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INTRODUCTION

Members of the Caribbean Community have recently experienced acute problems in trade within the community and with extra-regional countries at a time when both the region and the wider world were suffering economic recession. These circumstances impart a special urgency to the search for economic policies conducive to growth and development within the Caribbean Community. At the same time, persistent exchange rate depreciation by Jamaica and Guyana and the counter moves by some Caricom countries have focussed attention on exchange rate policies as a potentially disruptive influence on intra-Caricom trade and payments.

The present study, which has been commissioned by the IDB and the Caribbean Community Secretariat, analyses trade and exchange rate problems with a view to making recommendations on appropriate exchange rate policies and on the place of the exchange rate in economic policy within the Caribbean Community. Section I examines intra-Caricom trade performance and problems with a focus on structural characteristics and the factors that have determined the patterns of trade. Section II deals with existing exchange rate strategies and the overall considerations that might help to influence them. Section III discusses the possibilities for exchange rate co-operation within the region. The report ends with a summary of the principal conclusions and our recommendations.

SECTION 1: INTRA-CARICOM TRADE PERFORMANCE AND PROBLEMS

Intra-Caricom trade performance in the current decade has been far from impressive. After growing significantly during the 1970's, intra-regional trade stagnated between 1970 and 1983, and actually declined in 1984. Economic policymakers within Caricom have been exploring a number of approaches to solving the community's trade problems and exchange rate policy has featured prominently in the debate. In order to analyse the potential of exchange rate policy for promoting stable intra-regional trade we first examine trade performance and problems in this section of the report.

THE STRUCTURE OF INTRA-CARICOM TRADE

The first notable feature of intra-Caricom trade is the predominance of the Caricom "MDCs" - Barbados, Guyana, Jamaica, and Trinidad and Tobago - in total trade within the region. Individual country shares of intra-regional imports and exports in 1981 are presented in Table 1.

TABLE 1

PERCENTAGE COUNTRY SHARES OF INTRA-CARICOM TRADE, 1981

Country	EXPORTS		IMPORTS	
	Unadjusted	Adjusted	Unadjusted	Adjusted
Antigua	1.4	2.5	1.9	3.0
Barbados	9.2	16.1	15.6	14.0
Belize	0.7	1.2	-	-
Dominica	1.5	2.7	2.3	2.9
Grenada	0.7	1.3	2.9	3.5
Guyana	11.3	19.8	26.7	4.3
Jamaica	12.9	21.4	19.1	23.0
Montserrat	0.2	0.3	0.7	0.6
St. Kitts	0.7	1.2	1.6	1.5
St. Lucia	3.2	5.6	4.7	5.1
St. Vincent	2.0	3.5	2.7	3.3
Trinidad & Tobago	56.2	24.4	21.8	38.4
TOTAL	100.0	100.0	100.0	100.0

Note: "Unadjusted" includes petroleum; "adjusted" do not.

Source: Trade Tables compiled by Caribbean Community Secretariat.

If petroleum is included, these four countries received 83% of the total value of intra-Caricom imports, with Guyana separately accounting for 27%, Trinidad and Tobago for 22%, Jamaica for 19%, and Barbados for 16%. If petroleum is excluded, the MDC's share drops to 80%, the main change being the decrease in Guyana's share from 27% to 4%. As an importing country, Guyana is significant mainly as a market for Trinidad and Tobago's petroleum products. Guyana ceased to be an important market for non-petroleum products in 1977 when stringent import restrictions were adopted. The four MDC's also predominate in intra-Caricom export trade, accounting for 90% of domestic exports (including petroleum) and 82% of domestic exports when petroleum is excluded. Trinidad and Tobago accounted for 56% of intra-Caricom domestic exports including petroleum and for 24% excluding petroleum. Indeed, when petroleum exports are excluded, export shares are relatively evenly distributed among the Caricom MDC's, with Barbados having 16%, Guyana 20% and Jamaica 21%.

The OECS countries and Guyana specialise in the export of agricultural commodities within the region while manufactures are the dominant items in regional exports by Barbados, Jamaica and Trinidad and Tobago. For instance, Barbados' Caricom

exports are almost exclusively manufactured goods and 70 per cent of Jamaica's exports in 1982 could be identified as manufactures. The major share of manufactures in the export structure of these three countries when combined with the high proportion of intra-Caricom exports accounted for by them leads to the identification of a third structural feature, namely the large share of manufactured commodities in intra-Caricom trade.

Much detailed information is not available on the services component of intra-Caricom trade. However, there is reason for thinking that this trade is particularly important for Barbados as opposed to other Caricom countries. Visitors to Barbados originating from Caricom countries rose as proportion of total stop-over visitors from 17% in 1978 to 27% in 1982. In Jamaica, in contrast, the percentage shares were 1.6% in 1978 and 3.3% in 1982. The actual numbers of Caricom stop-over visitors are themselves revealing. Visitors to Barbados numbered 81.6 thousand in 1982, whereas those to Jamaica were only 15.8 thousand. Although it is not possible to estimate the dollar value of Caricom tourism to Barbados solely on the basis of the information on the region's share in visitors and the total value of tourist expenditures, it seems safe to infer that a sizeable proportion of the US\$241 million spent by tourists in 1982 accrued from Caricom visitors.

RECENT TRENDS IN INTRA-REGIONAL TRADE

The current price value of intra-regional trade, having increased between 1975 and 1981, has subsequently declined.

Indices of import and export values presented in Table 2 show that the current price value of imports more than doubled between 1975 and 1981, but declined by 7 per cent in the next year. The movement of the current price value of domestic exports was quite similar. The exclusion of trade in petroleum products for which Trinidad and Tobago is the major exporter does not alter the picture.

The inflation of trade prices after the onset of the first oil shock has partially concealed the poor trade performance. Intra-regional trade performance has been much weaker than indices utilising current prices indicate. We suspect that when we allow for price increases at best intra-regional imports and exports fluctuated around a basically stationary trend since 1975. In effect, stagnation and instability characterised real as distinct from monetary trade.

The incidence of the decline in intra-regional trade has not been uniform across the several member states of Caricom, because of differences in the degree to which countries participate in Caricom export trade, differences in their ratios of Caricom to total exports, and differences in their degree of trade dependence.

The main supplier of Caricom domestic exports is Trinidad and Tobago which accounted for 59 per cent of intra-regional domestic exports in 1975 and 53 per cent in 1982. The other three sizeable suppliers are Jamaica, Guyana and Barbados. Barbados' share of intra-Caricom exports has

TABLE 2

VALUE INDICES OF INTRA-CARICOM TRADE (1975=100)

Year	CURRENT PRICES		CONSTANT PRICES	
	Imports	Exports	Imports	Exports
1975	100	100	100	100
1976	114	131	94	92
1977	115	129	92	90
1978	127	138	93	88
1970	164	172	91	75
1980	205	237	83	80
1981	243	251	94	87
1982	228	245	94	92

Source: Based on Trade Tables compiled by Caribbean Community Secretariat

increased substantially between 1977 and 1982, while Guyana's share has decreased considerably. The OECS members and Belize individually account for tiny proportions of intra-Caricom domestic exports.

Quantitatively, exports to the Caricom region are much more important to the overall export performance of the OECS countries and Barbados than to the other Caricom states. The data in Table 3 show that in 1982 for instance, intra-regional domestic exports comprised 72 per cent of the total domestic exports of Montserrat, 58% for St. Vincent, 48% for Dominica, 46% for St. Lucia and 33% in the case of Barbados. Contrastingly, intra-Caricom domestic exports of Trinidad and Tobago were only 9 percent of its total domestic exports, Jamaica's intra-Caricom domestic exports were 10% and Guyana's were 17%.

Although the differences in ratios of exports to gross domestic product (Table 3) are not as sharp, they are sufficiently pronounced to imply that the downturn in Caricom trade has had more pronounced global effects on the economies of the OECS countries and Barbados than on the other Caricom member countries. Nonetheless, in those countries where intra-Caricom exports are of less global significance particular sectors may depend very heavily on the regional market. The Trinidad and Tobago the manufacturing sector, especially firms producing textiles, and the Barbadian manufacturing sector have both suffered badly as a result of the contraction in intra-Caricom trade.

TABLE 3

INTRA-REGIONAL DOMESTIC EXPORTS AS PER CENT OF TOTAL
DOMESTIC EXPORTS (CURRENT PRICES)

COUNTRY	1975	1982
Antigua	8.4	-
Barbados	18.2	32.7
Belize	3.3	11.6
Dominica	14.4	47.9
Grenada	5.0	32.1
Guyana	12.4	16.7
Jamaica	4.1	10.3
Montserrat	48.2	72.6
St. Kitts	4.0	-
St. Lucia	39.9	45.7
St. Vincent	20.8	57.9
Trinidad & Tobago	8.7	9.9
TOTAL CARICOM	8.3	11.8

Source: Trade tables compiled by Caricom Secretariat

OVERALL TRADE POSITION

The weak performance of intra-Caricom trade is but one aspect of overall depression in the export sector of the region, which has contributed to Caricom countries' acute balance of payments problems. The diagnosis of the obstacles to recovery and growth of intra-Caricom trade and the policies that might facilitate revival needs to take account of the constraints and difficulties that are generic rather than peculiar to trade within Caricom.

Table 4 provides indices of total domestic export and import values in current prices. For Caricom countries as a group, the value index of domestic exports was almost constant between 1977 and 1978. It then rose greatly in 1980, before declining substantially in 1981 and 1982. Individual country experience was not uniform. Most countries experienced a growth in the current values of imports until 1982 when a decline occurred. The main drag on overall export performance was associated with Jamaica, Grenada and Guyana. If export values are deflated by export prices which rose in several years during this period, Caricom export performance is bleaker. Using this method decline has been the dominant characteristic for most of the period under review.

Alongside the weak performance of export trade is a rather steep upward trend in the current values of total imports. As a consequence, trade deficits widened considerably for Caricom countries other than Trinidad and Tobago which retained a healthy surplus until 1982.

TABLE 4

VALUE INDICES OF TOTAL DOMESTIC EXPORTS AND TOTAL IMPORTS (CURRENT PRICES)

Country	EXPORTS			IMPORTS		
	1975	1980	1982	1975	1980	1982
Antigua	100	58	74	100	161	235
Barbados	100	213	255	100	309	319
Belize	100	181	140	100	211	186
Dominica	100	86	210	100	274	262
Grenada	100	173	185	100	254	287
Guyana	100	135	82	100	143	101
Jamaica	100	191	150	100	131	154
Montserrat	100	361	560	100	275	312
St. Kitts	100	141	104	100	237	235
St. Lucia	100	279	312	100	315	206
St. Vincent	100	266	560	100	385	304
Trinidad & Tobago	100	285	210	100	258	297
TOTAL CARICOM	100	226	171	100	210	233

Source: Trade tables compiled by Caricom Secretariat

ANALYSIS OF INTRA-CARICOM TRADE PROBLEMS

The level of intra-Caricom exports is fundamentally influenced by prices, income levels, and the structure of production and commodity trade within the region. Developments with respect to these basic factors explain much, though not all, of the current difficulties.

Price Factors

A number of empirical studies have examined the role of price changes in Caribbean import demand. Their results permit a judgement about the contribution of intra-regional variations in prices on individual country demand for Caricom exports. Adams (1971) and Joefield-Napier (1978, 1982) have estimated relative price elasticities of import demand for manufactured goods ranging between -0.064 and -2.363 for Barbados, Jamaica and Trinidad and Tobago. A later study by Worrell (1981) estimates relative price elasticities of -0.35 for Barbados and -0.03 for Jamaica for the 1957 and 1978 period. Also important is Joefield-Napier's finding that consumer goods are highly price sensitive while producer goods exhibit low price sensitivity.

If imports respond at all to relative price changes demand for the exports of those countries experiencing the faster rates of inflation will contract unless these countries practise "dumping" or exchange rate policies designed to confer hidden subsidies to exporters. Furthermore, the beneficiary of price induced import demand switches may not be another regional trade partner but a third country.

Inflation rates within Caricom have been high and countries differ significantly with respect to their inflation experience. While not wholly indicative of the movements of the general level of prices, the time series on consumer price indices compiled in Table 5 provide a sufficiently illustrative representation of the situation across the region. It can be seen that in 1980, all countries experienced high rates of inflation. However, inflation was much faster in Jamaica, St. Lucia, Antigua, and Trinidad and Tobago than in Guyana, Barbados and St. Kitts. After 1980, inflation decelerated in the OECS countries, Barbados and Jamaica, but accelerated in Guyana while hardly changing in Trinidad and Tobago.

When domestic inflation feeds into a country's export prices, its competitive edge is blunted. There is some evidence, based on data for Trinidad and Tobago and Jamaica, of correlation between domestic inflation and export price inflation for manufactures which feature prominently in Caricom trade. The rapid growth of informal trade in made up textile goods, footwear, and cosmetics in a high inflation, foreign exchange surplus economy like Trinidad and Tobago is an indication of the extent to which demand may be diverted away from costly items. The main characteristics of this trade are the large number of traders, the integration of travel and importation, and the wide price and quality variation of the commodities basket. Although quality and variety are undoubtedly influences on the growth of this trade, the competitiveness of prices is a major factor.

TABLE 5

ANNUAL AVERAGE PERCENTAGE IN CONSUMER PRICES 1980-83

COUNTRY	1980	1981	1982	1983
Antigua	19	11.5	4.6	n.a.
Barbados	14	12.3	6.9	5.3
Guyana	14.2	24.7	18.5	n.a.
Jamaica	28.2	11.9	6.5	11.6
St. Kitts	14.2	8.3	3.3	n.a.
St. Lucia	19.5	15.1	4.6	n.a.
St. Vincent	n.a.	13.0	7.2	n.a.
Trinidad & Tobago	17.5	14.3	16.1	16.7

Source: Country statistical reports and UNECLA (Port of Spain) Survey of Economic Activity in the Caribbean

Theoretically, a member country of a trading bloc can restore price competitiveness by devaluation of its exchange rate vis-a-vis other member countries of the bloc. But as the Jamaican experiment with unilateral devaluation in 1983 clearly revealed, the other members are prone to take protective action. Even when some exchange rate realignment is mutually agreed upon, there will be strong temptation on the part of non-devaluing countries to adopt hidden protective measures such as export credits and fiscal transfers to domestic exports. In practice, therefore, the exchange rate tends to be an ineffective policy instrument when directed towards intra-regional trade imbalances.

Production Costs

Production costs, adjusted for labour productivity, have a direct bearing on the prices of exports within the Caricom market. Caricom countries are not price takers in regional markets, as they are for major export commodities sold in third country markets i.e., sugar, bananas and minerals. Furthermore, because of the dominance of a few firms in intra-Caricom trade in manufactures, the local currency price determination process for manufactured exports is imperfectly competitive, and prices are administered by producers.

There appears to be significant intra-regional differences in production costs. In the absence of comparative data on total production costs, these differences can be illustrated by reference

to differences in the behaviour of important components of total costs. It is well established that wage rates and imported producer goods prices are the two main components of production costs.

Wage rates have been rising much faster in Trinidad and Tobago than in either Barbados, Guyana or Jamaica. For instance, the Trinidad and Tobago all-industry index of minimum wages for production and ancillary workers rose by 21.6% in 1980, 30.6% in 1981 and 20.4% in 1982, while the index for the textile, garments, and footwear sub-industry increased by 40.3%, 48.0% and 12.8% in the same years. On the other hand, the annual percentage changes in Jamaican median weekly income decreased by 21.9% in 1980, 1.3% and 1.2% in 1982. Barbadian wages and salaries are reported to have risen by 26.1% in 1980, 8.4% in 1981, and 12.5% in 1982.

Persistent devaluations in Jamaica between 1977 and 1983 and a downward exchange rate float since then have exerted strong upward pressure on production costs in that economy. These cost increases have been reinforced by capacity under-utilisation induced by the vastly decreased availability of foreign exchange for purchase of imported producer goods. The Guyanese experience, except for the absence of an exchange rate float, has been qualitatively similar. In the other countries, effective exchange rates have tended to appreciate. While one

should not expect prices to have fallen (bearing in mind the likelihood of a 'ratchet effect' in commodity pricing), it is reasonable to conclude that exchange rate changes did not directly increase production costs in the latter groups of Caricom countries.

Income Factors

Of overwhelming importance for the intra-Caricom trade experience is the trend in national incomes. Aggregate export demand and its composition are determined by the level of incomes. The mechanisms are familiar but one needs to stress here that an upward trend in Caricom incomes would shift consumption demand towards manufactured goods of increasing sophistication in taste and quality, in addition to raising the level of aggregate demand. A downward income trend on the other hand depresses primarily the level of aggregate demand. It is also useful to recognise at this point that foreign exchange availability conditions the transformation of domestic demand into import demand, so that in addition to income trends, one must also consider trends in foreign exchange resources. For the moment, we pay attention only to income trends.

Table 6 provides estimates of annual percentage changes in real gross domestic product between 1978 and 1982. Guyana and Jamaica, two major markets for Caricom products, continue to experience severe economic recession. Barbados, a third major market, experienced a mild recession between 1981 and 1983.

TABLE 6

ANNUAL PER CENT CHANGE IN REAL GDP, 1970-82

COUNTRY	1979	1980	1981	1982
Barbados	7.9	4.9	-2.6	-4.7
Guyana	-0.1	1.0	-0.5	n.a.
Jamaica	-1.5	-5.4	2.0	0.0
St. Kitts	1.3	4.3	2.9	-0.7
St. Lucia	4.4	9.0	-3.0	0.6
St. Vincent	-0.6	0.1	12.5	0.8
Trinidad & Tobago	5.3	7.4	3.4	3.5

Source: Country statistical reports and UNECLA (Port of Spain) Survey of Economic Activity in the Caribbean

Trinidad and Tobago, currently the largest single importer of Caricom products, experienced rapidly decelerating rates of growth of real GDP in 1982 and negative growth in 1983. The OECS countries, having succeeded to a large extent in maintaining moderate income growth rates until 1979 - hurricane-ravaged Dominica being the exception - slumped thereafter. The income situation for the Caricom region as a whole is thus one of stagnation and decline.

The strength of the trade retarding effects of income stagnation or decline depends on the income elasticities of demand. Adams (1971) and Joefield-Napier (1978, 1982) estimate income elasticities ranging between 1.2 and 2.3 for non-agricultural consumer and producer goods. Holder and Worrell (1984) report income elasticities of aggregate import demand of 2.5 for Barbados, and 3.2 for Trinidad and Tobago. The econometric evidence, therefore, points to high income elasticities of import demand. As a result, it can be inferred that economic recession has been a major depressant in intra-Caricom trade.

Foreign Exchange Resources

Nearly all Caricom countries are currently experiencing foreign exchange difficulties. Table 7 presents details on net foreign reserves between 1975 and 1982 for the four largest economies. It can be seen that net foreign reserves became increasingly negative since 1976.

TABLE 7

NET FOREIGN RESERVES (US\$m). 1975-1982

Year	Barbados	Guyana	Jamaica	Trinidad & Tobago
1975	43	77	79	830
1976	28	-21	-187	1008
1977	38	-43	-160	1062
1978	64	-23	-280	1792
1979	73	-71	-416	2778
1980	84	-155	-439	2778
1981	64	-172	-690	3337
1982	94	-220	-853	3063

Source: Annual Statistical Digest 1983, Central Bank of Barbados.

The foreign reserve situation of Barbados remained buoyant through the 1970's and into the early part of the next decade. However, poor tourist seasons in 1982 and 1983, as well as non-payments of trade debts by Caricom trading partners have pressured the foreign exchanges. In 1981 and 1982, Barbados found it necessary to increase the level of its foreign indebtedness. In 1981, US\$30 million was obtained from the Eurocurrency market, and a further \$30 million through Central Bank credit arrangements with the International Monetary Fund and with the Trinidadian and Venezuelan Oil Facilities. The Barbados Central Bank made further drawings of US\$5 million from the Oil Facilities and US\$25 million from the International Monetary Fund in 1982.

Trinidad and Tobago, by virtue of its position as an oil exporting country, has the most buoyant foreign reserves position. Nonetheless, it was evident by 1982 that the collapse of international oil prices and a severe contraction in Trinidad and Tobago's oil production had eroded the economy's capacity to earn foreign exchange. Export contraction combined with large payments for imports and debt service meant a drastic deterioration in the stock of net foreign reserves. By the end of 1984, Trinidad and Tobago's net foreign reserves had decreased to US\$1,189, that is, to 64 per cent below the 1981 level.

Foreign exchange difficulties led to the implementation of a number of policies with harmful effects on intra-Caricom trade. Licensing, foreign exchange rationing, and other

restrictive measures have been intensified. Trade debts have been allowed to accumulate to unsustainable levels, bringing to a standstill the Caricom Multilateral Clearing Facility which is the financial mechanism for promoting and facilitating Caricom trade. Very important also, is the spate of currency devaluations Caricom Governments have been forced to implement with the consequences of higher domestic inflation and changes in bilateral exchange rates within Caricom.

Foreign exchange resources have such strong pervasive effects on output, prices and incomes in the trade dependent Caricom economies, that the fundamental problems of intra-Caricom trade and their solutions are not separable from the problems of extra-regional trade and payments. Progress in solving the latter set of problems is by the same token, progress in solving the main problems of intra-Caricom trade.

Effect of Exchange Rate Changes on Caricom Trade

A later section of this Report details the course of exchange rate changes with the Caricom area since 1967. It is shown that until 1981 a stable relationship existed between the several national currencies. Subsequent exchange rate devaluations and downward float by Jamaica and the Guyana devaluations in 1983 and 1984 have introduced an element of exchange rate instability and have also raised the issue of changes in the competitive position of Jamaica vis-a-vis its Caricom partners. It is useful to consider these issues now.

Theoretically, on the assumption of risk-averse behaviour on the part of importers whose purchases are denominated in foreign currencies and exporters whose sales are also denominated in foreign currencies, exchange rate uncertainty may reduce exports. This may happen because of variability of profits measured in domestic currency increases. This theoretical possibility creates a presumption that the greater exchange rate uncertainty caused by the Jamaican parallel exchange rate system and later by the foreign exchange auction market may have discouraged intra-Caricom trade. However, two considerations suggest that exchange rate uncertainty may not have been very important in practice. First, the exchange rate effect on profits accruing to importers is likely to be muted by the widely prevailing practices of mark-up pricing with stable mark-ups. Second, intra-Caricom exports are typically denominated in the currency of the exporting country, so that although the foreign currency price of exports will be variable, the domestic currency price and profitability measured in domestic currency will not be variable.

The magnitude and persistence of the decline in the international exchange value of the Jamaican dollar is likely to have contributed to the contraction of intra-Caricom trade. The essential mechanism is the real income effect of exchange depreciations under conditions of weak domestic output response. Because import prices are an important element in the aggregate price equation for the Jamaican economy (e.g. Bourne and Persaud, 1976), the exchange rate changes directly raised the domestic

price level while not eliciting proportionate increases in real output. Real incomes contracted. It is most likely that the fall in real incomes reduced the demand for imports, the extent of the contraction being greater for Caricom commodities because of their greater income-elasticity.

It does not seem that the competitive position of Jamaica improved vis-a-vis its Caricom partners as a consequence of the currency devaluations. The performance of the price advantages initially conferred by exchange rate changes depends greatly on the response of production costs to those changes. The two main elements of costs are the costs of imported intermediate and capital goods and labour costs. The first, which accounts for at least 43% of Jamaican manufacturing production costs, responds fully and immediately to devaluation. The second responding directly and with a variable lag. Import price feeds into the general price level which partly determines wage rates. The length of the lag between devaluation and wage rate increases depends upon the timing of the devaluation in relation to the life of the wage contract. Because starting and end dates of wage contracts are not uniform within the Jamaican economy, the average lag would be variable. Since the duration of wage contracts rarely exceeds two years, the upper limit of the wage lag in response to devaluation may be treated as two years. In practice, wages seem to respond much more quickly. In sum, production costs are likely to have risen almost equiproportionately to the exchange rate change after a relatively short lag. As a consequence, initial price gains to

Jamaican exporters are rather shortlived. This leads to the conclusion that exchange rate changes have had little, if any, effect on the country-composition of intra-Caricom trade.

SUMMARY TO SECTION 1

Intra-Caricom trade has several prominent structural characteristics: the predominance of the MDC's, i.e. Barbados, Guyana, Jamaica and Trinidad and Tobago, in total merchandise trade; the specialization of the OECD countries, Guyana, and Belize in agricultural exports; the predominance of Barbados, Jamaica, and Trinidad and Tobago in manufactured export commodities; and the major role of intra-Caricom tourism in Barbados' tourist trade.

Although in current prices, intra-Caricom merchandise trade increased significantly in absolute terms between 1975 and 1981 before declining, the real quantum of trade tended to fluctuate around a stationary trend. In 1983 and 1984, there was a pronounced decrease in nominal and real merchandise trade. The macro-economic impact of the intra-Caricom trade depression is particularly severe for Barbados and the OECS countries, where exports to the Caricom region comprise a significant proportion of total exports. It is worth noting also that the weak performance of intra-Caricom trade was part of a weak overall export performance.

Several main factors contributed to intra-Caricom problems. Domestic price inflation weakened the export competitive position of some countries, notably Trinidad and Tobago, whose manufacturing

export demands are price-sensitive. Variations in ability to control production costs underlies the intra-regional differences in commodity price inflation. The single most important depressant on trade is the continued slump in real incomes. Another retarding factor is the foreign exchange problems currently being experienced by all countries, but with particular severity in Guyana and Jamaica since 1976. Exchange scarcity has led to increasingly severe quantitative restrictions on imports and to the collapse of the regional payments scheme. Apart from their real income effects, exchange rate changes do not appear to have had a strong influence on either the volume or the country composition of intra-Caricom trade, largely because domestic production costs adjust almost fully to currency devaluations.

SECTION II: REGIONAL EXCHANGE RATE STRATEGIES

Exchange rate arrangements in CARICOM have their origins in the colonial monetary system under which currencies were fixed in terms of the pound sterling. The existing arrangements, in their operational aspects, have not moved very far from their origins, except that sterling has been replaced by the US dollar; however, consciousness of the exchange rate in the array of economic policy instruments is now very high. The first regional discussions of the exchange rate as a policy instrument took place in 1968 [U.W.I./ISER 1968] in response to the 1967 devaluation of the pound sterling. By that time one of the formal aspects of the colonial monetary system - the Currency Board - had disappeared in Jamaica, Trinidad and Tobago, and Guyana, where central banks were in operation. Greater awareness of the exchange rate as a policy tool was one consequence of membership by the CARICOM countries in the International Monetary Fund. In the 1970s exchange rate changes moved from what can be described as the 'passive phase' to the 'active phase'.

This section of the report examines the changes in exchange rate strategies in the region, and assesses the case for over valuation of regional currencies. It also discusses the case for a currency basket as a possible solution to the perceived problems of exchange rate arrangements in the region; a note on methods of calculating effective exchange rates appears as an appendix.

Exchange Rate Arrangements

In 1967 all currencies of the CARICOM countries were fixed to the pound sterling. In Trinidad and Tobago, Guyana and the East Caribbean¹ countries the dollar was the unit of account, valued at the rate of one pound sterling to 4.80 dollars. At that time it did not matter that both Guyana and Trinidad and Tobago had their own currency, the TT\$ and the G\$, respectively, and that the EC\$ had recently replaced the BCCB dollar in circulation in the East Caribbean. In Jamaica the Jamaican pound, equal to the pound sterling, was the unit of domestic currency until 1969 when it was replaced by the Jamaican dollar at the rate of two dollars to the pound. These were administrative changes of little economic significance. All regional currencies bore a fixed relationship to each other through the pound sterling (Table 8) and a country could secure a competitive price advantage over its neighbours only by keeping its own costs below theirs. This situation remained unchanged apart from an 8.5% devaluation of the Guyana dollar against the pound sterling and against all regional currencies in 1971.

The first change of any significance in regional exchange rate arrangements came in January 1973 when the Jamaican authorities severed the link between the Jamaican dollar and the pound sterling and tied the domestic currency to the US dollar.

¹Antigua, Barbados, Dominica, Grenada, Montserrat, St. Kitts-Nevis, St. Lucia and St. Vincent.

TABLE 8

NOMINAL EXCHANGE RATES OF REGIONAL CURRENCIES AGAINST
THE BARBADOS DOLLAR 1967-1983
 (END OF PERIOD)

Year	Guyana	a) Jamaica	b) OECS	Trinidad & Tobago	BDS\$/US\$
1967	1.0000	2.4000	1.0000	1.0000	0.5149
1968	1.0000	2.4000	1.0000	1.0000	0.4967
1969	1.0000	2.4000	1.0000	1.0000	0.5001
1970	1.0000	2.4000	1.0000	1.0000	0.5000
1971	0.9210	2.4000	1.0000	1.0000	0.5318
1972	0.9210	2.4000	1.0000	1.0000	0.4892
1973	0.9210	2.2727	1.0000	1.0000	0.4840
1974	0.9210	2.2483	1.0000	1.0000	0.4893
1975	0.7843	2.2000	0.8430	0.8430	0.5000
1976	0.7843	2.2000	0.8333	0.7407	0.5000
1977	0.7843	1.5625	0.8333	0.7407	0.5000
1978	0.7843	1.1800	0.8333	0.7407	0.5000
1979	0.7843	1.1227	0.8333	0.7407	0.5000
1980	0.7483	1.1227	0.8333	0.7407	0.5000
1981	0.6667	1.1227	0.8333	0.7407	0.5000
1982	0.6667	1.1227	0.8333	0.7407	0.5000
1983	0.5333	0.6400	0.8333	0.7407	0.5000

Source: Economic and Financial Statistics, Central Bank of Barbados, March 1984

Notes: (a) The rate for the Jamaica dollar is used throughout;
 (b) Organisation of East Caribbean States.

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At the same time, following the Guyanese lead, the currency was devalued by 6.7% independently of the currency to which it was pegged². A second devaluation of 10% (in terms of sterling and other regional currencies) followed in February 1973, but this was a 'passive' devaluation following that of the US dollar. This move by the Jamaican authorities was operationally of major significance. The rate for the Jamaica dollar vis-a-vis the other regional currencies was determined by the exchange rate between the US dollar and sterling. This process continued until all the regional currencies had severed the link with sterling and were tied to the US dollar.

Two years were to elapse before the next country, Barbados, severed the link with sterling and tied its currency to the US dollar (July 5, 1975). In fixing the rate at one US dollar to two Barbados dollars, the Barbadian authorities revalued the domestic currency by 9.5%. The Guyanese authorities tied their currency to the US dollar in the same year (October 9, 1975), but at the rate of one US dollar to G\$2.55, the rate prevailing at the close of business on the previous day. The Trinidad and Tobago dollar was tied to the US dollar on May 28, 1976 at the rate of US \$1 to TT \$2.40, which involved a revaluation of 12.7%; less than two months later (July 7) the EC dollar was also tied to the US dollar at the rate of US \$1 to EC \$2.70, which involved a slight devaluation of 1.4%.

²In any event, by 1973 the system of par values was abandoned (August 15, 1971) and the system of floating exchange rates was in place. This was of little operational significance to those countries whose currencies were pegged to a major currency.

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The link to a single currency restored the fixed relationship of regional currencies to each other even though the values ranged from J\$1.10 to US dollar to EC \$0.3703 to the US dollar.

The next movement in the 'active phase' of exchange rate policy came in 1977 (April 22) when Jamaica adopted a dual exchange rate system which included a basic and a special exchange rate. The basic exchange rate was the existing rate of J\$1.10 to the US dollar and was applied to:

- (a) payments for imports of basic food, petroleum and petroleum products, essential drugs, fertilisers and animal feeds;
- (b) receipts and payments on Government account; and
- (c) receipts and payments relating to the mining sector.

All other transactions were at the special rate of J\$0.80 to US\$1.00, a 37.5% devaluation on the basic rate. These rates remained in force until October (21st) when a new basic rate of J\$1 to US\$0.78125 was adopted.

Jamaica again led the way in exchange rate innovations in the region. A crawling peg exchange rate was introduced from May 1978 to May 1979. First, the dual exchange rate system was abolished and a new central rate of J\$1 to US \$0.64515 was introduced in May 1978; by May a year later the rate was J\$1 to US \$0.56135. A period of stability in the official Jamaica

dollar/US dollar rate followed until November 1983, but in the meantime Jamaica re-introduced a dual exchange rate system in January 1983. Unlike the earlier dual rate system the authorities fixed only the official rate which remained at J\$1 to US \$0.56135; the second rate was left to be determined by market forces. There was some discussion about the rate to be used for settlement of regional balances and after a series of meetings the Jamaican authorities introduced a special rate of J\$1 to US \$0.4444 for transactions with CARICOM countries. This rate was abolished in November when the exchange rates were unified at an official rate of J\$1 to US \$0.32.

Guyana, in the meantime, introduced a new system for determining the value of the currency. From June (2nd) 1981, the value of the Guyanese dollar was determined by a composite basket made up of the US dollar, the pound sterling, the deutschemark, the Japanese yen, and the Trinidad and Tobago dollar. The US dollar, however, remained the reference currency for determining the exchange rate of the Guyanese dollar which was also fixed at that time at G\$1 to US \$0.3333, a devaluation of 17.6% on the previous rate. This move by the Guyanese authorities made little immediate difference to the actual management of the exchange rate. Although the value of the Guyanese dollar in terms of the basket fluctuated, the official rate was held constant in terms of US dollars. By 1984 however, the Guyanese authorities took a more active exchange rate management stance by making frequent adjustments in the value of the currency as were warranted by movements in the basket.

Pegging to a basket gives the authorities the opportunity to make incremental changes in the exchange rate without appearing to devalue or revalue since technically the local currency unit is floating against the currencies in the basket. However, the Guyanese authorities continued to operate the exchange rate system without reference to the basket for a long time after it was introduced. The value of the Guyana dollar remained fixed at US \$0.3333 long after market forces on the currencies in the basket indicated that a change was necessary to reduce the appreciation of both the real and the nominal exchange rate for the Guyana dollar.

Exchange rate changes after 1976 were confined to Jamaica and Guyana. In the other CARICOM countries the exchange rate was, no doubt, a subject for discussion with the IMF consultation or programming missions. But, except the countries were negotiating with the IMF, no action was likely to follow such discussion. Institutional arrangements virtually precluded the use of the exchange rate in the adjustment strategies for some countries. In the OECS countries an exchange rate change required the joint approval of all the member states of the East Caribbean Central Bank (ECCB). In Barbados adjustment under the Stand-by Arrangement negotiated in 1982 depended on fiscal and credit policies with no change in the exchange rate. Nevertheless, membership of the IMF has resulted in much greater consciousness of exchange rates and in the need to adopt policies that avoid erosion of confidence through frequent exchange rate adjustments.

PURCHASING POWER PARITY AND COMPETITIVE ADVANTAGE WITHIN CARICOM

Beginning with the substantial Jamaican devaluations in 1983, Caricom countries have been concerned that exchange rate changes have given some countries an advantage over others in regional trade. The issue revolves around the way in which exchange rates affect factor costs in the currency of each importing country. Because we have no information on relative cost, an index of relative consumer price movements in competing countries is used as a rough and ready indicator. It is modified by an index of changes in the exchange rate, to indicate how prices of goods made in one country are affected by the exchange rate when they are sold in a neighbouring country.

The exchange rate may be regarded as the price which balances the supply and demand for foreign money; that is to say, it is the price which equilibrates the balance of payments. Countries have therefore sought exchange rates which satisfy overall balance of payments needs, rather than rates designed to accommodate regional trade.

If capital flows are random, the inflation differentials determine the demand and supply of foreign exchange and the exchange rate is then determined by the current account of the balance of payments. However, if capital flows show a systematic behavioural pattern, interest rate differentials should be taken into account as well. They will affect the demand and supply of foreign exchange on capital account and hence affect the exchange rate.

Two sets of graphs (see Appendix B) are presented for each country in the sample - Barbados, Jamaica and Trinidad and Tobago - showing:

- (a) short-term capital movements;
- (b) short-term capital movements plus errors and omissions (which usually include unidentified capital flows).

Each graph contains two curves: one expressed in absolute levels and the other in first differences. The graphs indicate that short-term capital movements plus errors and omissions are perhaps the best indicator. For Barbados and Trinidad and Tobago, the changes in short-term capital seem to be random, characterized by a stationary time series with increasing variance. The pattern for Jamaica is autorregressive, possibly a reflection of that country's political difficulty during this period. The path of capital movements by Barbados and Trinidad and Tobago is therefore considered more representative.

If short-term capital movements are random, inflation differentials are the the factor behind the supply and demand for foreign exchange. Accepting this assumption, the level of exchange rate is analysed in terms of the currency's purchasing power parity.

In Table 9 currency parity positions are defined as cross exchange rates adjusted by inflation rate differentials. They are reported for Barbados, Jamaica, Trinidad and Tobago and

TABLE 9

INDICES OF PURCHASING POWER PARITY

	1969	1970	1971	1972	1973	1974	1975	1976	1977	1978	1979	1980	1981	1982
<u>U.K. Pound</u>														
Barbados	5.24	5.17	5.09	5.08	4.73	3.94	3.82	3.42	3.54	3.86	4.15	4.68	3.98	3.38
Jamaica	2.94	2.90	3.04	3.09	3.18	2.76	2.79	2.41	2.42	3.36	4.04	4.14	3.59	3.16
Trinidad/Tobago	4.33	4.76	4.80	4.70	4.44	4.21	4.52	4.36	4.30	4.64	5.08	5.58	4.77	4.00
Guyana	3.39	3.48	3.82	4.22	4.22	4.19	4.89	4.59	4.75	4.91	5.23	5.93	5.11	4.32
<u>U.S. Dollar</u>														
Barbados	3.75	3.69	3.37	3.18	2.94	2.46	2.20	2.19	2.17	2.13	2.03	2.01	1.94	1.86
Jamaica	2.10	2.06	2.02	1.93	1.98	1.73	1.61	1.55	1.48	1.85	1.98	1.78	1.75	1.73
Trinidad/Tobago	3.10	3.20	3.18	2.94	2.75	2.63	2.60	2.80	2.62	2.56	2.48	2.40	2.32	2.20
Guyana	2.43	2.49	2.54	2.64	2.63	2.62	2.80	2.95	2.90	2.71	2.56	2.55	2.49	2.38
<u>Mark</u>														
Barbados	1.27	1.31	1.27	1.32	1.47	1.23	1.12	1.09	1.12	1.22	1.19	1.11	0.82	0.73
Jamaica	0.70	0.74	0.74	0.80	0.99	0.66	0.82	0.76	0.76	1.06	1.16	0.98	0.74	0.68
Trinidad/Tobago	1.05	1.14	1.20	1.22	1.58	1.31	1.32	1.38	1.36	1.46	1.46	1.32	0.98	0.86
Guyana	0.82	0.88	0.95	1.09	1.32	1.31	1.44	1.45	1.51	1.55	1.50	1.40	1.05	0.94
<u>Barbados Dollar</u>														
Jamaica	0.55	0.55	0.60	0.61	0.67	0.70	0.73	0.70	0.68	0.87	0.98	0.89	0.91	0.94
Trinidad/Tobago	0.83	0.87	0.94	0.92	0.94	1.07	1.18	1.28	1.22	1.20	1.22	1.19	1.19	1.18
Guyana	0.65	0.67	0.75	0.83	0.89	1.06	1.28	1.34	1.34	1.27	1.26	1.27	1.29	1.27
<u>Jamaica Dollar</u>														
Barbados	1.78	1.78	1.67	1.64	1.48	1.43	1.37	1.42	1.47	1.15	1.03	1.13	1.11	1.07
Trinidad/Tobago	1.47	1.55	1.57	1.52	1.39	1.53	1.62	1.81	1.78	1.38	1.26	1.35	1.33	1.27
Guyana	1.15	1.20	1.25	1.36	1.33	1.52	1.75	1.90	1.96	1.46	1.29	1.43	1.42	1.36
<u>Trinidad/Tobago Dollar</u>														
Barbados	1.21	1.15	1.06	1.08	1.06	0.94	0.84	0.78	0.83	0.83	0.82	0.82	0.84	0.85
Jamaica	0.69	0.65	0.64	0.66	0.64	0.71	0.65	0.62	0.56	0.73	0.80	0.74	0.75	0.79
Guyana	0.78	0.78	0.79	0.90	0.95	0.99	1.09	1.06	1.10	1.06	1.03	1.06	1.06	1.08
<u>Guyana Dollar</u>														
Barbados	1.54	1.49	1.53	1.20	1.12	0.94	0.78	0.75	0.75	0.79	0.79	0.79	0.77	0.78
Jamaica	0.87	0.84	0.79	0.73	0.75	0.66	0.58	0.53	0.51	0.68	0.77	0.74	0.70	0.73
Trinidad/Tobago	1.27	1.29	1.26	1.11	1.05	1.00	0.92	0.95	0.90	0.94	0.97	0.94	0.94	0.93

*Parity Positions were calculated by the following formula: (Gross exchange rate) (Foreign Price Consumer Index) / (Domestic Price consumer Index).
 Source: International Financial Statistics - IMF 1983.
 Note: Decrease means overvaluation. Increase means undervaluation.

Guyana, in relation to the pound sterling, the U.S. dollar, the German mark, and other Caribbean currencies.

An effort has been made to calculate real exchange rates based on the relative prices of tradable and non-tradable goods, weighted by trade shares. The results are consistent with those found in table 10, which uses parity positions based on relative consumer price indices. The findings are shown in chart 1. It is difficult to arrive at a precise estimation of the degree of overvaluation since there are as many relative price indices and related weights as there are analytical or policy questions addressed and different sets of market conditions apply in different sectors. However, there seems a clear tendency towards a real appreciation of CARICOM currencies.

We may average exchange rate movements with respect to several currencies by weighting both exchange rates and relative prices by trade shares, to arrive at a price-adjusted trade weighted exchange rate (PTE). Between 1978 to 1983, the value of the price adjusted trade weighted exchange rate for the Barbados dollar rose by 27.6%; for the OECS countries the appreciation was 12.4%, for Guyana 61.1%, for Jamaica 6.2%, and for Trinidad and Tobago 48.2%. The differences in the appreciation of the PTE between Barbados, the OECS and Trinidad and Tobago reflect changes in relative rates of inflation only; for Guyana and Jamaica the differences also reflect changes in nominal exchange rates since 1978; the Guyanese and Jamaican currencies were devalued by 40.3% and 84.4% between 1978 and

1983. Inflation in Barbados was 11.8% a year between 1977 and 1983, for Trinidad and Tobago the rate was 14.1%, and for Guyana and Jamaica inflation was 19.9% and 18.0% a year, respectively. Given the cumulative increase in prices in both Jamaica (196.4%) and Guyana (129.1%), it is clear that exchange rate adjustments were used to compensate for the rise in prices. In those two countries the changes in exchange rates also added to the rate of price increase triggering the process of circular and cumulative causation between exchange rates changes and inflation.

The movements in exchange rates between pairs of countries, adjusted by the relative CPI's, (the purchasing power parity - PPP) have been used to measure the competitiveness of countries in intra-regional trade. These movements do not reflect a policy design; they result from inflationary conditions in each country and from differences in exchange rate strategy. The PPP of Jamaica against Barbados and Trinidad and Tobago declined between 1969 and 1974 but remained relatively stable thereafter, a reflection of the fairly close rates of inflation in the two countries. In the case of Guyana, the PPP fell against the other currencies.

If exchange rates remain unchanged, a fall in the PPP indicates that domestic consumer prices are rising faster than consumer prices in the other country. Under such conditions importing from that country becomes more attractive and exporting to it may be more difficult. Although exchange rate adjustments can be used to compensate in highly open economies a devaluation

tends to feed into the price of both tradable and non-tradable goods, and the advantage of a devaluation may be short-lived.

Other factors affecting the real exchange rate in these countries include shifts in the terms of trade, changes in commercial policy and capital flows, which all affect the equilibrium real exchange rate. The way in which the exchange rate is managed may create a divergence between the equilibrium and the effective real exchange rate. This divergence should be adjusted or neutralized in order to secure an exchange rate suitable for promoting trade and growth on regional and extra regional markets.

EXTRA REGIONAL PAYMENTS AND CARICOM EXCHANGE RATE POLICY

The exchange rate choices facing individual Caricom countries must be evaluated in the light of each country's global payments position, since this has always been the deciding factor in exchange rate movements by members.

The long controversy among industrial countries about the merits of fixed, flexible or floating exchange rates has not produced any resolution. The existing floating system was not settled by agreement but was accepted as a way of coping with increasing disequilibria on international and external balances.

The issues become more complicated when one is dealing with small open economies where:

- 1) price structures are heavily weighted towards tradable goods and exchange rate variation transmits global changes in cost to the rest of the economy;
- 2) markets for local money are small, and consumers and savers reckon values in foreign currency, with the implication that exchange rate flexibility may degenerate into volatility.

In the experience of many small countries which have adopted the exchange rate as a stabilizing instrument, the adjustment effort was accompanied by high real interest rates, instability in the rate of inflation, distortion in cost structures and financial disintermediation.

The exchange rate is expected to equilibrate the balance of payments; that is, it should balance the supply and demand for foreign exchange. Less developed countries are characterized by thin and imperfect capital markets and a lack of integration into international financial markets. Under these conditions the exchange rate will be determined by current account flows - that is, by demand and supply of foreign currency emanating from the goods market. The exchange rate is the link between the balance of payments and the real sectors of the economy. An appropriate exchange rate may promote trade, growth and employment levels.

However, an appropriate real exchange rate does not mean equilibrium in balance of payments, since the latter responds as well to the soundness of monetary and fiscal policy, and to such underlying causes of trade or export instability as concentration in trade on a few commodities, specialization in primary products, and dependence on a few trading partners. Here the trade elasticities and the responsiveness to relative prices are critical.

The alternatives for exchange rate management are a pegged exchange rate or a flexible, crawling one. A floating regime is not considered a feasible option.

A currency peg of any sort provides a rigid guide for domestic monetary policy which must stay roughly in line with the monetary policy of the currency (or currencies) in the peg. The local economy must accept the inflation rate of the country whose currency is used as the peg. Policies must be designed to keep wages, prices and the level of economic activity consistent with the fixed link to an external standard.

In contrast, a flexible exchange rate policy implies that the monetary authority intends to pursue an independent rate of inflation, for instance by attempting to follow an autonomous (and usually expansive) monetary policy. However, it is possible that this framework may introduce tendencies towards instability and uncertainty which may prove self-defeating.

CARICOM countries are characterised by the two specific features of small open economies mentioned earlier: they have a structure of prices in which tradable goods weigh heavily and they also have a small domestic money market which may result in a certain degree of instability in their demand for local money. Moreover, they are committed to a process of economic and financial integration from which a compromise to harmonize policy objectives can be inferred, since persistent inflation rate differentials could imperil the integration process. Since these countries' trade contracts are demoninated in one major currency, pegging to that currency would be the simplest option.

Opting for a fixed peg is acceptable, provided countries are determined to adopt fiscal and monetary policies to support it. With a fixed peg any monetary disturbance tends to provoke a balance of payments crisis, which alerts the authorities to the need for fiscal and monetary measures to restore equilibrium. Under a fixed peg, credit policy rather than the exchange rate is the basic adjustment variable.

The domestic currency may be pegged to a basket of currencies or to a single currency. In table 9 standard deviations for three CARICOM countries are estimated under the following alternative exchange rate strategies: (1) peg to a weighted basket of importable goods in which the weights are the trade shares with the country's main partners; (2) peg to a currency basket, in which the weight structure is that of the

Special Drawing Right (SDR); (3) peg to the pound Sterling adjusted by the United Kingdom rate of inflation (3a), and by the rate of M1 growth in UK (3b); (4) peg to the U.S. dollar adjusted by the U.S. rate of inflation (4a) and by the rate of M1 growth (4b).

TABLE 10

STANDARD DEVIATIONS WITH ALTERNATIVE PEGS

	Standard Deviations		
	1969-82	1969-75	1976-82
1) Importable goods basket (main partners)			
Barbados			
Jamaica			
Trinidad and Tobago			
Weighted average $\frac{1}{3}$			
2) Currency basket (SDR)			
Barbados			
Jamaica			
Trinidad and Tobago			
Weighted average $\frac{1}{3}$			
3a) Pound Sterling (Adjusted by United Kingdom rate of inflation)			
Barbados	5.71	6.89	3.64
Jamaica	1.39	1.97	0.98
Trinidad and Tobago	2.34	2.35	2.43
Weighted average $\frac{1}{3}$	8.03	10.21	5.24

TABLE 10 (Cont'd.)

	Standard Deviation		
	1969-82	1969-75	1976-82
3b) Pound Sterling (Adjusted by U.K. rate of M1 growth)			
Barbados	6.41	7.61	4.10
Jamaica	1.65	2.09	1.16
Trinidad and Tobago	3.05	3.62	2.66
Weighted average $\frac{1}{3}$	7.09	8.13	6.32
4a) U.S. Dollar (Adjusted by U.S. rate of inflation)			
Barbados	2.86	2.43	3.12
Jamaica	2.40	0.99	2.69
Trinidad and Tobago	2.47	1.60	2.79
Weighted average $\frac{1}{3}$	2.69	2.91	3.07
4b) U.S. Dollar (Adjusted by U.S. rate of M1 growth)			
Barbados	1.23	0.70	0.79
Jamaica	1.09	0.59	0.92
Trinidad and Tobago	1.28	0.92	0.69
Weighted average $\frac{1}{3}$	1.21	0.95	0.84

Source: International Finance Statistics - FM1

Symbols:

P UK, P US: Growth rate wholesale prices for United Kingdom and the United States

M1 UK, M1 US: Growth rate narrow money supply (IFS concept) for United Kingdom and United States

$\frac{1}{3}$ Weights constrained to sum up to unity.

In deciding on a numeraire for evaluating the need for exchange rate changes under a crawling peg, the ongoing experiences of Central America and the Andean subregional common market are worth mentioning. The Central American numeraire is the "peso centroamericano", based on a parity with respect to the U.S. dollar. Among the alternatives studied by the Andean Pact prior to the establishment of a unit of account were a unit of account (i) based on a parity level with respect to the U.S. dollar; (ii) weighted by a basket of currencies such as the SDR; (iii) weighted by a basket including a mix of traditional exports and the SDR; (iv) based on a basket of traditional exports.

The methodology for deriving the exchange rate policy should be the guide for the choice of a numeraire. The same weight structure and the same basket composition have to be applied in both situations. CARICOM countries might structure a numeraire whose weights are the same as those used for the estimation of a real exchange rate index, if that is regarded as an appropriate indicator of the equilibrium exchange rate or international competitiveness.

Alternatively, exchange rate policies might be based on parities in terms of a major currency like the U.S. dollar. The resulting structure of exchange rates for the region would provide the weights to be included in the numeraire or unit of account.

The economic interpretation of real exchange rates depends on:

- 1) the choice of the base period for the index: the base period should be one of approximate equilibrium in the balance of payments, thereby assuring consistency between tradable and non-tradable prices;
- 2) the proper choice of weights used in the index;
- 3) the compatibility of the relative prices used in the index;
- 4) the specific formulation of the index: the real exchange rate index is defined as the cross exchange rates adjusted by an index of relative prices of tradables and non-tradables, weighted by trade shares. The construction of this real index involves a purchasing power parity type of relationship between relative prices and exchange rates.

Caribbean countries might set up a crawling exchange rate mechanism, where regional currencies could adjust to each other depending on differences in the countries' rates of inflation. These regional exchange rates would be kept within a fluctuating band, which Caribbean countries would try to stabilize

SECTION III
EXCHANGE RATE CO-OPERATION

The exchange rate options now open to Caricom countries are as follows:-

- a) a unified exchange rate for the Caricom region, which would apply to all transactions; the rate might be fixed and changed periodically, or might be made to crawl, and it could be linked to a single currency or to a basket;
- b) a single Caricom exchange rate with respect to some numeraire, currency or basket to be applied only to Caricom trade; countries would continue to determine their exchange rate strategy individually, and their currencies' values in terms of the Caricom rate would be different from the local currency's value in terms of the numeraire. The country's own rate would be used for all non-Caricom transactions;
- c) individual countries to fix their own exchange rates, but to maintain a separate, unvarying rate for Caricom transactions. There would not be a single rate for use by all Caricom countries, as at (b), but any country which changed its exchange rate would then maintain two rates, the old rate for Caricom trade and the new rate for all other;

- d) essentially the same as at (c), but instead of maintaining an unchanged exchange rate for Caricom the devaluing country provides for additional taxes on exporters to the region;
- e) individual country exchange rate strategy with internal budgetary action by non-devaluing countries, by subsidies for exports to the devaluing country;
- f) countries set exchange rates individually but non-devaluing countries impose trade and exchange control restrictions, and introduce special tariffs to limit access to their markets;
- g) individual country exchange rate strategy, with no reaction on the part of countries which choose not to vary their exchange rates.

When one member of the regional grouping devalues, its partners may react in several ways, varying from ostracism to attempts to rewrite the rules of the game. They may decide to ostracise the devaluing country by banning all trade directly or by blocking all payments and inviting a similar retaliation. Of all the possible options this probably involves the greatest loss for all parties, including the country which initiates the action. Everyone surrenders the gains expected from economies of scale, comparative advantage and external economies associated with the growth of trade and the widening of markets to include the entire region.

The imposition of trade restrictions, tariff barriers and exchange controls is just as destructive a policy. It also invites retaliation and the prospects of a decline in trade within the region. The policy squanders the potential gains which prompted the formation of the economic community in the first place - economies of scale in production, increased competition with the possibility of improvements in efficiency, scope for developing broader marketing skills, a wider pool of expertise from which to draw and a better chance to build a critical mass of new industrial activity.

One possible option is to set up a preferential exchange rate arrangement within the regional bloc. The devaluing country would maintain the previous parity for regional transactions for as long as the price adjustment period lasted, assuming that there would be no change in the real exchange rate. Once cost and price increases in the devaluing country returned the relative prices to their previous levels, the preferential treatment would expire. This option requires a precise estimation of the adjustment period. As an alternative, the devaluing country might place a temporary tax on exporters to Caricom, which would have the same effect.

If suitable regional agreements could be secured, a devaluing country might tax sales to its Caricom partners and contribute the proceeds to a regional fund from which firms exporting to her markets could borrow. These firms could use the borrowed funds to implement strategies to counteract their

price disadvantage vis-a-vis producers from the devaluing country, by advertising, re-tooling or shifting their marketing strategy. However, it is hard to think of inducements sufficient to persuade a devaluing country to this course of action; even a substantial rate of return on contributions to the regional fund would probably be inadequate. Moreover, the tax on exporters from the devaluing country would become burdensome if devaluation served to increase their costs in due course.

Non-devaluing countries could take internal budgetary measures to offset the advantage gained by the devaluing country, to some extent. For example, an additional tax might be placed on imports or consumption and the proceeds used to subsidise exporters. The rationale might be that consumers gain because they may obtain cheap imports from the devaluing country, and they might be asked to share this gain with exporters, to help maintain their competitiveness. However, the additional taxes would be placed on all taxable imports or all consumption, not just on goods originating from the devaluing trade partner. The proportion of trade with any single regional country is never large enough to justify this policy. However, the non-devaluing country may decide to provide subsidies for exporters out of government revenues.

A much discussed option is to devise a unified exchange rate for the region as a whole. Although this has proven a seductive notion it faces formidable problems of implementation. Every country's exchange rate must ultimately be settled with

respect to its overall balance of external payments, and CARICOM payments are always a minor proportion. The exchange rate has to change if the balance of payments deteriorates to the point where there are insufficient foreign exchange reserves to defend the existing rate. A unified exchange rate for the region is possible only if it is linked with some strong devices to ensure balance of payments equilibrium in each country by regionally imposed fiscal and monetary policy. Since what is at stake in regional trade is always a small part of all economic activity, it should come as no surprise that Caricom members are unwilling to submit to any such supra-national discipline.

We may quantify the implications of exchange rate unification by simulating the effects of a unified rate for the region. To do this we devise a currency for the region, the Caricom unit of account (CUA) and stipulate a rule for managing it. We then measure some of its effects on individual countries. The analysis is vastly simplified; we have only attempted to deal with issues of trade, but in practice the exercise would have to be performed to determine implications for inflation, competitiveness and growth in each country.

The quantification is preceded by a discussion of how a unit of account might be managed and the need for convertibility. It is followed by an evaluation of an alternative proposal for a unit of account to be used only for regional transactions. It would allow each country the possibility of an independent exchange rate strategy, at the expense of maintaining dual exchange rates.

A Caricom Unit of Account

One idea which has been mooted to address the current payments impasse in CARICOM is the creation of a CARICOM unit of account. The value of regional currencies would be fixed in terms of the unit of account, which would be used to value regional transactions, and to make settlements. The essential problem is to devise some means of ensuring the convertibility of the unit of account.

Two of the better known examples of units of account are the ECU used in the EEC and the transferable rouble used for trade between the countries making up the Council for Mutual Economic Aid (COMECON). The transferable rouble is actually used for settlement of intra-COMECON trade, but it is not convertible into foreign currencies. In effect, therefore, it is a unit of account for barter operations between COMECON countries [Garvy 1977, IBEC 1977]. The ECU, on the other hand, is not a settlement unit for intra-EEC trade or for trade with non-EEC member countries. Settlements both within and outside the EEC take place in the currencies of member countries; these currencies are freely convertible into third currencies.

A Caricom unit of account, will be convertible only if the currencies supporting the unit are convertible. Creating the unit will require a supporting pool of foreign exchange - essentially United States dollars - if it serves as something more than a means of demoninating.

barter arrangements. The Barbados dollar, the East Caribbean dollar and the Trinidad and Tobago dollar are convertible because their respective Central Banks stand ready to make legitimate sales at the official price for US dollars. The Jamaica and Guyana dollars are not convertible because their Central Banks can offer no such assurance. If a Caricom unit of account is to be convertible, the account manager will need an adequate reserve of United States dollars, and regional member governments will have to provide most of it. Outsiders can hardly be expected to capitalise a Caricom fund if members of Caricom are not willing to make the major contributions themselves.

Already the US dollar functions both as a unit of account and as a means of settlement. The United States is perhaps the only country willing and able to allow its currency to be used as a reserve currency, and its central bank to be used as a clearing house by the rest of the world. Any other currency, including the SDR, could also serve as a unit of account, but at the time of settlement values would still have to be converted to US dollars or some other currency actually used for payment. (The Trinidad dollar is, to some extent, used as a unit of account for regional travel since Caricom travellers' cheques are not convertible into non-regional currencies. Eventually, however, these travel credits and debits have to be settled in US dollars).

Although total intra-Caricom exports must equal total intra-Caricom imports, this is unlikely to be true for any individual country. In fact, if some countries are net importers, others must be net exporters; and any country which is a net exporter to Caricom will be a net importer from the rest of the world. The country in that situation must be able to use the foreign exchange earned by selling to Caricom to buy goods from the rest of the world. That is to say, the country must earn convertible money from its Caricom sales. If the country does not earn convertible currency in Caricom, it will have to limit its sales to Caricom to its purchases from Caricom. The existence or non-existence of a Caricom unit is immaterial in that situation, since transactions reduce essentially to barter. No currency is needed, only an agreed method of valuation.

Another presumed advantage of the proposed regional unit of account is that it would introduce exchange rate stability in the region. This argument is based on the mistaken notion that the ECU prevents the exchange rate fluctuations of the European currencies against each other. In fact, the limits to ECU variation depend on the complex system of rules determining the points at which the authorities intervene in the market to prevent divergences away from some desired relationship. This is one of the last vestiges of the parity system when margins were fixed within which currencies could legitimately trade against each other.

Earlier variations of the European currency arrangements included the 'snake' which set even narrower margins for EEC currencies against each other, and the 'worm' which set even stricter limits on the fluctuations of the Benelux currencies. Within these arrangements the strongest and the weakest currencies in the parity grid often needed to purchase or sell foreign currency to keep the value of domestic currency within the agreed margins.

Caricom countries could not sustain such a system at present because they do not have convertible currencies to support intervention necessary to maintain an agreed relationship to the unit of account. But, if they were able to do so, a parity grid similar to that in use in the EEC could, in fact, be constructed around the US dollar, thus obviating the need for a unit of account. For the same reason that Jamaica and Guyana are unable to maintain current parities with the US dollar, they would be unable to sustain their currencies' value in terms of any other unit of account. Under these circumstances, a given set of regional currency parities could be preserved only by depreciating the strong Caricom currencies in line with the weakest. That option has always been open to Trinidad and Tobago, ECCA, Belize, the Bahamas and Barbados. Not surprisingly, they have chosen not to exercise it.

The Caricom problem revolves around foreign exchange management in those countries which have intractable balance of payments deficits. They cannot shoulder their share of the

burden of maintaining the convertibility of regional settlements. The system can only be reactivated if someone is prepared to bail them out. When the sums involved were small and when Trinidad and Tobago's reserves were on the increase, that appeared feasible; one can no longer be optimistic about this possibility.

The determination of the value of the CUA is usually seen as a choice between currency pegs and various currency baskets. The relative merits of such alternatives are discussed elsewhere in this paper. However, we may devise a strategy which can be applied with equal facility to any peg or basket by focussing on the objectives of exchange rate adjustment. This is the approach we adopt in this section. We may work out, very approximately, the implications for each country of changes in a unified exchange rate. They will include effects on the balance of payments, inflation, the country's competitive position and its level of output. However, in this paper we confine our attention to the balance of trade.

We first calculate the elasticities which measure the effect of exchange rate changes on imports of goods and services, for each country. We need an elasticity for each currency used in any country's trade. For example, for Jamaica there is an elasticity of demand for imports from the US, another for imports from the UK, a third for imports from Caricom countries, etc. There is a range of supply elasticities for exports, along the same lines. By using these elasticities we find out how any given change in exchange rates will effect each country's trade.

It does not matter what currency we use as a numeraire to measure the exchange rate change - the US dollar, sterling, the SDR or any combination of currencies will do; we know the values of each trading currency used in the region in terms of US dollars, sterling and the SDR, and we can calculate their values in terms of any basket so long as we know the currencies that make up the basket and the weights assigned to them.

Instead of taking the changes in exchange rates for granted and deriving the effects on trade we may turn the procedure around, pick a balance of trade target and find out what change in exchange rates is needed to secure that target. Suppose the objective were to ensure that the ratio of the balance of trade to expected GDP did not change; by how much would we have to devalue or revalue the currency, taking account of the effects that would result on the trade balance? In table 10 we present for Barbados, Guyana, Jamaica and Trinidad and Tobago the exchange rate changes which would have secured an unchanged balance of trade to GDP ratio for the period 1973 to 1982. The policies needed would have varied quite remarkably between countries. For example, in 1973 a significant devaluation is indicated for Guyana, with only negligible changes for Jamaica and Trinidad and Tobago. For Barbados, a marked revaluation is indicated. The implied strategy requires highly volatile rates for all countries, with several reversals in the direction of exchange rate changes and a wide range of magnitudes. These results raise questions about the policy of using the exchange

TABLE 11

EXCHANGE RATE STRATEGY: TARGET TRADE RATIO
(PERCENTAGE CHANGES, LOCAL CURRENCY PER US DOLLAR)

Year	Barbados	Guyana	Jamaica	Trinidad/ Tobago	Weighted Average
1973	-21.9	19.	1.6	-3.4	-2.3
1974	4.6	228.9	3.5	4.9	23.5
1975	3.1	1.0	3.7	1.1	0
1976	5.1	1.2	19.8	0.2	6.0
1977	5.4	1.0	3.0	16.5	8.7
1978	9.9	29.5	7.5	5.7	3.5
1979	12.8	23.4	8.4	9.7	3.3
1980	9.5	12.2	8.2	15.7	12.6
1981	2.6	2.4	13.0	0.6	3.7
1982	2.9	303.7	13.6		

rate to adjust the balance of trade, but we will sidestep that issue for the moment.

We now suppose that regional exchange rates were unified, by imposing on each country an exchange rate strategy which followed the weighted average of the changes calculated for the individual countries. This unified rate will have very different effects on the balance of trade for different countries; they are presented in table 11. In 1973, the region's currencies would have been jointly revalued by 2.3%, in contrast to the changes ranging from 21.9% revaluation to 19.3% devaluation that would have been in individual countries' interest. As a result of the joint strategy Trinidad/Tobago's trade balance would have deteriorated by an estimated 180% of its 1972 value, while Barbados' trade balance might have improved by 60%. The joint strategy, if pursued over the whole period, would have produced violent swings in the trade balances of Caricom member states.

Furthermore, the destabilisation of the balance of payments, severe as it is, is by no means the only economic fallout that the region would have to contend with. Prices, costs and output would also be affected; we could, if we wished, estimate these effects by applying the relevant elasticities to the joint exchange rate changes in table 11. However, the joint exchange rate strategy seems already highly problematic on the basis of balance of payments effects alone.

TABLE 12

TRADE EFFECTS OF COMMON EXCHANGE RATE
(PERCENTAGE CHANGE IN TRADE BALANCE)

Year	Barbados	Guyana	Jamaica	Trinidad/Tobago
1973	-59.9	5.9	34.1	-180.1
1974	284.6	9.3	844.4	581.2
1975	-146.7	-54.9	0.6	88.8
1976	-114.2	-691.4	287.6	17,816.0
1977	221.7	368.8	1,360.8	-1,287.3
1978	-1.4	-13.6	98.6	257.3
1979	334.9	11.8	-466.9	.2,169.7
1980	-538.1	-70.7	250.6	172.2
1981	161.8	173.2	3.6	-279.5

The Currency Area Problem

The pegging of exchange rates among Caricom countries would be the key institutional factor in the formation of a regional currency area. If it could be achieved it might deepen the currency markets of the combined member countries and make them more resistant to speculation and random shocks. Moreover, it might prove easier to realign currency valuation within a regional association.

Partner countries within the currency area would face constraints on specific policy variables such as the level of interest rates, wage rates, capital formation and exchange rates. More fundamentally, these countries would not be free to choose at will the pattern of government income redistribution or public goods expenditures. If members are allowed autonomy in any of these policy areas one country's disequilibrium could destabilise the entire region. This danger is acute where member countries vary greatly in size; larger members may quickly absorb the foreign exchange earnings of the smaller, if the expenditures in the larger are not kept in line with their incomes.

In several currency areas member countries have created a fictitious numeraire called the "unit of account" to speed up the process of cancelling the credits and debits; "the Peso Centroamericano" is one example. In theory, there can be just

one numeraire: for a floating or flexible system it is the money supply; for a currency area the numeraire is the whole structure of exchange rates.

The problem of a currency area can also be analyzed from the standpoint of the adjustment process, making a distinction between internal and external disturbances. The currency bloc is one way to cope with external disturbances. Specific arrangements would have to be agreed among bloc partners to smooth the process of moving jointly in relation with all other currencies. The currencies might all remain in the same relationship to the U.S. dollar, for instance, or they may be tied to a basket of goods.

However, there remains the problem of counteracting internal shocks, such as those recently experienced by Jamaica, which could put the integration scheme in jeopardy. Whether the exchange rate is fixed or crawling, internal and external balance must be achieved simultaneously. If the country in disequilibrium does not face fundamental structural imbalances the proper use of monetary and fiscal policies should gradually move it back to equilibrium. However, if monetary and fiscal policies cannot achieve equilibrium, the solution becomes exceedingly complicated, requiring a turnover of the whole structure of economic policies and entailing a sacrifice of income and well being. Otherwise, it is highly probable that the disequilibrium will become explosive.

A Unit of Account for Caricom Transactions Only

In view of the formidable difficulties in the way of full exchange rate unification, proposals have been offered for a unified rate that would apply only to transactions within the CARICOM grouping. Each CARICOM country would have discretion to set its own parity, as under the current arrangements. But all CARICOM transactions would be valued in a CARICOM currency unit (which we call the CCU to distinguish it from the CUA above) which might be a weighted average of the values of all currencies in the region. Karl Bennett [1984] provides an illustration of how such a system might work, and his calculations are reproduced in tables 12 and 13. Whenever a Caricom country devalues its currency, the value of the CCU falls, but not by the full amount of that country's devaluation. The extent to which the CCU depreciates depends on the weight assigned to the devaluing country.

It is argued that this device will ameliorate the effect of the devaluation because the loss of competitiveness by non-devaluing countries is less than the full extent of the devaluation. The prices of exports from its partners to the devaluing country will rise by something less than the full amount of the devaluation because these prices are denominated in CCUs. The prices of imports from the devaluing country, also denominated in CCUs, fall by less than the full amount of the devaluation.

However, this amelioration is illusory. The effect on the purchasing power of the non-devaluing country is the same as

it would be in the absence of the CCU. That country's export prices do rise by less than the full amount of its partner's devaluation, but it loses something on every dollar of exports because each CCU it receives in payment will purchase less than it did before devaluation. A similar line of reasoning holds for imports from the devaluing country. Although they are not quite as cheap to buyers in non-devaluing countries in terms of CCUs, each CCU purchased to pay for imports will cost less in the buyer's currency. The consumer will obtain the product just as inexpensively as he would have without the CCU. Except as a cosmetic device, the CCU does not appear to have great merit.

TABLE 13

VALUE OF THE CCU¹ IN REGIONAL CURRENCIES

§	(1)		% Change
	Initial Value	After (2) Jamaican Devaluation ²	
Trinidad/Tobago	.957	.918	- 4.1
Barbados	.798	.765	- 4.1
Belize	.798	.765	- 4.1
Guyana	1.20	1.15	- 4.2
ECCM	1.08	1.03	- 4.6
Jamaica	1.20	1.53	+27.5

$$1\text{CCU} = .25 (\text{US}\$/\text{TT}\$) + .20 (\text{US}\$/\text{BDS}\$) + .20 (\text{US}\$/\text{J}\$) \\ + .10 (\text{US}\$/\text{EC}\$) + .50 (\text{US}\$/\text{BZ}\$)$$

=39.92 cents U.S. at end - 1983 exchange rates

²Assuming Jamaica devalued its currency by one third

Source: Bennett [1984]

TABLE 14

IMPACT OF A DEVALUATION ON PRICES OF JAMAICAN

EXPORTS IN REGIONAL CURRENCIES¹

§	Pre Devaluation ² Price	Post Devaluation ³ Price	% Change
Trinidad/Tobago	95.7	83.4	12.9
Barbados	79.8	69.5	12.9
Belize	79.8	69.5	12.9
Guyana	120.0	104.5	12.9
ECCM	108.0	94.1	12.9

¹ Based on a pre and post devaluation values of 1 CCU in J \$.

² Pre devaluation export unit price J \$120.

³ Post devaluation export unit price J \$133.2

Source: Bennett [1984]

Summary

The economies constituting the Caribbean Economic Community have recorded a wide range of performance in recent years. A few have had reasonable growth, tolerable inflation and external payments stability, but others have done badly and some have been reduced to quite straightened circumstances. Within any regional grouping the economic fortunes of one member must have an impact on all; policies are needed to mitigate the dislocation caused by the misfortunes of other members of the group. There is some sentiment that, rather than being helpful, unilateral policies in the CARICOM region may have aggravated the transfer of economic disequilibria from one country to another.

Disquiet about actual policies may have confused the issues; there has been a tendency to place all blame for the contraction in regional trade on inappropriate policy. However, under the best of policies regional trade could not have maintained robust growth in the face of economic contraction in so many CARICOM states. It is more realistic to accept a slowdown in intra-regional trade. Nevertheless, policies can no doubt be improved so as to soften the adverse impact of economic difficulties in any one country, and to allow others to render reasonable assistance without danger of having their own economies dragged under. One particular concern in this study is whether exchange rate policy can be so managed as to ameliorate the impact of any one country's exchange rate adjustment policies on other countries' trade balance.

re available options are:

- (a) a unified exchange rate for the Caricom region, to be used as the standard of value for all individual currencies in the area. It might be fixed and adjustable or crawling, and bands of deviation could be established. It would be used for all transactions;
- (b) A single CARICOM exchange rate, to be applied only to CARICOM trade. Countries would continue to determine their exchange rate strategy individually, and their own rates would be used for all non-Caricom transactions. Each country would, in effect, have a dual exchange rate system;
- (c) individual countries to fix their own exchange rates, but devaluing countries to maintain a separate, unvarying rate for Caricom transactions;
- (d) essentially the same as at (c), but instead of maintaining an unchanged exchange rate for Caricom the devaluing country provides for additional taxes on exporters to the region;
- (e) individual country exchange rate strategy with budgetary subsidies by non-devaluing countries, for exports to the devaluing country;

- f) countries set exchange rates individually but non-devaluing countries may impose trade and exchange control restrictions, and introduce special tariffs to limit access to the markets of non-devaluing countries;
- (g) individual country exchange rate strategy, with no reaction on the part of countries which choose not to vary their exchange rates.

In order to sustain a unified Caricom rate for all transactions each member country would need access to reserves of foreign exchange sufficient to defend the fixed value of its own currency in terms of the regional currency unit. Each country would need policy instruments powerful enough to counteract the volatile trade, inflation, output and cost effects which this strategy would incur. Unification raises the spectre that relatively stable countries might impoverish themselves by exposing their economies to volatile policies dictated by the circumstances of the less stable. Moreover, countries with structural balance of payments disequilibria would be in a position to absorb the foreign exchange reserves of the region instead of making necessary economic adjustment; if they were denied access to the regional foreign exchange pool they would be unable to maintain their currency's value in terms of the CARICOM

unit. Exchange rate unification under the current political arrangements is the worst possible option: it would reduce all countries to the level of the weakest. Unification would be sensible only if there were a firm CARICOM central government making economic policy for each country to ensure domestic fiscal and monetary conditions appropriate to the chosen rate.

Nothing is to be gained by creating a CARICOM unit of account for regional transactions only. The impact of divergence between the currencies of the region is exactly the same as it would be without the CARICOM unit. Product prices in regional trade would adjust by only part of the devaluation of any one country, but there would be a loss in the value of the CARICOM unit in terms of non-devalued regional currencies in addition.

A devaluing country might head off criticism from others by maintaining the pre-devaluation exchange rate for CARICOM trade. However, it would do so at the expense of its own exporters to CARICOM; their costs would rise in due course as a result of the devaluation, but their prices to CARICOM would not be permitted to rise. This measure would have to be seen as a temporary expedient, to be removed as relative prices adjust.

The imposition of barriers to trade is self defeating because it surrenders the benefits of integration. Domestic

industry will eventually exhaust the limits of the home markets; meanwhile firms would have become non-competitive with other producers in the region, from whose products they have been protected. The outcome is much worse if offended countries decide to retaliate.

The most benign policies are those internal adjustments which countries that do not devalue may make to offset undesirable outcomes. A combination of taxes and selective subsidies is the principal suggestion we have made along these lines. Even this policy is not justified unless the impact is sizeable. With Caricom trade accounting for such a small segment of external transactions for most member countries, a decision not to react to any one country's devaluation may be the most appropriate.

Recommendations

- (1) CARICOM member states need to maintain much more frequent contact on general economic policy to gain an understanding of the roots of policy changes. Devaluations in the region have never been designed to hurt regional trading partners; they were dictated by global balance of payments conditions. These issues should be clearly understood by all members.

- (2) Each CARICOM member state must be free to determine its own exchange rate policy. A unified exchange rate strategy is not feasible at this stage.
- (3) No action is recommended on the part of its partners if one country decides to devalue, provided the impact on the trade balance, prices, output and cost competitiveness is mild.
- (4) If devaluations are large, devaluing countries should agree to consider maintaining a pre-devaluation rate especially for CARICOM trade, at least for some time after the devaluation. Alternatively, a temporary tax should be placed on exporters. Either measure would offer other countries a breathing space to adapt to the eventual change in competitiveness.
- (5) Non-devaluing countries should have the right to subsidise exports to devaluing countries if the latter fail to honour agreements accepted under item (4).
- (6) Members should agree to avoid trade controls, exchange controls and special tariffs on goods originating in the Caricom region.

APPENDIX A

LESSONS FROM THE EXPERIENCE OF THE CENTRAL AMERICAN COMMON MARKET

The setting up of a currency area requires certain conditions in terms of monetary cooperation: 1) fixed exchange rate system; 2) unrestricted convertibility among currencies; 3) freedom to transfer currencies from one to another partner country; and 4) consistent monetary policy among member countries. From those conditions, it is possible to derive some basic features that characterize a currency area or a monetary cooperation agreement, which in summary are:

- 1) A clearing-house or payments agreement, including:
 - i) a numeraire or unit of account to settle payments and receipts;
 - ii) multilateral compensation in intra-regional trade bounded by mutual credit lines among partners
 - iii) an exchange rate agreement to make possible a deepening of trade in the area;
 - iv) some credit facilities to cancel net debtor positions;
- 2) A financial mechanism to accommodate temporary balance of payments disequilibria based on automatic or conditional credit lines.

Those characteristics were present in the Central America integration scheme, although their performance was only partially successful due to inconsistencies in monetary policies.

A clearing house was agreed in 1961 and restructured in 1964 when the Central Banks of the region took charge of monetary cooperation in the area. The Central American Monetary Council was created and became the number one authority for the payments mechanism. A numeraire or unit of account was established, introducing the so called "Peso Centroamericano" at par value with the U.S. dollar. Each country maintained a pegged currency long before in terms of the U.S. dollar, at a level that revealed a comparative advantage in some traditional export items such as cotton, coffee and cattle. So, a unified exchange rate system emerged pegged to a single major currency and convertibility for current account flows was honoured within the region. Both were useful instruments in promoting the functioning of a payments system and, therefore, intra-regional trade flows were heavily stimulated. Trade transactions through the mechanism reached an average of 90% of the overall intra-regional trade, and they increased nine-fold in absolute level from 1963 to 1974. In 1969 a complementary institution, was established the "Central American Fund for Monetary Stabilization". Its main objectives were to finance temporary balance of payments disequilibria, and to avoid instabilities in the exchange rate system.

However, during the years 1963 and 1964, Costa Rica adopted truly expansive monetary policies which, were promptly offset by adverse changes in international reserves that ended in a balance of payments crisis in 1966. Beginning January 1967, the Central Bank adopted a dual exchange rate policy that was at odds with the convertibility principle and produced instabilities in the structure of the exchange rate system. It discriminated against trade within the area and representatives from the regional monetary institutions urged the Costa Rica monetary authorities to give preferential treatment to regional transactions.

Nevertheless, a segmented foreign exchange market remained up to early 1970 when the unified system was reimposed at December 1966 parity level. It is open to question if that face value was an equilibrium one; in any event the Central Bank supported that parity for eighteen months, and in June 1971 a dual exchange rate system was re-established under heavy pressure of foreign exchange demand. This new crisis was due to a resumption of expansive monetary policies in hopes of maintaining employment and a level of effective demand. Again, the empirical evidence ran counter to expectations: confidence was eroded, foreign reserves were run down, and even worse, Costa Rica was reluctant to make use of funds supplied by regional monetary institutions because of their conditional nature.

The institutional framework, already weakened due to political and military problems between Honduras and El Salvador,

was further shocked by the behaviour of a member country whose inflationary and redistributive policies were not consistent with external balance and with basic commitments related to the integration scheme such as convertibility, exchange rate stability and an unimpaired payments mechanism. Some lessons could be derived from the aforementioned events:

- 1) There was a persistent feeling that a devaluation implies, automatically, a better competitive position. It proved to be half truth since an exchange rate change could just mean returning back to an equilibrium level for an overvalued currency.
- 2) There was hard evidence of the linkage between domestic monetary policies and the performance of the integration process. Thus, a country with relatively expansive credit policies is constrained to adopt measures that run counter to free trade movements and exchange rate stability.
- 3) There was growing consciousness among member countries about:
 - i) the problems that arise when there is not a real compromise in harmonizing domestic policies; and
 - ii) the social costs that are associated to a liberal utilization of policy instruments.

Finally, with shocks coming from an unstable external environment, weakness of the structural framework and, a complicated political problem, the monetary integration process has been reversed and a trend toward bilateralism has emerged together with undesirable measures such as compensatory taxes, tariff barriers, and import and foreign exchange controls. The social cost of this failure, in terms of production, consumption and employment, has been extremely high, and cannot be easily made up. The following summary of recent measures ensues to give a better understanding of the poor situation.

CENTRAL AMERICAN COMMON MARKET: SOME RECENT MEASURES

Central American countries have constituted a common market and a monetary zone through the General Treaty of Economic Integration and other related instruments.

A special tenet, under the General Treaty, was the setting-up of preferential treatment for regional trade and payments. Therefore, Central Banks made the compromise, through the Central American Monetary Agreement, that in accordance with their respective national laws they would support uniformity in the exchange rate system as a normal monetary regime whose characteristics would be stability and convertibility of their currencies. Moreover, they advocated the use of the said currencies for transactions within the region.

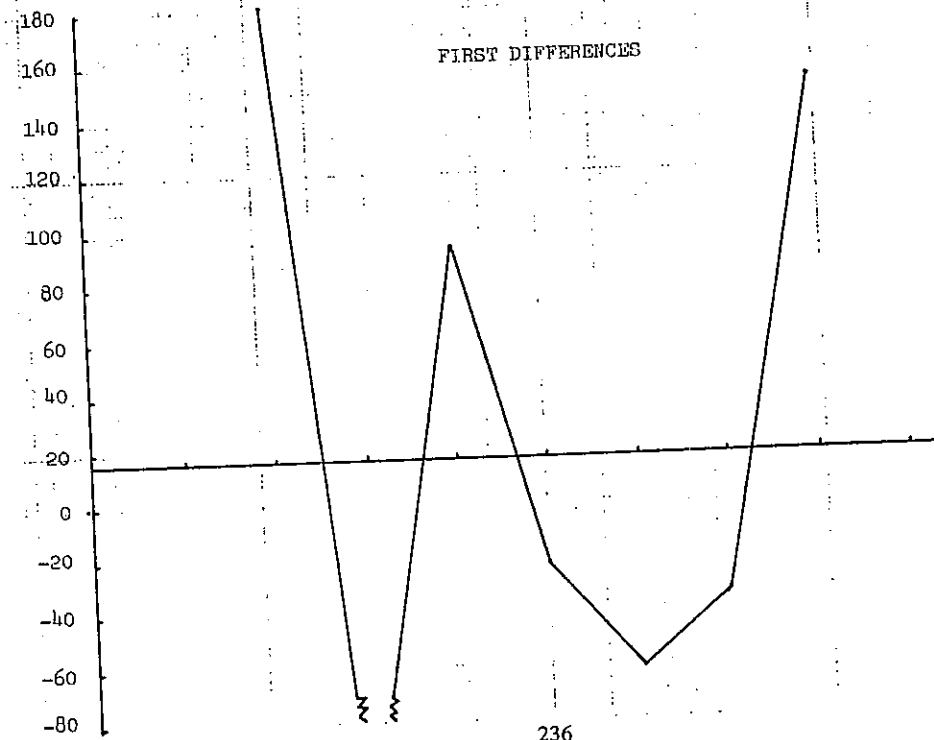
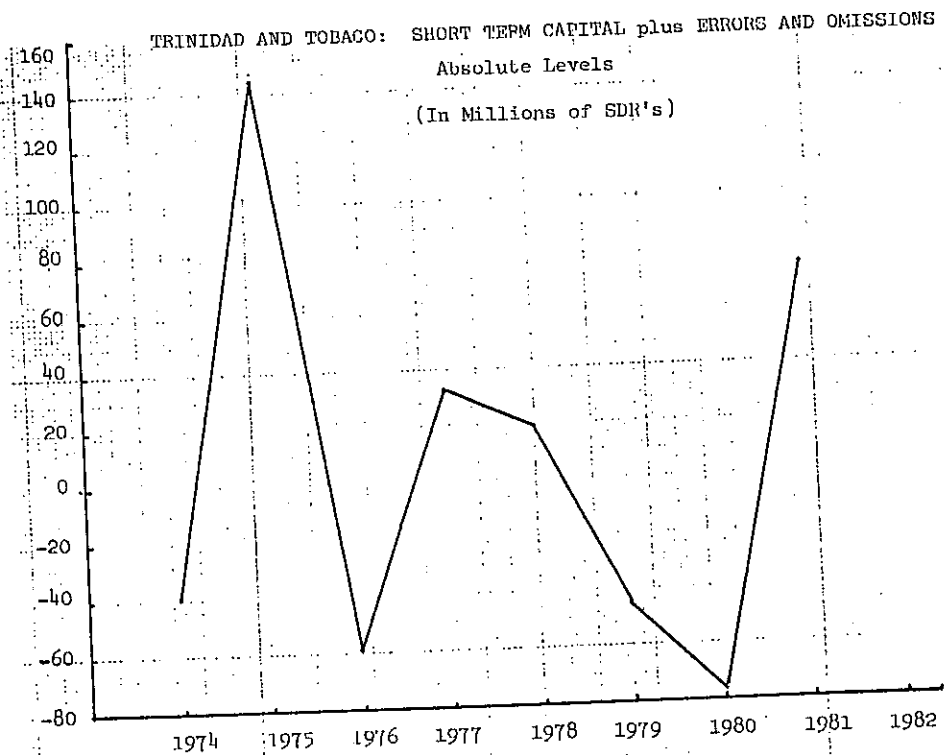
However, in recent times a range of measures has been introduced that affect the exchange rate systems:

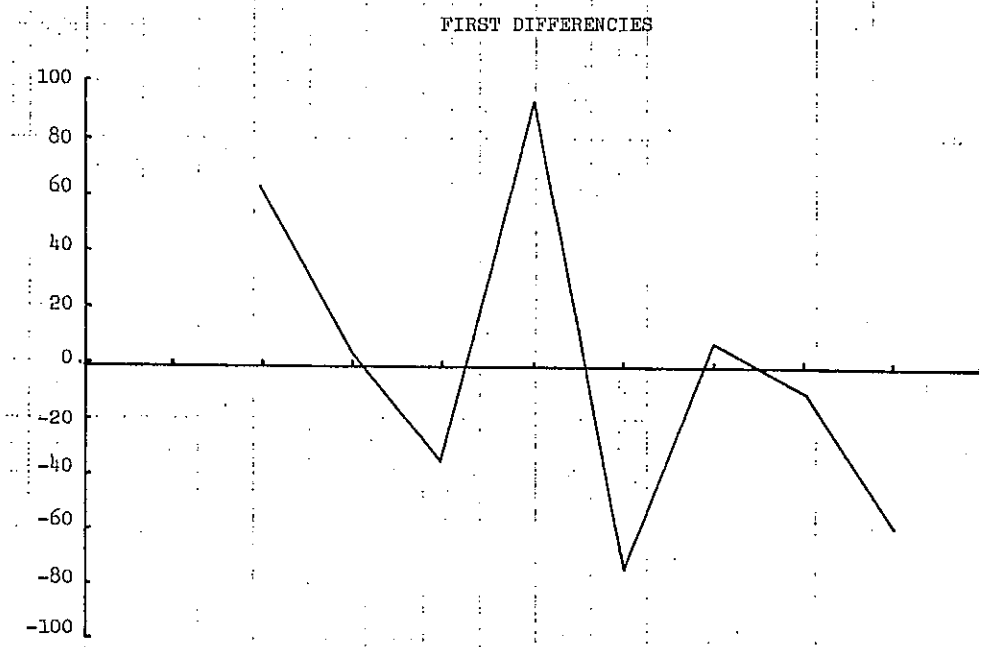
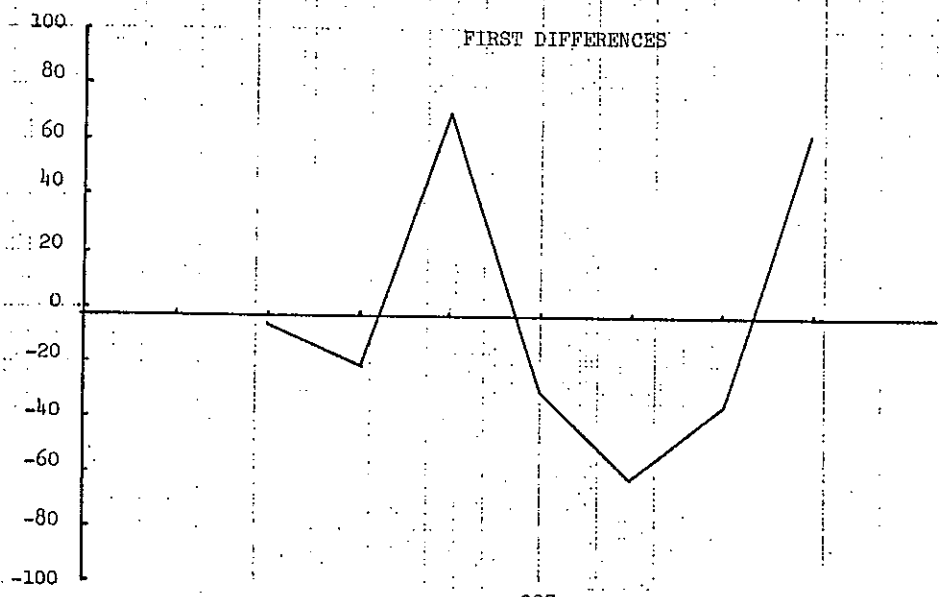
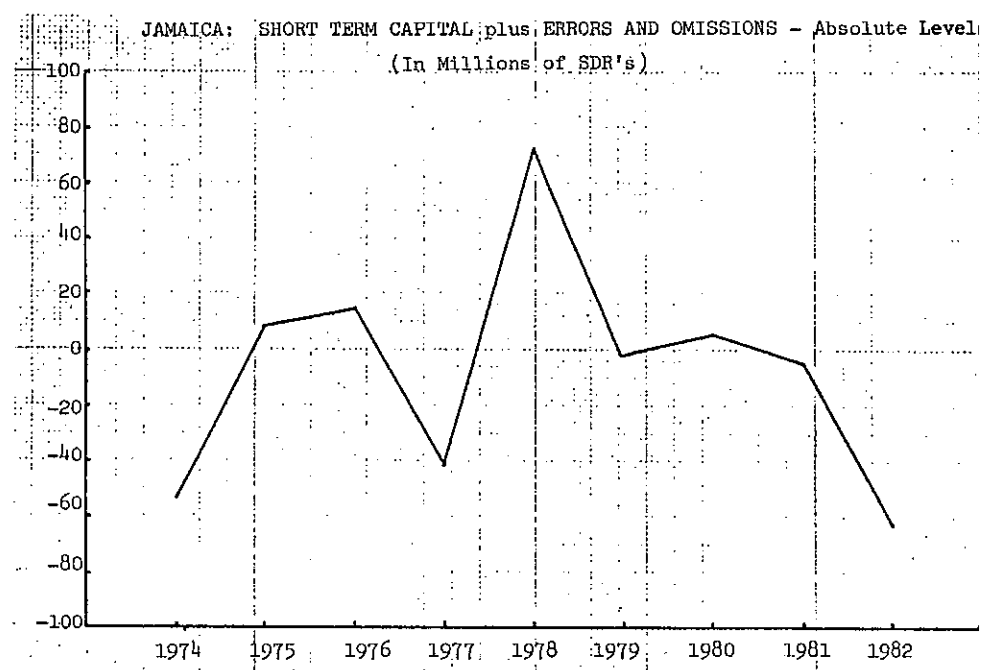
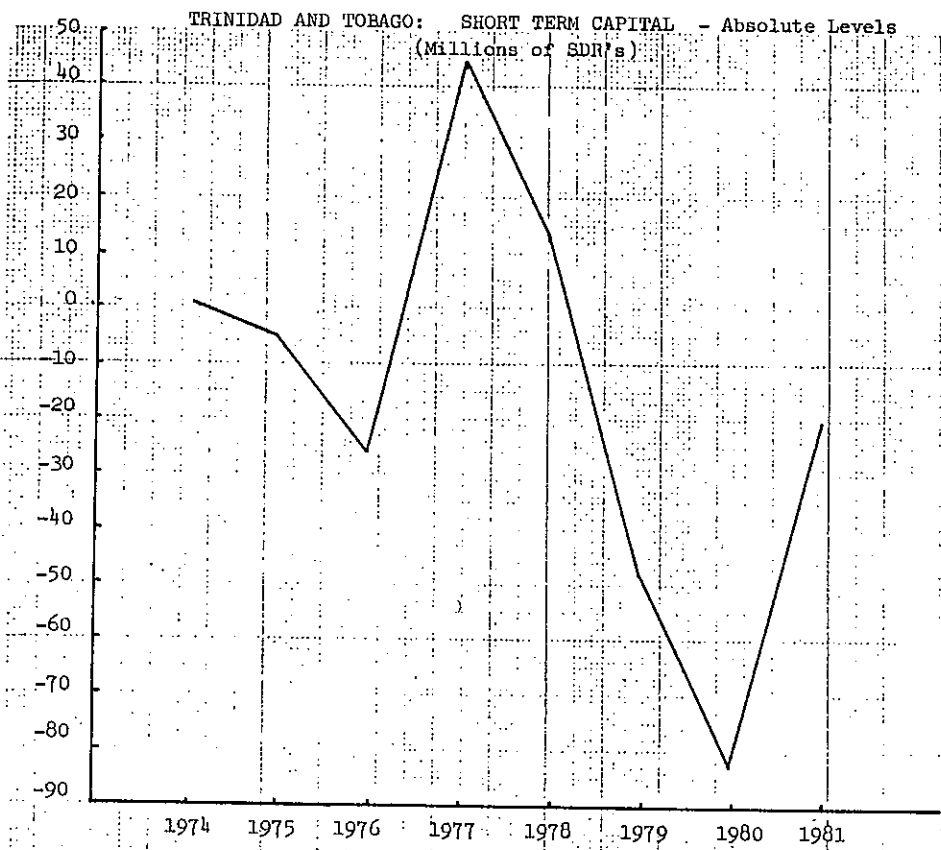
- a) in Costa Rica, El Salvador and Nicaragua multiple exchange rates are applied in the official market, affecting regional competitiveness and discriminating against regional transactions.
- b) The import lists and exchange rationing in Costa Rica, El Salvador, Honduras and Nicaragua are based on essentiality and priority criteria based on the needs and objectives of each country. Consequently, these policies of rationalizing the use of foreign exchange differ from one country to another and have thus varying implications in the exchange field.
- c) All Central American countries apply exchange control. "Black markets have arisen to cope with the unsatisfied demand for foreign money at an even higher exchange rate, resulting in a multiple exchange rate system. Only Guatemala honours the preference treatment while Costa Rica and Nicaragua have outlawed black market operations.
- d) Costa Rica has worked out three lists of products for which imports can be authorized at the interbanking rate. The first one is applied almost exclusively to products from the other Central American countries; the second one includes only goods

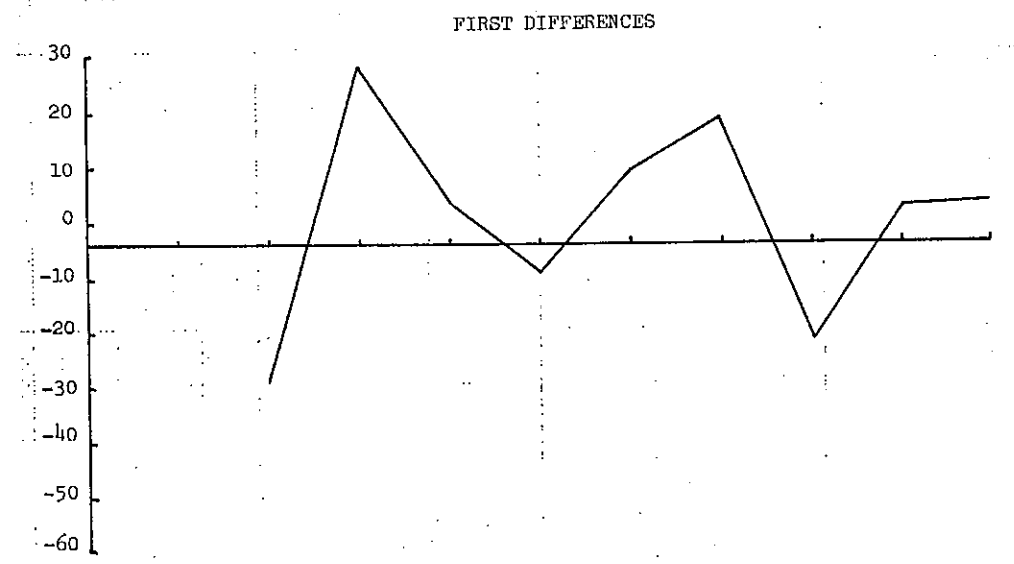
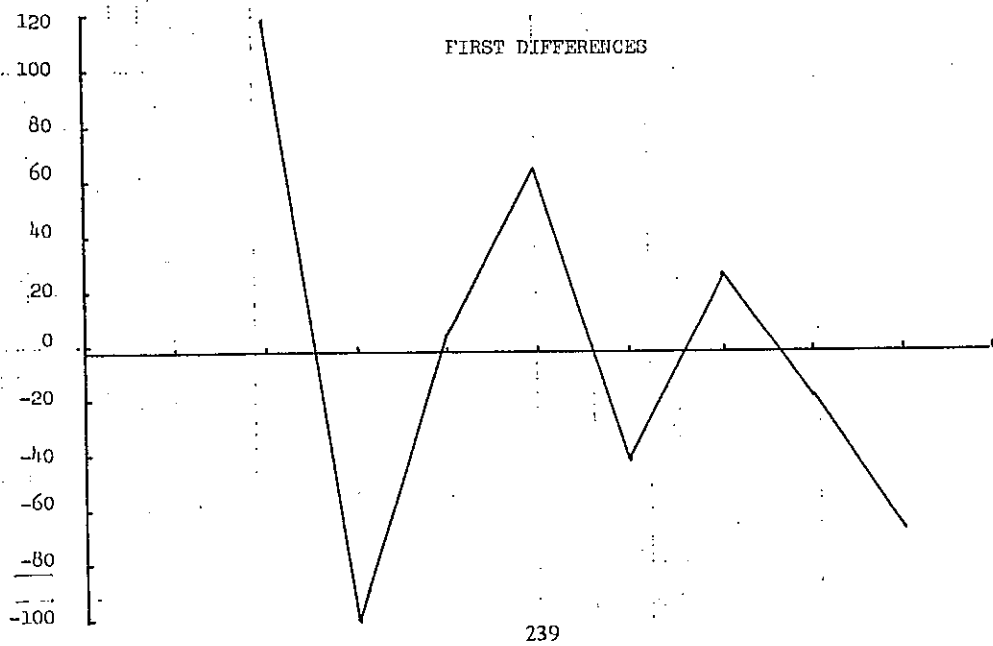
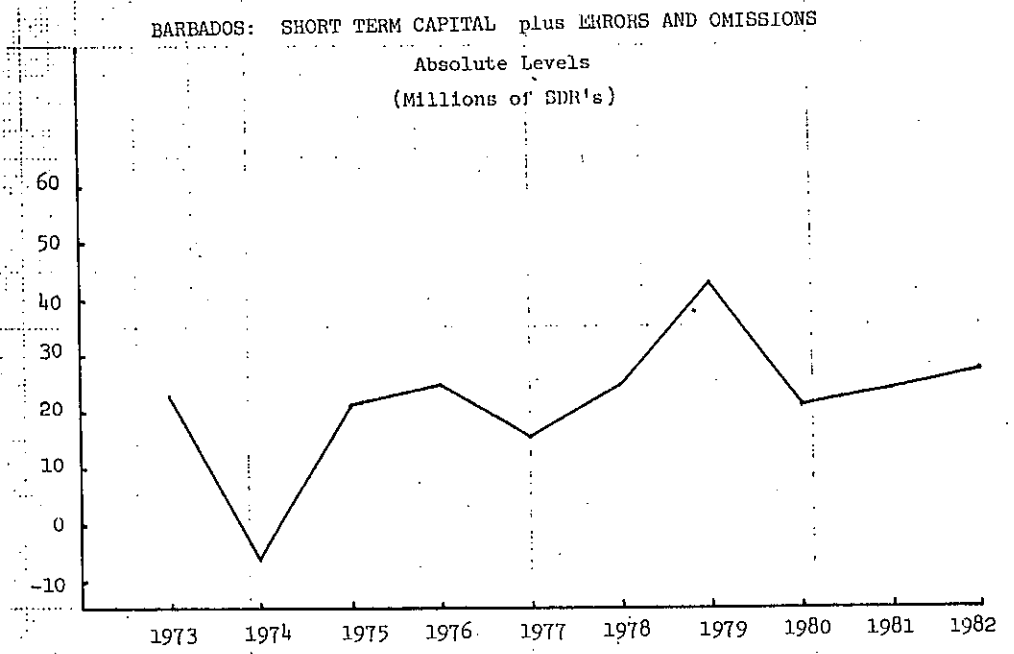
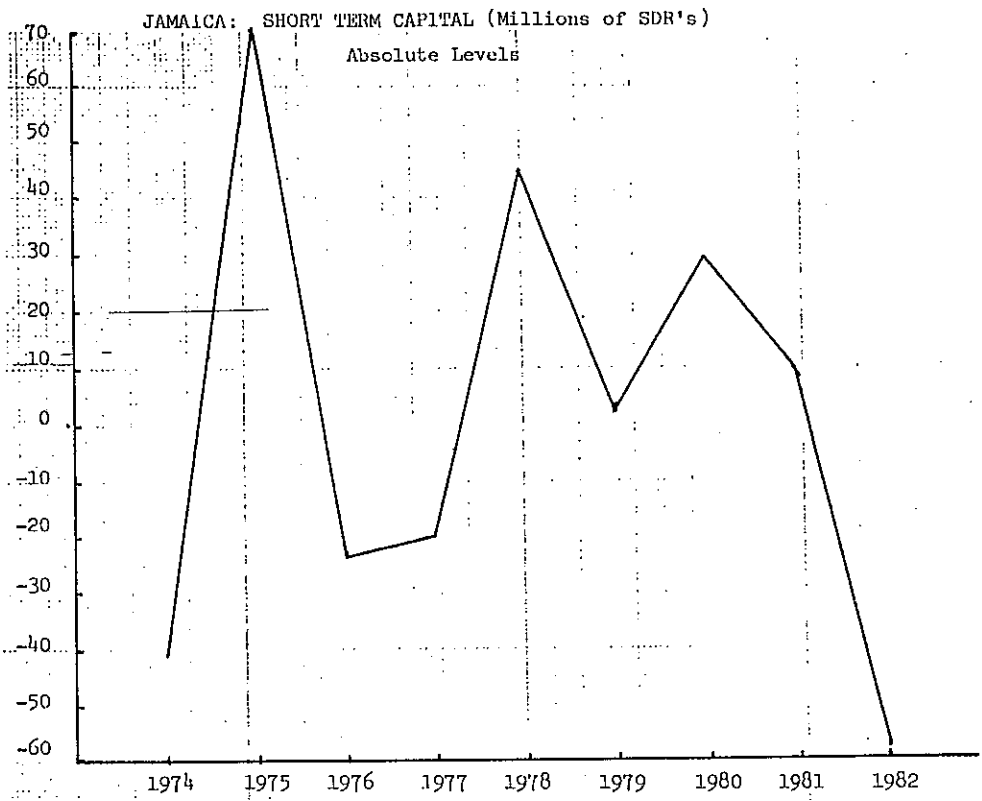
imported from Honduras and Guatemala; the third one includes other products coming only from the latter country. The second list discriminates some products coming from El Salvador, Honduras and Nicaragua and which can only be imported at the free exchange rate.

- e) With regard to El Salvador, its import lists indicate the products which are not authorized for trade unless they come from Central American countries. However, payments for those imports can only be made at the free exchange rate.
- f) Regarding administrative measures, El Salvador, Honduras and Nicaragua require prior import authorization for both regional and extra-regional trade. This measure could cause delays or discrimination which would affect purchases from Central American markets. Guatemala and Costa Rica do not require prior import authorization when applied to regional trade.
- g) The exchange control system within the region has institutionalized a queue, creating delays and discrimination for businessmen needing foreign money.

h) Aside from restrictions which are affecting intra-regional trade and payments, it is recognized that there exist fiscal and commercial instruments which have had significant negative impact upon trade and financial flows; among these mention can be made of bilateral treaties between Honduras and other regional countries as well as application of selective consumer taxes when they discriminate in favour of domestic production.

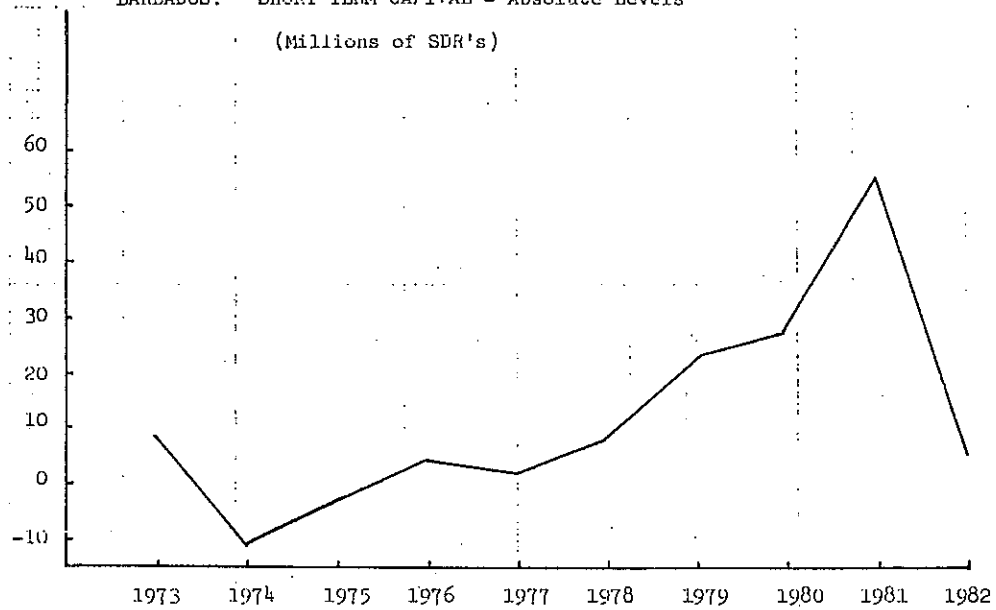






BARBADOS: SHORT TERM CAPITAL - Absolute Levels

(Millions of SDR's)



FIRST DIFFERENCES

