Trade Aspects of Caribbean Balance of Payments, 1974-85

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Introduction

Small size, a narrow resource base and a common history of colonial exploitation predisposed the countries of the English-speaking Caribbean to a dependence on foreign trade for viability. The pattern of colonial economic relationships remained intact for four hundred years. By 1909 J.S. Mill could still characterise these countries as "... a class of trading and exporting communities..." where England found it convenient to produce sugar and other tropical crops.

In the 1960s Mill's general description had become the focus of a new economic typography, the plantation economy - still oriented towards, but operating on the fringes of, international commerce (see Beckford [1972] and Levitt and Best [1975]). These hinterland economies supplied the metropole with raw materials, imported all essential items and had no say in the determination of the prices of these commodities. Long after political independence, C.Y. Thomas was able to describe the Guyanese (and indeed the regional) situation as "export specialisation complimented by extensive dependence on the importation of foodstuffs (although the economy was still principally agricultural) intermediate goods and capital equipment..."

increasingly, there were challenges to this mechanistic way of functioning. By the early 1970s most of the former colonies had become responsible for their own external economic well-being. Countries had to accord a much higher priority to economic development and how it could be facilitated through monetary and fiscal policies. This period saw further attempts at regionalism and ushered in the era of central banking, and concerns with international reserves and exchange rates. Moreover in the 1970s rapid increases in oil prices forever changed international economic relationships and severely circumscribed the ability of the territories to survive.

This paper examines those trade and trade-related issues which have most attracted the attention of writers and planners in the region since 1974. The following section gives a brief overview of the economic fortunes of the individual countries. Following that we deal in turn with what experience and the literature have taught us about the link between trade and growth, regional integration (including payments) and the burning issue of adjustment. After this we examine some statistical evidence with policy implications and conclusions coming at the end.

Overview

During the period under review export agriculture was still dominant in all but a few economies in the region. The cultivation of sugarcane had wide currency, while bananas were exported from the Windward Islands and Jamaica, which along with Belize, also exported citrus; Guyana depended heavily on receipts from rice. Other major exports included bauxite and alumina from Guyana and Jamaica and petroleum products which dominated the economy of Trinidad and Tobago. In recent times, too, manufactured exports - clothing, chemicals and electrical components - had become increasingly more important to those economies which were making quicker progress with diversification. Invisible earnings, notably from tourism, were crucial for Barbados, Antigua, Jamaica and the Bahamas. For most of the territories the major export markets were North America, the European Economic Community (EEC) and the Caribbean Community. The composition of imports has been described already; major sources included North America, Western Europe, Caricom and increasingly (because of motor cars) Japan.

The fragility of these open economies was exposed by the external influences which buffetted them after 1974. The period was characterised by exchange rate fluctuations, sudden oil price increases, stagnant export markes, highly variable terms of trade and inflationary pressure from rising import prices (see Worrell [1986(a)]). The turmoil in the international economy was transmitted swiftly and directly through the foreign sectors of Caricom countries and into their wider economies.

In Jamaica, the first oil price shock of 1973 coincided with a fall in production from which the country has never really recovered. Over the years as export proceeds declined attempts at stabilization included several devaluations which helped little. Towards the end of the period balance of payments (BOP) deficits became more pronounced and erosion of the value of the Jamaican dollar had boosted prices significantly. Trinidad and Tobago on the other hand started 1974 on an upbeat note as the opening of a new oilfield coincided with the rise in oil prices. The next five years were a period of unprecedented prosperity as the proceeds from oil fuelled large BOP surpluses which boosted incomes and spurred job creation. Eventually rising wages and prices caused production of some items to become uncompetitive and economic activity slackened. Moreover spending by government and individuals sustained too rapid a growth in imports. The second oil price shock of 1979 gave only temporary relief; thereafter the oil market weakened and reserves fell in 1982 for the first itme in a decade. By the end of 1985 the country had devalued its currency.

After performing well in the early 1970s the Guyanese economy slipped back in 1976 when sugar prices collapsed. Money creation by the Central Bank kept alive the public sector capital works programme but this fuelled trade outflows which led to a fall in reserves. Around this time, too, large portions of the economy were nationalised but the ensuing uncertainty resulted in a lower level of output; the situation was not made any better by the oil price increae in 1979. In the early 1980s the currency was effectively devalued without any noticeable improvements in the country's liquidity position.

In the two years immediately following the "oil crisis" of 1973 the Barbadian economy plunged into recession which was marked by BOP deficits and record inflation levels. As reserves came under pressure in the mid-1970s controls on consumer credit were introduced to protect the BOP. Economic recovery in 1977 was sustained until 1980 on the strength of good performance from the tourism and manufacturing sectors. From 1981 onward the combination of falling export prices and weak markets caused the economy to slip back again. This latter period of difficulty, characterised mainly by tight fiscal policy, was made worse by a shortage of foreign exchange consequent upon the demise of the regional payments machinery. By 1985 there was some output gains but the BOP remained under pressure.

The Bahamas, Belize and the smaller economies of the East Caribbean were all adversely affected by rising fuel prices in the early 1970s; tourist arrivals were especially hard hit as the world economy weakened. Those countries which produced sugar and boasted a tourism sector recovered by the late 1970s but banana growers did not fare as well. The oil price increase of 1979 and the ensuing international recession set back the islands' recovery. By 1985 there had been a general decline in output, with rapid inflation and large BOP deficits; only tourism showed any economic resilience.

Trade and Economic Growth

According to Levitt and Best (op. cit. p. 34) the central post-war concern of economists in the Caribbean has been how to get the economy to grow fast enough. For some time it had been commonly accepted that in small open economies there was a well established link betwen foreign trade and economic growth. However, the turmoil of the 1974-85 period forced regional planners to take another look at their development strategies.

Exports

(a) Merchandise

Arthur Lewis in 1950 had argued that the way forward in the Caribbean lay in industrialisation - not as a goal in itself, but in the interest of export expansion. During the period under review export expansion as a strategy was employed by virtually all the territories; throughout the region governmental agencies were established specifically to push exports (witness for example the proliferation of corporations concerned with industrial development and export promotion).

The rise in exports, it was constantly pointed out, could lead to gains in output and employment. Indeed, Cox and Worrell [1979] writing about Barbados concluded that, income and employment, in addition to export expansion was found to bring efficient use of resources, increased capacity utilization, economies of scale and technological improvements. Some analysts, however, question the possibility of such gains, citing the shortcomings of international trade theory on which they are premissed (see for example, Samuel [1985]).

Notwithstanding the fact that some economies have become less open over the year, there seems now to be some strong support for the view that growth in the region is export led. It must be pointed out that for most of the time the term "exports" was defined to mean commodity exports only. Recently, however some researchers have propagated the existence of a traded-goods sector which includes both commodities and tourism. Thus the conclusion by Cox and Worrell in 1979 that Barbados' exports were not export-led is entirely consistent with Worrell's later [1981] statement that the economies of Jamaica and Barbados are export-led with traded goods earning the foreign exchange to boost non-traded activity. By the same reasoning St. Cyr [1981 p. 113] could describe Trinidad and Tobago as "an export-propelled dependent economy ..." In any case it is recognised that foreign exchange earnings perform an important role in the growth process. They constitute a constraint on the performance of some sectors and are also required to meet other current account obligations like debt service payments.

The attempt to expand exports during the 1970s and 1980s was an exercise in diversification - an attempt to increase manufactured exports. This is essentially the advice given by Professor Lewis over three decades ago. His prescription for trade-induced growth is simple - sell manufactured goods and use the foreign exchange to purchase food and raw materials from abroad (op. cit. p. 17) Recent research in the region is highlighting the strong correlation between income growth and the expansion of non-traditional exports. Diversification is also crucial because there is presently still a very high concentration of export earnings in one or two commodities and one or two markets (a good example is petroleum products for Trinidad and Tobago). This heavy dependence on a few primary exports opened the way for the severe fluctuations in earnings which regional economies experienced because of changing commodity prices in 1974-76 and 1979-81.

Efforts at diversification have introduced further complications. One issue has to do with the pattern of ownership in the nascent manufacturing sector. Most of the firms producing for export are branches or subsidiaries of foreign corporations which also control the markets. Some critics see a contradiction between the encouragement of such foreign enterprise and the movement towards indigenization of the export sector. William Demas, while cautioning that foreign investment is not all bad, is typical of those who think that all is not well with that pattern of relations. He notes that "foreign ownership and control of the key sectors of the economy is usually regarded as the principal form of economic dependence" and that presently in this region the control is exercised by the multinational corporations (Beckford (ed.) [1975 p. 67]).

Demas argues a case for a programme of localisation of key sectors, pointing out that economic development is also a process for allowing the involvement of nationals at all levels of decision-making. This is one reason why the joint-venture approach to industry (for example in the context of the so-called Caribbean Basin Initiative, CBI,) is being increasingly popularised. The joint-venture scheme, moreover, provides foreign exchange which is badly needed in the manufacturing sector to purchase machinery.

Secondly, there has been some debate about the kind of firm which should spearhead the diversification efforts. Industralization has often meant deliberate government policy to attract footloose activities which need not locate near their market or raw material source (Whitehall [1984 p. 9].) If the operation, in addition, provided several jobs, most governments found nothing wrong with that. The result of this has been an abundance of firms using cheap unskilled labour and assembly-type processes which limit the possibilities for technology transfers.

A third issue which is linked to the growth of the manufacturing sector is incentive legislation; there is some doubt as to whether incentives stimulate exports of manufactured goods. The evidence from Barbados suggests that incentives are more important for certain types of activities, usually labour intensive, export-oriented operations (Cox [1982] and Codrington [1985]). Still, throughout the region, foreign investors of all types have been offered a wide range of different inducements in the hope of diversifying the export sector. So intense was the competition that formal regional guidelines for dealing with investors had to be set out in the Harmonization of Fiscal Incentives to Industry.

Whilst foreign manufacturers appear to be an obvious first choice in the move to diversify the export base it was recognised that there was a role to be played by local entrepreneurs, especially in the regional market. One result of this realisation was the use of tariffs to protect regionally produced goods from foreign competition. The few commentaries on this issue (Worrell [1982] and Whitehall [op. cit.] agree that the infant industry argument is the one valid argument in favour of protection. It is easy to see that if inexperienced and unskilled local firms are not sheltered from well established foreign competition such industries may never be established at all (Whitehall op. cit p.10). In this respect it is noted that the common external tariff stimulated the production and trade of labour-extensive items like clothing, processed food and cosmetics.

There is also agreement that protection should be temporary to allow the new firm to learn up-to-date processes and benefit from technical change. It is debateable whether this argument is sound in the real world where technology changes are very slowly incorporated into production processes in the Caribbean i.e. a local infant may need a much longer incubation period. Notwithstanding this, it must be true that learning is an important source of productivity gains. Whitehall's study shows that protection is greatest for those activities with higher levels of value added and higher export ratios, in line with official policy (op. cit. p.22).

(b) Tourism

Even though tourism is now readily accepted as part of the traded-goods sector it is sufficiently different from commodities to merit special treatment. It is for example, a product which requires the consumer to always come to the market since it cannot be shipped to him. Sir Arthur Lewis had recognised its potential in the early 1950s and discussed it with respect to foreign exchange earnings and employment. Several countries exploited their tourism potential in the 1960s and 1970s, especialy after the sugar industry ceased to be a dependable income earner.

Harris [1982] concluded that in Jamaica the new interest in tourism derived from the reality of deteriorating trade balances, economic restructuring and the need to service a growing demand for goods and services. He confirmed that without tourism earnings the current account would be worse off. An examination of the BOP of Barbados and the Bahamas reveals a similar situation.

In a recent [1986] comprehensive study of the industry in Barbados, Clark et al examined the determinants of tourism arrivals. A visitor's choice of a holiday destination appears to be linked to his disposable income, comparative holiday costs (like airfares and hotel rates) as well as advertising. The econometric tests showed disposable income and airfares to be significant factors. Disposable income however appears to be less important for wealthy tourists who stay in luxury accommodation.

This finding should indicate both the type of visitor and accommodation which should be a priority in the islands.

Promotional activity was found not be significant; the low elasticities are probably a reflection of the continuing meagre level of outlays in this direction. Overall the results were not surprising; Clark in 1978 had reached basically the same conclusions. Other authors (Bennett [1981] and Phillips [1982] have however alluded to other determinants like the political environment (important to Jamaica), proximity to a major market (crucial to the Bahamas and Jamaica) and historical links (important to most of the islands).

One of the issues which Lewis had raised in 1950 was the leakage in tourism; he had been referring to the import content of the industry. Harris (op. cit.) notes that tourism is a multifaceted industry which cuts across many other sectors, thus increasing the potential for import leaks; he disaggregates leakage in Jamaica into components for food (30%) equipment and promotion. Worrell estimtes leakage in the Barbados tourist industry at 40% in 1982, not much different from the 42% estimated by Dawn Marshall in 1978. Marshall's definition, however, included non-trade items like debt-service, commissions and discounts; she also indicated that a full social costing would include the costs of extra infrastructure and of social tensions created by tourism. The concensus is that there is room for increasing the local content in tourism and simultaneously forging inter-industry links with agriculture and manufacturing.

In recent times, another kind of leakage has occupied the attention of tourism officials; this refers to the percentage of tourism earnings which does not reach the banking system (see Harris op. cit.). As most commentators righty point out a lot of this leakage is through the parallel market which developed in some countries on the heels of devaluation; in territories which have not devalued the propensity to hoard increased as foreign exchange became scarcer. This leakage is now a major source of import growth and countries may have to look anew at exchange control regulations and the payments arrangements in the tourism sector in order to deal effectively with this problem.

Other problem areas have not generally met with any serious analysis. For example, in Barbados one concern is with the skewedness of arrivals which show 50% of all tourists coming in the December to April period. The answer to this may lie in market diversification and/or serious promotion during the off (summer) season. There is also concern about the proliferation of apartment hotels which are unattractive to wealthy tourists, thereby contributing to a fall in occupancy rates and employment. Recent indications are that throughout the region there is a new thrust in the provision of luxury accommodation. Finally, William Demas and other experts have called for a revision of the traditional relationships with tour operators who are accused of having too much market power. A case is made for the development of local tour operating enterprises which are more responsive to the peculiar needs of the region. (See Demas et al [1981] and Phillips op. cit.).

(c) Imports

As the economies grew and became more diversified over the years they fed the demand for all types of imported goods. Some economic activities used rather than earned foreign exchange; for one, intermediate goods were imported to meet the export drive. In 1971 Adams writing about Jamaica concluded that "the changing structure of manufacturing has been important for increasing dependence on raw materials, with sectors with greatest import-dependence growing fastest" (p. 254). A decade later this phenomenon was also observed by Brown [1981] who showed that in Jamaica those activities heavily dependent on imports - construction, distribution, manufacturing - accounted for 31% of national income and 27% of employment. Worrell was able to report in 1982 that in Barbados, to generate sales of $10 million in tourism, manufacturing and sugar required foreign exchange outlays of $4 million, $3 million and $0.5 million respectively.

Growing export proceeds also made available more personal disposable income, thus stimulating a demand for consumer goods imports - food, motor-cars, television sets. The increase in consumer goods is, in addition, a function of a growing tourism sector in some countries. Diversified exports and increased consumer sophistication required that attendant features such as the infrastructure should be upgraded to international standards. This opened the way for imports of machinery and transport equipment to account for a significant proportion of total imports between 1974 and 1985.

The contention that the demand for imports is a function of economic activity was proven by several analysts during the period (Gafar [1975], Cox and Worrell [1978], Joefield-Naper [1982]). In addition, Cox and Worrell maintain that a number of other unquantifiable factors affect import demand. Some of these are global economic developments, natural resource endowments, the chosen path of development as well as peculiar historical, cultural and socio-economic considerations. Farrell [1983], was even able to identify a portion of imports which is permanent and related to the country's absorptive capacity as well as a transitory component which is a lagged function of the capacity to import or the availability of foreign exchange.

This strong dependence on imports made it difficult to control them in order to bring about adjustment. In the first place income elasticities show that most items in the import set are considered as necessities (with one or two luxuries). Thus increases in income lead to import growth and put pressure on the BOP. During the period most countries were therefore caught on the horns of a dilemma - trying to raise income levels but mindful of the damage which too rapid a growth in wages could do to their payments positions. Secondly, the demand for imports proved quite unresponsive to price changes and this is one of the major difficulties associated with using devaluations to correct trade deficits. Thirdly, with highly open economies and underdeveloped tax structures, import duties are an important source of government revenue. (Joefield-Napier op.cit.) This is all the more important for those countries which have either abolished, or shifted the burden away from, income taxation.

It is this downward stickiness of imports which has frustrated attempts at import substitution over the years. A good working definition of import-substition is "... the extent to which the ratio of imports to domestically available supplies (i.e. imports plus domestic production) falls." (Adams op. cit. p.261). For this rate to fall either imports must fall or local production (which is import-dependent) must rise; so no matter what path is taken it boils down to a question of what is the desirable level of imports.

Arthur Lewis had recognised long ago that import substitution was not as easy as it appears. Major constraints are the small size of the local market and the fact that the real cost of local manufacture is not always lower than imported goods (op. cit. pp 15-16). He however made a point in this regard which appears to have escaped modern economic planners for most of the time, namely, that it is not necessary to use all imported imports to develop local industry.

With respect to empirical data, Brathwaite and Codrington [1982] reported that in Barbados import-substitution had contributed 25% of the growth in manufacturing output between 1954 and 1980. Its impact was greatest for clothing, which is not surprising; there is obviously some substitutability between locally-made trousers and underwear and the same foreign items. This may be true for most textile producers in the region. The contribution of import-substitution to the output of food and beverages has been negative because of the rapid growth in the tourism sector and the unspectacular performance of domestic agricultural production. This latter observation can also be expected to apply generally to other territories with well developed tourism sectors e.g. Jamaica, the Bahamas and Antigua. Later evidence for Barbados, Jamaica and Trinidad and Tobago shows that import-competing production accounts respectively for 8%, 12% and 5% of tradeable output (Holder and Worrell [1985]).

The link between the price of imports and domestic inflation was reconfirmed during the 1980s. Two recent studies of the economies of Barbados, Jamaica and Trindiad and Tobago show how foreign prices influence costs in regional traded and non-traded sectors. The prices of traded goods vary directly with foreign price changes while the prices of non-traded goods are influenced by heavy use of imported inputs and through actual or expected inflation. Holder and Worrell (op. cit.) claim that domestic inflation in the three countries is about one-third imported. The link between imports and domestic inflation has been confirmed for Trinidad and Tobago by St. Cyr He goes on to show how, in the context of an export boom, inflation can result and be reinforced by the natural class struggles to share in the prosperity (1981 p.155).

But the effects of import prices have been witnessed most of all in the secular decline in regional terms of trade over the 1970s and 1980s. After the first oil shock in 1973 the costs of fuel, capital goods and raw materials rose rapidly and, after some lag, consumer prices rose as well. In Barbados, the net terms of trade fell by 28% between 1972 and 1980, rising only in 1975 and 1980 when sugar prices were high. In Trinidad and Tobago there was a steep rise in import prices, but this was more than offset by the increase in petroleum export prices, allowing the commodity terms of trade to grow by 63%. However, after 1980 and softer oil prices, it started to fall again (see Codrington and Holder [1984]). Because of adverse net terms of trade the gains which should have accrued from substantial increases in export volumes did not materialise. Indeed the volume of exports grew six times as quickly in Barbados and 21 times as quickly in Trinidad and Tobago as the income terms of trade or purchasing power of that quantum of exports.

To summarise this discussion on trade we reiterate the major lessons from the 1974-85 period:

(1) There is a firmly established link between growth and trade;

(2) growth prospects are severely disturbed when there is turmoil in the international economic community;

(3) export expansion is a viable strategy but is linked to diversification and official industrial policy;

(4) long-run growth prospects appear to depend on the expansion of non-traded activities;

(5) the economies remain import-dependent and new growth sectors have been reinforcing this trend;

(6) foreign prices feed domestic inflation and adversely affect the terms of trade.

Issues of Trade and Integration

(a) Regional Trade

The usual arguments for integration apply to the Caribbean territories - small domestic markets, limited potential for economies of scale and vulnerability in the wider international economy. The need for some kind of customs union was recognised by Lewis in 1950 but did not come into full flower until the formation of the Caribbean Free Trade Association (CARIFTA) in 1968. CARIFTA, according to Demas entailed little more than a modest and gradual elimination of tariffs and other trade restrictions [1976 p. 119]. Still this was a step in the right direction. Hope [1979] reported that among the More Developed Countries (MDCs) - Guyana, Barbados, Jamaica and Trinidad and Tobago - regional trade was stimulated. Regional trade as a percentage of the total nearly doubled between 1967 and 1972.

As the international trading environment became increasingly more hostile the CARIFTA partners recognised the need for further cooperation in order to stimulate economic growth. This resulted in the formation of the Caribbean Community (CARICOM) in 1973 and the advent of a common external tariff and a common protective policy. The immediate effect was a further boost in regional trade which grew by 27% on average between 1971 and 1976. After some territories experienced foreign exchange problems in the mid-1970s the growth of Caricom trade slowed to 11.6% per annum between 1976 and 1982 and has stagnated ever since.

Generally speaking, integration has expanded and diversified exports, but some commentators have been more concerned with the way in which the gains from trade have been shared within the region. Hope points out that even among MDCs there was an unequal share in regional exports with Trinidad and Tobago having by far the highest share. Of course it was recognised that Trinidad and Tobago's monopoly position as a supplier of petroleum products facilitated its dominance of regional trade. Williams [1985] has however pointed out that prior to the imposition of controls on regional imports Trinidad and Tobago was a prime market for Caricom goods. From 1971 to 1982 regional exports to that country rose nine-fold, compared to a six-fold rise in regional sales of Trinidad and Tobago goods. This, according to Williams, explains in part the reluctance on the part of that country to bail out its Caricom partners now that times are difficult.

There is also a feeling that the benefits from increased regional trade accrue mainly to the MDCs, perhaps because intra Caricom trade is essentially an intra-MDC affair (see Lestrade [1981] Bennett [1982] and Bourne et al [1985]). Part of the reason is that while a considerable amount of regional trade has been in manufactures the less developed countries (LDCs) have no established manufacturing sectors. Moreover, the LDCs depend more heavily on the regional market than do the more diversified economies of the MDCs. Some of the smaller economies sell as much as 45%- 72% of their exports in Caricom. Therefore, whenever regional trade falters the more fragile economies may be most adversely affected.

Most of the strides in Caricom trade has been of the trade diversion type with discriminatory reductions of tariffs on regionally-produced textiles, chemicals and processed foods crowding out the foreign competition. So successful was the integration movement for the trade in manufactured goods that as early as 1975 exports of manufactured goods were accounting for half of all Caricom exports. The result was an increase in jobs in the manufacturing sector and the more rapid creation of a modern sector which demanded higher wages and more sophisticated living standards. This trade in manufactured goods is according to Bennett [1982] the raison d'etre of the integration movement; it is therefore lamentable that since 1975/76 no further strides, worthy of note, have been made in this direction.

Not all commentatators agree that the growth of regional trade was a result of deliberate attempts by businessmen and governments to promote growth through expanded cooperation. Williams, for one, believes that the growth in trade rather reflects the inability and unwillingness of exporters to break into new markets; this inertia developed because the Caricom market is a captive one. This contention is not hard to believe about producers operating in a market distinguished by low or no tariffs, proximity and a familiarity with language and administrative procedures. Bennett's recent model attempts to explain the growth in trade by segmenting it into normal expansion and expansion stimulated by the regional preference system. The conclusion was that preferences in the region played an important role in the growth of Caricom trade in manufactures and appears to support Williams' "captive market" explanation.

Most critics of the movement believe that the integration process has not delivered on the promises and potential which were evident in 1973. They point to the fact that steps must be taken to remove administrative barriers to trade, to zone export activity, to adopt joint marketing strategies, to provide for export finance, reserve pooling and the removal of exchange controls More attention should be paid to the Brewster/Thomas proposals to establish regional plants for steel, paper, textiles, plastics and chemicals in order to maximise potential economies. Instead the reality is that some industries like, food-processing and petrochemicals have developed along national lines.

Throughout the region there have been few strides towards self-sufficiency. There is an absence of import-substitution on a large scale, the demand for regional imports is sluggish and inter-country competition is encouraged by the production of homogeneous items in all the territories. Finally there are inherent weaknesses like disparities in size, income and administrative capacity as well as differences in political ideology (see Worrell [1979]).

(b) Regional Payments

One of the most topical issues in Caricom in recent years has been the payments mechanism. It was recognized from early in the 1970s that one of the ways in which intra-regional trade would be most beneficial to all members was by allowing them to economise on the use of hard currencies. The earlier bi-lateral payments arrangement was replaced in 1977 by the Caricom Multilateral Clearing Facility (CMCF) which allowed participants to offset debits and credits for trade (and later some services). This system worked well until early 1983 when the facility went bankrupt because some members were unable to settle their debts (for a full discussion see Williams op. cit pp. 3-10).

It must be pointed out that the build-up in liabilities which led to the CMCF's collapse was allowed in an honest attempt to keep Caricom trade alive. The concensus, however, is that the CMCF worked well in good times but was much less efficient in hard times when members adopted defensive or protective stances. This contention conceals the real position - which is that the CMCF was never endowed with the necessary flexibility or muscle to handle hard times. Several commentators highlight the fact that the facility was not a legal entity and therefore could not impose conditions on member countries.

Other inherent weaknesses abound. The body was never considered a policy arm of Caricom, indeed there was little coordination between these two integration mechanisms. The monitoring and information systems were quite weak; thus it appears that the unusual increase in debits which were incurred by some countries in the early 1980s went largely unnoticed until it was too late. Even though it was essentially a body concerned with payments the CMCF should have paid some attention to those issues which could affect payments, e.g. illegal imports, trade concessions and trade protocols. That it never reached its full potential is exemplified by the failure to establish the regional Stabilization Fund which had been under discussion since 1979.

Not all the problems with payments originated with the facility - some members took unilateral decisions which compromised the multilateral arrangement (for example, there were exchange rate moves which encouraged retaliation.) There was also a growing trend towards the non-acceptance of regional currencies through the CMCF. At the time of its bankruptcy in 1983 only two members accepted repatriation of their own currency notes through the facility.

Both during the life of the CMCF and since its demise some analysts have concentrated on ways of revising the body to make it more responsive to the realities of the time . It has been suggested that the CMCF should be allowed to supply medium term finance for BOP support. Of course one problem with this is that the facility would have to raise funds abroad but could not bind any government to accept responsibility for loans acquired from these sources. Other suggestions (by Bennett) include tightening of the rules which govern the time schedule for settlement with the facility, a special arrangement for manufactures and food and the establishment of a Caricom Reserve Fund to which members contribute a percentage of their foreign reserves.

One perennial suggestion is the introduction of a Caricom unit of account (CUA) for settlement of regional transactions; with the value of regional currencies fixed in terms of the unit. (See Bourne, Solis et al op. cit. This approach to payments has one inherent problem - that of ensuring the convertibility of the unit which entails having a large pool of US dollars if the system is to work. For sometime only Trinidad and Tobago had the resources to provide but now that situation has changed. The problem relating to convertibility is the reason most authorities reject the CUA and plays down its ability to stablise exchange rates in the region.

Trade and Adjustment Strategies

Between 1974 and 1985 the external economic influences created both a variety of problems and policy responses from Caricom countries. Throughout the period Guyana and Jamaica concentrated on foreign exchange balance which entailed mainly exchange rate adjustment. Barbados, with modest foreign reserves, was mainly cautious and defensive while Trinidad and Tobago was expansionary up to 1981 and later restrictive. All told, the policies in so far as they are related to trade, could be divided into two: (a) adjustments to the exchange rate and (b) other management of the foreign reserves.

(a) Exchange Rate Adjustment

Since 1974 all the countries which now constitute Caricom have adjusted their exchange rates in one form or another. By 1976 all the territories had severed the old link with the pound sterling and had pegged to the US dollar. This reflected in the main the fact that the US was fast becoming the major trading partner for most countries. Jamaica was the first to experiment with "active" exchange rate policy in 1977 and by 1985 several devaluations had pushed down the value of the Jamaican dollar from US $0.80 and US $1.10 in 1977 to around US $0.16. Guyana in 1981 pegged her dollar to a basket of currencies, resulting in a 63% fall in value betwen June 1981 and the end of 1985. Finally, in December 1985 Trindiad and Tobago instituted a 33 1/3% devaluation of the local currency against the US dollar.

Devaluation is supposed to correct a balance of payments disequilibrium by altering the relative prices of domestic and foreign goods. Foreign exchange is saved by switching expenditure from high-priced foreign, to cheaper local, goods which are also in greater demand by the rest of the world. For these effects to occur the demand for both imports and exports must be responsive to price changes (the so-called Marshall-Lerner Conditions.) We have already alluded to the downward stickiness of regional imports; what is more the prices of traditional agricultural exports are determined more by negotiation and production than by genuine market forces. The prices of minerals - petroleum, bauxite, alumina - were somewhat more freely determined but these items sometimes had production problems because of structural rigidities; tourism, it was learnt, does not respond to price changes alone. The resulting low elasticities for goods and tourism were bound to limit the effectiveness of any devaluation.

In the particular case of Caricom, Bennett [1985] explains that since all currencies are linked to the US dollar its appreciation would weaken any country's export position in the markets of other industrial countries. The recent experience of sugar and tourism in the UK market is instructive. But this reasoning has now become central to what Blackman [1986] calls the "devaluation syndrome" by which international lending agencies advance devaluation as a cure for all economic ills. It is noted that the impression given is that a poor country can never have too big a devaluation. Bennett was able to show how an overvalued currency feeds BOP problems by helping to misallocate resources and stifling export growth and import substitution. But Blackman confesses "I have never read anywhere about the evils of currency undervaluation" (op. cit p. 9.)

In the Caribbean most of the experience with devaluation lies with Jamaica, consequently that country provides most of the evidence on its effects. Witter concludes that Jamaican devaluations failed to stimulate exports, contain imports and elminate BOP deficits [1983]. Why was this so? It was noted that little expenditure - switching took place and indeed there were difficulties in achieving a noticeable change in relative prices. Domestic prices remained high because devaluation boosted wage demands and the prices of imported imports. In so far as it affected traded goods devaluation generated inflation and reduced real income [See Worrell 1986 (a) p. 33].

The fall in living standards is consistent with Blackman's view that the real purpose of devaluation is to reduce real income of economies in line with a sustainable import level. Viewed that way, the devaluations would appear to have had some measure of success. The conclusion with respect to inflation was neither new or isolated. In 1981 Worrell had blamed the 1977/78 devaluations for most of the domestic inflation in Jamaica in those years. Because of these inflationary tendencies he described devaluation as "highly suspect as an adjustment policy ...". In 1982 Bennett agreed that devaluation was mainly inflationary with little effect on foreign exchange, a view supported by Witter in 1983.

All told, however it may just be that Witter comes straight to the heart of the issue with his declaration that devaluation more often than not addresses the symptoms of the crisis in production but not the crisis itself. Top priority for Jamaica was to get output to increase but this did not happen. In Guyana, the fall in the exchange rate made that country's prices quite competitive within Caricom but with no increase in supply there was nothing to export. This underscores a feeling among some observers that the devaluations of the region, though limited in possible effects as they were by the peculiar economic environment, were never accompanied by policies which gave them a chance to work.

Worrell believes that devaluation should be accompanied by indexation which would conceal part of the price effects. According to Bennett [1983] the real effective exchange rates were limited in scope and depth and were therefore insufficient to stimulate exports. All that happened was a widening of the gap between the supply of, and the demand for, foreign exchange. This development aided expansion in the parallel market, absorbing reserves which should have gone to the Central Bank. Witter, too, blames speculative tendencies as partly responsible for the failure of devaluation; as long as there is a shortage of hard currency some actors in the market will capitalise on this disequilibrium.

Some critics believe that the parallel market was not attacked with the right amount of resolve. The relaxation of exchange controls on unofficial trading in foreign exchange was a boost to the parallel market; there should have been strong penalities attached to unofficial transactions to remove incentive for so-doing. Still, Bennett believes that further devaluation may be a way to eliminate the price advantage of the parallel market; this is desirable since it is that market which supports imports of consumer goods but contributes little to production.

In the wake of the failure of devaluation to achieve the desirable trade effects suggestions have been made for alternative exchange rate strategies. A popular notion is a dual exchange rate scheme for each country; Bennett's scheme envisages an external rate which gives proper advantage to leading economic sectors as well as "an internal free rate" operated by the commercial banks on behalf of the Central Bank. This proposal finds favour with Worrell [1985 (b)], except that the internal rate becomes a rate for Caricom transactions.

One school of thought, in recent times, has been pushing the idea of exchange rate unification. The proposal for a unified intra-Caricom rate crystalised into a movement towards a Caricom Unit of Account (CUA). As explained by Bennett the unit would be a weighted average of the exchange rates of the six regional currency units and its value would be measured in US dollars. The CUA has met opposition from Williams, Worrell and Bourne et al. Bourne and his colleagues argue that the US dollar is already serving as a unit of account and as a means of settlement. They point out that even though the Caricom travellers cheque is demoninated in Trinidad and Tobago currency, net settlements for travel are made in US dollars. They caution against the feeling that the CUA would bring exchange rate stability to the region; it is unlikely that member countries could support a joint intervention in the market in order to maintain an agreed relationship to the unit.

Worrell [1986 (b)] believes that rates cannot be harmonised because it is impractical. The present regime of divergent rates reflect varying goals among member countries which are based on their different economic circumstances. In any case if countries are to adopt a unified approach it is more instructive to decide on targets to be achieved and then pick the rates which can achieve them. Even so, it appears that a unified rate would have had severe adverse effects on the trade balances of the MDCs since 1973.

There appears to be also some sympathy for the establishment of a currency area. More recent commentaries indicate that such a move could deepen the currency markets of members and render them more resistant to speculation and random shocks. However, this proposal would have to be taken cautiously and is premissed on the full cooperation of member countries. If any one country should take a unilateral move this could destabilise all the others; it is especially true in the present situation when there are economies of varying size. Given recent history one anticipates difficulty in achieving a common opposition on when to move with respect to other currencies or when and how to intervene in the market.

(b) Other Management of the Foreign Reserves

Adjustment policies which affect trade sometimes do not require movements in the exchange rate. There are other ways to reduce import volumes, increase exports and ration foreign exchange without changing currency values. Indeed with the exception of Jamaica, Guyana (and late in the period Trinidad and Tobago) regional central banks stayed clear of active changes in the currency values. Other approaches to reserve management are still however, limited by import-dependence, domestic supply rigidities and weakness in established markets.

In the area of foreign reserve management lessons must have been learnt from the contrasting experiences of Barbados, which had modest reserves and Trinidad and Tobago whose reserves were very high up to 1981. The case of Barbados, advocates the prudence of plugging the import gap by limiting credit for consumer purchases and allowing only modest expansion in the government sector. This did impose some hardships, like unsatisfied consumer demand, wage restraint and/or layoffs in the public sector. In the end however, the country avoided the more severe conditions attached to the use of credit from the International Monetary Fund (IMF). More importantly, there were still some reserves to manage (in this connection see Humes [1981 p. 189] on Belize.)

The experience of Trinidad and Tobago reinforces the resolve of those who believe in caution and shows that management of a trade surplus is as problematic (sometimes moreso) as management of a deficit. During those years when reserves were on the increase there was a tendency to be less than cautious. For example, it was hardly noticed, amid the oil export boom, that imports in 1979 rose by 26%, a rate twice that for the previous four years and by a further one-third in 1980 (Farrell op cit.). The evidence points to unchecked government and private expenditures which led to heavy outflows of foreign exchange. But some restraint on trade payments is all the more important when the trade surplus is the windfall type due to "sudden unsustainable increases in export commodity prices" (Farrell op. cit. p.10). C.Y. Thomas has also alluded to this ability of windfall earnings to mask critical underlying weaknesses in the economy (op. cit. p.23). Blackman had proved prophetic in 1981 when he cautioned against "wasteful importing" during a boom, advocating that excess reserves should be stored until the time is ripe for their use.

Apart from monetary policy there are certain administrative procedures which may help to protect the balance of payments. Good reserve management may put the highest priority on, say, liquidity, income and maintenance of value (see Blackman 1981 p. 150). The level of liquid assets which is available is vitally important in economies like ours with such seasonality and lumpiness in the receipts from exports and in payments for imports. In Barbados, reserves typically are accumulated in the first half of the year when the sugar industry and tourism are booming only to be depleted in the third and fourth quarters as importers increase stocks with the approach of the festive season. But the liquidity pattern can be jolted by unexpected events. The demise of the CMCF reduced Barbados' liquidity by Bds $120 million and forced the country to seek short-term finance to meet trade and other current account obligations.

In order to maximise income some criteria should be outlined for asset holding. This entails not only the use of the most reputable institutions and instruments but also for diversification of assets. According to Farrell this diversification should be both with respect to currency composition and maturity. Any regional central bank would have experienced severe losses at some time or other within the last five years if all of its assets had been held in US dollars, the pound sterling, Japanese yen or German marks.

The retention of exchange controls is urged on countries which have modest or substantial reserves. This option however should not be employed in its fullness for countries which have little or no foreign exchange (Worrell 1985 (a)). Those countries are faced with the problem of currency substitution which is associated with the spread of the parallel market for foreign exchange. Accordingly, global application of exchange controls would give the incentive to circumvent the official administration, boost the parallel market and the more general use of foreign currency in day to day transactions.

Therefore, it is suggested that exchange controls and import restrictions be limited to large transactions which do not need elaborate administration. Among other strategies of a defensive nature are the reduction of the spread between official and unofficial exchange rates and increased taxes on imports to encourage switching away from foreign goods. These could result in inflation or even further exchange rate erosion but those are probably the best of possible outcomes and may keep essential raw materials available. (Worrell [1985 (a) pp. 28-33]).

Some authors have suggested that the correct analytical tool in this respect is not the balance of payments but the foreign exchange budget (see Bennett [1981] and Carr [1981]). It is pointed out that the BOP is concerned with the value of trade recorded in a particular period whereas foreign exchange problems in reality are about receipts and payments. So that the perceived difference in receipts and payments is a better target variable than the projected current account position. One practical problem however which has not been extensively explored in the literature is the difficulties associated with the construction of such a foreign exchange budget.

Bennett, however, goes on to take a broader view of foreign exchange problems with his suggestion of a regional fund for reserves (op. cit. p. 182). The funds would then be used to buy bonds issued by the member governments, these instruments having a maturity of at least 10 years. All transactions should be in US dollars and the Reserve would be managed by the Central Bank of Trinidad and Tobago. One weakness with this approach is that it rested on substantial commitment by one country - Trinidad and Tobago (5% of its gross reserves). Moreover, the suggestion came when that country's external position was weakening. In any case it could only be a stop-gap measure - the first best solution is still for the countries to build up their earning capacity and reduce their import-dependence.

A Review of Regional Trade Models

Most of the statistical tests have been concerned with explaining the demand for merchandise exports and imports. Few researchers, and then for only one or two countries have paid any attention to the determinants of tourism demand. (We have already referred to studies by Clark [1978] and Clark et al [1986]). As expected in countries so close in economic features the models show a lot of similarity in specification and in results. However, to the extent that they draw on data from different time periods comparison may be limited. The export equations we examined are from Gafar [1977] for Trinidad and Tobago, Cox and Worrell [1979] and Brathwaite and Codrington [1982] for Barbados, Ramcharran [1983] for Jamaica and Bennett [1981] for the region. Import statistics come from Gafar [1975] and 1977] and St. Cyr [1981] for Trinidad and Tobago, Cox and Worrell [1978], Joefield-Napier [1982], Worrell [1982] Holder and Worrell [1985] for Barbados, Adams [1971], Bennett [1981] and Ramcharran [1983] for Jamacia.

Exports

In countries in which it is true that the demand for exports is exogenously determined there is a temptation to avoid a functional relationship for the export equation. Thus Gafar shows export as governed by the relationship $X_t = X_o (1 + g)^t$ where X refers to exports and g is their rate of growth. This expression, which says that exports will grow at some rate, is mathematical simplicity but of limited value because it says nothing about what determines that rate of growth. Of much more usefulness is the equation in the same study which shows that the link between exports and overall economic growth is statistically significant.

Cox and Worrell use a highly disaggregated model and a log specification - quite unlike Gafar. They use two sets of equations; external orientation equations link export growth to indices of commodity and market concentration as well as the number of export flows. There are also trading partner equations relating exports to income of foreigners and relative prices. The external orientation equations provide a more reliable explanation of export growth except that the commodity concentration variable is not statistically significant. The trading partner equations for overall export demand show foreign income to be significant. This is a useful piece of information which one would not have expected in a situation where sugar and molasses dominated exports, and it exposes the weakness of the Gafar specification.

Cox and Worrell carried out separate tests on traditional (agricultural) and non-traditional (manufactured) goods. Relative prices and foreign income were not significantly related to traditional exports whose demand is determined more by negotiation and/or production levels. However, the equation for non-traditional exports, which included a variable for manufactured output, showed strong correlation between these items, relative prices and foreign GDP. The overall conclusion was that growth was led by non-traditional exports and not by total exports. Later Brathwaite and Codrington found that exports of goods and services did not explain a lot of growth in GDP, but this was to be expected as the Barbados economy became less open with non-traded activities making larger contributions to real income.

Ramcharran's export function for Jamaica is expressed as Qx = f (Yr, Px, ERX) where Qx is the volume of exports (excluding services), Yr is real income of the importing country, Px is the price of the export expressed in foreign currency and ERX is the exchange rate. This specification is not radically different from that employed by Cox and Worrell. In the tests, however, he disaggregates exports into sugar, bauxite and alumina and also distinguishes between the main markets for these goods - the US, the UK and Canada. One wonders whether the demand for these goods in the three markets is sufficiently different to merit separate treatment. Another weakness is that the time period 1969-78 was too short to allow for reliable estimates. Generally speaking, the results are reported at a level of significance which is well outside the accepted norm.

Bennett makes two contributions to these efforts. Firstly, he specified a traditional export equation for Jamaica showing that exports are determined by economic activity in North

America. He agrees that the demand for the agricultural products (sugar and bananas) is more accurately a function of production. Exports of bauxite and alumina are shown to be a function of the index of industrial output in the US.

Bennett also presents a model which attempts to estimate the contribution of Caricom to regional trade, by segmenting the trade expansion into normal growth and growth induced by the regional preferential market. The resulting equation is

$$Pi = (X_{ic} - X_{io}) - (E_{ic} - X_{io}) \text{ where,}$$

P is the regional preference and X_{io} is the actual exports of commodity i to the regional market in the base year, X_{ic} is the actual exports of commodity i to the regional market in a later year while E_{ic} is the estimate of the value of commodity i in a later year and is determined by overall growth in regional import demand for the product.

The expression above is therefore equivalent to the difference between actual regional export sales and that level of export sales which would reflect the growth in the regional market for the items traded. The extent that a country's exports exceeded the estimated norm measures the contribution of the preferential market arrangements. He concludes that regional preferences played a significant role in the growth of Caricom trade in manufactures. The results show that Jamaica and Trinidad and Tobago were influenced over a broad range of items since these countries have the most diversified economic structures within Caricom.

Imports

It is very useful for economic planners to know the determinants of import demand. Price elasticities can give guidance about the efficacy of a devaluation while income elasticities are important in the formulation of tariffs and other indirect taxes, wages policy and general macro-economic policy.

Import models in the region have been influenced by the theory of consumer behaviour which relates the demand for a good to income and relative prices. Gafar's import equation for Trinidad and Tobago [1975] is typical of recent specifications. It is given as M = f (Y, Pm, Pc) where M is imports and Y, Pm and Pc are respectively real GDP, the prices of imported goods and the prices of other goods. By 1977 Gafar had changed this functional form only slightly, incorporating the two separate price variables into a simple relative price term MP/PC which is equivalent to Pm. The import equation with a simple relative price variable had been seen in Adams [1971] and was continued in Cox and Worrell and Joefield-Napier. Adams was also the first among recent analysts to experiment with the use of both disposable income and per capita GDP as alternative measures of the income term.

Naturally, there have been deviations from the basic specificaion. St. Cyr relates Trinidad and Tobago's imports to aggregate demand alone. This probably reflects the overwhelming dominance of petroleum in economic activity. St. Cyr explains that the link is either through the demand for fixed goods and raw materials or through capital formation in infrastructure or in the creation of productive capacity. Worrell, for Barbados, found that real GDP, relative prices, tourist arrivals and real output in manufacturing and construction were the important variables. Bennett, too, extended the functional relationship beyond real income and relative prices. Ramcharran's equation included a measure of exchange rates and gross foreign reserves. There appears to be some sympathy for the position that in poor countries foreign exchange availability is a more reliable indicator of import capacity than real GDP.

Most of the models are highly disaggregated, in recognition of the limited value of global regressions of imports. For some the level of disaggregation is simply into consumer, capital and intermediate goods, the functional classification (Gafar [1977]). But most of the specifications show further categorisation into food, beverages, tobacco, raw materials, transport equipment, machinery and so on - the Standard International Trade Classification (SITC). Indeed Joefield-Napier's study is extremely disaggregated and experimental, employing both functional and SITC nomenclatures, log and linear specifications as well as aggregate and per capita income. Dummy variables are used widely to incorporate the effects of such events as the 1967 devaluation of the pound sterling and the 1973 oil price increase.

Adams, in 1971, had reported insignificant price elasticities for all goods except textiles and automobiles. By 1975 these findings were generally supported by Gafar who concluded that there was "elasticity pessimism" or the possibility that a devaluation would be unsuccessful. However two years later he was reporting that price was significant for all except consumer goods. This later conclusion is akin to Joefield-Napier's revelation that consumers are quite concerned with relative price changes. But in Joefield-Napier's study relative prices had the correct (negative sign) only when the regression used per capita data and the functional classification; the price elasticities were generally high for consumer goods.

In Cox and Worrell, there is a structural break in 1973; before that year only food and other non-durables were responsive to price changes. After 1973 the demand for all imports in Barbados shifted downwards, in response to the large price increases of the mid-1970's. By 1982 it was reported that all imports were responding less significantly to price changes (Worrell). In Ramcharran's study price elasticities were insignificant; he concluded that foreign exchange availability had more explanatory power for all types of imports.

Whereas he reported a range of income elasticities in 1975, Gafar's later study showed income elasticities to be high - usually greater than unity - indicating that imports are superior goods. Joefield-Napier's results showed that food, crude materials, chemicals, fuels, machinery and transport equipment are necessities. Beverages and tobacco were viewed as luxuries since as income rises and tourism grows tastes for these items become more exotic. All these results were sensitive to the choice of income variable (aggregate or per capita income) and trade data (SITC or functional classification).

Tourism growth had been found by Worrell and Cox in 1978 to explain food imports, with industrial and construction activity leading the expansion in imports of intermediate goods; investment in construction and manufacturing also boosted imports of capital goods. Income elasticities were very high for all imports, especially consumer and intermediate goods. However, capital goods were insensitive to income changes. These findings were confirmed in 1982 by Worrell who concluded that the level of investment is a better explanatory variable for capital goods than real GDP. In Ramcharran's study income elasticities were insignificant and had the wrong sign. Holder and Worrell [1985] reported overall high income elasticities for Barbados and Trinidad and Tobago.

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