for Dominica, Grenada, St. Kitts and Nevis and St. Vincent grew at rates between 9% to 18% - that is at slightly slower rates than for the group as a whole.

One cannot get an adequate picture of a country's debt burden and its ability to service its foreign debt by just looking at the country's overall level of indebtedness and its aggregate level of debt service payments (Mc.Intyre, 1986). To get a more adequate picture of the debt problem the use of other macro-economic indicators along with the absolute figures are more appropriate.

The ratio of external debt to GDP enables us to relate the size of a country's debt to its aggregate income. Table 7 shows that the external debt of Antigua, Dominica and Grenada have ranged between 33% to 65% of their respective GDPs, while the other countries have ratios in the range of 17% to 26%.

Table 8 shows that the total amount of debt service obligations of the ECCB countries increased from US\$13m in 1981 to US\$34.8m in 1986. For the group as a whole debt service obligations have increased at a slightly faster pace than the total volume of debt. With respect to individual countries, although debt service payments moved broadly in the same fashion as the total volume of their debts, there are some significant differences. Antigua, which accounted for a substantial share of the increase in the group's debt, shows a relatively slow rate of growth of around 10.6% in debt service obligations. This is because Antigua's heavy borrowings in 1986 have yet to make their impression on its debt service obligations. The debt service obligations of Dominica, Grenada and St. Kitts have all grown quite rapidly - at rates in excess of 25% a year, reflecting their increasing resort to foreign borrowings on non-concessional terms.

A useful measure of external financial solvency is the ratio of debt service obligations to foreign exchange earnings (Mc.Intyre, 1986). This index shows the amount of foreign exchange on the current account that the debtor country has to set aside to meet the debt service payments in any given year. Table 8 shows that these ratios are relatively small in the case of St. Kitts and Nevis, St. Lucia and St. Vincent. The ratios of Antigua and Dominica which had been on a rising trend approached 10% in 1986, while that of Grenada has risen more sharply from a range of 3.7% to 6.9% prior to 1984 to 15% to 20% thereafter.

Ultimately in economies like those of the ECCB member states the burden of servicing the public debt falls on government. Having to set aside too large a share of government revenue for debt can pose serious problems for small developing countries. In this regard the ratio of debt service obligations to public revenue therefore provides a measure of the debt servicing capacity for countries such as the ECCB member states (Ellis and Williams, 1986). The point being emphasised here is that given the statutory limitations imposed on borrowing from the ECCB, and given certain structural limitations with regard to borrowing from domestic sources, the burden of servicing the public debt ultimately falls on government revenue. The ratio of debt service obligations to public revenue for the ECCB states are shown in Table 9. The ratios for St. Kitts and Nevis, St. Lucia and St. Vincent

are much lower than for the other countries, however they are about twice the respective ratios of debt service to foreign exchange earnings. With regard to Dominica the ratio of debt service to public revenue is about 50% higher while in the case of Grenada the two ratios are about the same. In Antigua, however the ratio of debt service to public revenue is substantially larger than its debt service ratio with respect to foreign exchange earnings.

These debt service ratios should be interpreted with caution, especially when being used as a basis for comparison. It must be remembered that the ECCB member states have obtained much of their external finance on concessionary terms and as such these debt service ratios do not reflect commercial interest rates. A useful exercise would be the simulation of debt service ratios involving non-concessionary terms. In addition it appears that the conventional debt services ratios are generally inadequate as signalling devices, since despite being relatively low, some countries, for example Antigua, Grenada and St. Lucia have an accumulation of arrears on their debt. (McElroy and de Albuquerque, 1986).

Conclusions

This paper suggests that the external debt situation of the ECCB member states has been the result of the external financing of the twin deficits on the external account and on the public sector accounts. A major factor that contributed to these deficits was the need to make adjustments to the economies in the wake of the various shocks that they were subjected to in the early 1980s.

While the traditional debt service ratios are low compared to those of other countries, there is some cause for concern. First of all some countries have already accumulated arrears on their debt. Also in years to come these debt service ratios may increase rapidly as repayments on previous obligations fall due. In addition, if bilateral donors reduce their grant financed assistance and international agencies go ahead with their proposal for "graduation" such that some of these economies will no longer be eligible for loans on concessionary terms, any future obligations would also mean a significant rise in the various debt service ratios.

The economies of the ECCB member states will always be vulnerable to shocks of various kinds. Given the limits of domestic credit and the fiscal inelasticity characteristic of the Caribbean political economy there will always be the need to resort to external borrowing. It is our belief that through the right kind of policies the member states of the ECCB can avoid finding themselves in a similar plight to other nations.

In this regard we would like to highlight some elements of an adjustment programme, with specific debt management elements of an ECCB member state. They include:

1. A limit on the use of non-concessional financing.
2. A limit on government guarantees for foreign loans on non-concessionary terms.
3. The setting of limits on the external current account deficits.
4. Divestment of major state-owned corporation by offering equity for sale to the public.

REFERENCES

Ellis, C.F. and Williams, A.M.; "The External Debt Problem of the Countries of the OECS", ECCB (1985)

Mc.Elroy, J.L. and de Albuquerque, K.; "Recent Debt and Adjustment Experience in the OECS Countries of the Commonwealth Caribbean", (1986)

Mc.Intyre, A.M.; "The Economies of the Organisation of Eastern Caribbean States in the 1970s", (1986)

Eastern Caribbean Central Bank Annual Report (Years 1980 to 1984)

International Monetary Fund Annual Report - 1987

APPENDIX

TABLE 1

Commodity Exports

	1978	1979	1980	1981	1982	1983
<u>COCOA</u>						
Quantity	n.a.	n.a.	1,791	2,677	2,096	2,243
Value	19.6	27.0	18.2	19.1	12.5	10.9
<u>NUTMEGS</u>						
Quantity	2,263	2,516	1,648	1,683	1,900	2,421
Value	10.7	11.9	8.3	8.1	8.2	8.8
<u>BANANAS</u>						
Quantity	132,549	98,850	66,718	109,970	106,755	119,387
Value	85.3	73.2	60.2	103.8	96.9	114.4
<u>SUGAR</u>						
Production	38,992	38,885	33,927	31,572	35,059	27,761
Exports	34,908	33,531	27,662	26,216	27,353	27,159
Value	30.6	28.5	34.8	37.2	28.5	25.2

Quantity, Production, Exports: tons

Value: EC\$M

APPENDIX

TABLE 2

Tourism Earnings

(EC\$M)

	1977	1978	1979	1980	1981	1982	1983
Antigua	66.7	79.7	104.5	114.8	125.8	129.6	162.0
Dominica	8.1	10.3	7.0	7.8	8.6	13.0	11.1
Grenada	21.6	39.4	52.7	54.3	46.7	46.7	38.7
Montserrat	7.6	8.1	10.0	11.6	15.7	16.2	16.2
St. Kitts	5.4	13.5	18.4	21.3	25.9	25.4	30.0
St. Lucia	48.1	74.8	90.2	88.8	79.4	87.8	107.2
St. Vincent	15.9	30.0	34.6	45.1	48.1	46.4	49.1

APPENDIX

TABLE 3

Stay-Over Visitors

	1978	1979	1980	1981	1982	1983
Antigua	76,895	99,536	86,571	84,724	87,042	101,113
Dominica	21,117	20,305	14,357	15,391	19,032	19,638
Grenada	32,336	32,303	29,418	25,072	23,270	32,459
Montserrat	11,534	13,060	15,532	15,577	14,640	14,344
St. Kitts	20,234	25,074	32,751	35,484	34,538	34,274
St. Lucia	105,473	87,906	79,694	68,559	70,214	77,392
St. Vincent	34,249	42,714	50,351	44,732	50,351	51,910
Total	301,838	320,898	308,674	289,539	299,087	331,130

APPENDIX

TABLE 4

Cruise Ship Passengers and Excursionists

	1978	1979	1980	1981	1982	1983
Antigua	51,942	70,226	107,094	113,157	66,762	51,987
Dominica	7,335	7,770	7,377	5,806	2,362	6,112
Grenada	116,331	138,654	145,594	77,596	62,119	50,217
Montserrat	4,447	3,777	4,953	5,846	9,921	4,503
St. Kitts	2,092	2,993	5,782	10,850	11,146	22,835
St. Lucia	68,038	54,349	59,042	18,934	33,812	33,262
St. Vincent	20,888	20,726	32,479	33,449	33,872	34,440
Total	171,073	298,495	362,231	265,638	219,994	203,356

APPENDIX TABLE 5

Balance of Payments of the OECS Countries
(Summary Accounts for the years 1979 to 1986)

In Millions of E.C. Dollars

	1979	1980	1981	1982	1983	1984	1985	1986
Goods, services and private transfers	-209.8	-324.0	-373.4	-372.6	-225.2	-235.4	-243.0	-326.8
Trade balance	-608.3	-744.7	-797.9	-774.6	-693.4	-818.6	-874.6	-995.5
Exports	(278.1)	(456.6)	(465.5)	(471.2)	(485.7)	(495.5)	(534.4)	(661.5)
Imports	(886.4)	(1201.3)	(1263.4)	(1245.8)	(1179.1)	(1314.1)	(1409.0)	(1657.0)
Tourism	251.4	294.3	295.1	301.8	333.7	429.6	494.1	564.2
Other services	8.1	-13.2	-30.2	-64.5	-41.3	-17.6	-46.5	-85.5
Private transfers	139.0	139.6	159.6	164.7	175.8	171.2	184.0	190.0
Capital Account	230.3	289.7	328.6	356.1	221.7	312.2	324.2	448.4
Official grants	73.7	114.8	102.3	95.0	91.8	154.2	153.6	---
Of which: capital grants	53.5	91.8	90.7	88.0	85.9	135.0	---	---
Net public borrowing	58.1	42.9	128.8	88.3	65.6	50.8	31.3	---
Gross public borrowing	(61.8)	(56.2)	(161.7)	(105.6)	(87.8)	(79.9)	---	---
Amortization	(-3.7)	(-13.3)	(-32.9)	(-17.3)	(-22.2)	(-29.1)	---	448.4
Change in arrears	1.1	1.6	4.1	12.4	22.1	12.4	---	---
Commercial banks	-9.5	4.6	-8.6	17.3	-43.5	-30.2	-0.6	---
Private direct investment and errors and omissions	106.9	125.8	102.0	143.1	85.7	125.0	139.9	---
SDR allocation	3.0	4.1	3.8	---	---	---	---	---
Overall surplus or deficit	23.5	-30.2	-41.0	-16.5	-3.5	76.8	81.2	121.6
Financing	-23.5	30.2	41.0	16.5	3.5	76.8	-81.2	-121.6
Change in ECCB Reserves	-28.4	22.1	-3.5	15.1	-1.1	-69.5	-63.8	-113.3
Change in Governments for assets	-2.9	0.5	0.8	-0.3	-3.2	-0.6	-0.9	---
IMF borrowings	7.8	7.6	43.7	1.7	7.8	-6.7	-16.5	-8.3

Sources: I.M.F. Report and ECCB Annual Reports. The major differences between these data and those published by ECCB are:

1. An estimate is made of intra OECS flows which are included from this table.
2. The Capital Account includes Grants which are strictly speaking items for inclusion in the Current Account. However, the importance, the purpose, and the size of Official Grants attribute to them a strong similarity with long term Capital Inflows. Hence their inclusion in this table with Capital Account transactions. By so doing, the balance of goods, services and private transfers can be regarded as the more appropriate current account balance for which capital financing will, in the future, be required if Grant Financing is sharply reduced.

APPENDIX

TABLE 6

CONSOLIDATED PUBLIC SECTOR DEFICIT FINANCING SOURCES

ECCB MEMBER COUNTRIES (1981 - 1986)

EC\$ MILLION

	1981	1982	1983	1984	1985	1986
Overall Deficit before Grants	-243.9	-247.5	-213.9	-155.5	-164.9	-370.6
<u>Financing</u>	243.9	247.5	213.9	155.5	164.9	-370.6
External	212.6	187.3	175.3	186.3	113.9	374.0
Grants	87.3	96.0	95.6	154.7	157.3	152.5
Net external loans	125.3	91.3	79.7	31.6	221.5	221.5
Domestic (net)	31.3	60.2	38.6	-30.8	-8.9	-3.4
AS A PERCENTAGE OF GDP						
Overall Deficit before Grants	20.4	19.0	15.5	10.2	9.9	20.2
<u>Financing</u>	20.4	19.0	15.5	10.2	9.9	20.2
External	17.8	14.4	12.7	12.2	10.4	20.4
Grants	7.3	7.4	6.9	10.1	9.4	8.3
Net external loans	10.5	7.0	5.8	2.1	1.0	12.1
Domestic (net)	2.6	4.6	2.8	-2.0	-0.5	-0.2

APPENDIX

TABLE 7

Public and Publicly Guaranteed External Outstanding Debt

In ECCB Member Countries (1982-1986)

(US\$M)

	1981	1982	1983	1984	1985	1986
Antigua & Barbuda	46.7	54.0	55.7	53.3	61.2	133.9
Dominica	24.4	34.4	40.9	43.8	48.8	56.6
Grenada	26.1	32.1	46.8	46.8	49.3	54.2
St. Kitts & Nevis	11.9	10.9	11.5	16.6	19.0	19.1
St. Lucia	25.1	28.3	29.9	28.0	28.8	32.0
St. Vincent & the Grenadines	19.2	21.2	22.7	22.8	24.3	29.6
All	153.4	180.9	207.5	211.3	231.4	324.4

	As Percentage of GDP					
Antigua & Barbuda	39.0	41.4	38.6	33.0	33.9	64.5
Dominica	36.9	47.7	51.0	48.9	49.3	50.4
Grenada	35.1	36.1	49.8	45.7	42.8	43.0
St. Kitts & Nevis	20.5	18.5	19.3	24.1	26.0	23.0
St. Lucia	19.9	21.1	21.5	18.3	16.9	17.0
St. Vincent & the Grenadines	26.8	25.4	24.9	22.8	27.3	25.2

4.

APPENDIX

TABLE 8

External Debt Service Payments of ECCB Members

(US\$M)

	1981	1982	1983	1984	1985	1986
Antigua & Barbuda	7.0	7.3	9.4	9.1	10.2	11.1
Dominica	1.1	1.4	2.8	4.4	4.2	4.9
Grenada	1.4	2.2	2.2	6.4	8.6	7.6
St. Kitts & Nevis	0.5	0.7	0.7	1.1	1.5	4.8
St. Lucia	1.5	4.2	2.0	3.1	4.3	3.3
St. Vincent & the Grenadines	1.5	1.5	1.7	2.3	3.1	3.1
All	13.0	17.3	18.8	26.4	32.0	34.8

	As a Percentage of Foreign Exchange Earnings					
Antigua & Barbuda	6.5	7.5	9.3	7.4	8.5	9.3
Dominica	4.8	4.0	7.0	10.1	9.4	9.1
Grenada	3.7	6.9	6.2	17.6	20.5	15.8
St. Kitts & Nevis	1.0	1.4	1.5	2.0	2.6	8.3
St. Lucia	1.8	4.7	2.2	3.4	4.2	2.6
St. Vincent & the Grenadines	3.2	2.9	2.7	3.2	3.8	3.5

APPENDIX

TABLE 9

Debt Service Payments of ECCB Members
As a Percentage of Government Revenue (1982-1986)

	1981	1982	1983	1984	1985	1986
Antigua & Barbuda	23.8	18.0	23.8	19.6	19.7	17.0
Dominica	5.2	4.9	10.9	14.9	13.0	14.4
Grenada	6.0	7.8	6.7	18.2	21.1	18.9
St. Kitts & Nevis	2.5	2.9	2.9	3.3	5.0	6.9
St. Lucia	4.5	9.9	4.3	6.2	7.1	5.0
St. Vincent & the Grenadines	6.9	6.1	5.4	6.1	7.1	8.7