

recursos naturales e infraestructura

Trade between Caribbean Community (CARICOM) and Central American Common Market (CACM) countries: the role to play for ports and shipping services

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NACIONES UNIDAS



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¹ In the text, in general, when the word "ton" is used, it refers to metric ton, of 1.000 kgs, or 2.205 lbs.

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Abstract

Trade between the Central American Common Market (CACM) and the Caribbean Community (CARICOM) is very low. Only 0.2% of the two groups' trade is between them. A possible explanation for this might be a supposed lack of adequate transport services. This report analyzes if there exists a potential to promote inter-subregional trade by improving transport services.

It is found that in fact there does not exist a lack of direct services. 17% of services that call in one of the subregions also call in the other. In addition, due to the increase in transshipment services, almost all countries in the Wider Caribbean have different options to trade with each other. The main explanation of low trade levels is to be found in production patterns, history and language barriers.

Transport services between the two groups are, however, more costly and far less frequent than those from and to North America. This difference should become less relevant as transshipment within the Caribbean Basin, in countries such as the Dominican Republic, Jamaica, and Panama gains market share vis-à-vis transshipment in Miami. Such changes, as well as improvements in port productivity and information dissemination about available transport options, as well as non-transport-related initiatives could potentially help to increase trade between CACM and CARICOM.

Introduction

This report is concerned with shipping services and trade between the 14 countries of the Caribbean Community (CARICOM)² and the five countries which make up the Central American Common Market (CACM)³. Trade between these two groups of countries is found to be low relative both to their overall trade and to the intra-block trade and the report analyses the extent to which lack of adequate shipping services, or related factors, may be a cause of this low trade. The countries of both blocks belong to the Association of Caribbean States (ACS), which includes also Colombia, Cuba, Dominican Republic, Haiti⁴, Mexico, Panama and Venezuela. Trade between the CARICOM and CACM blocks is predominately by sea, with the exception of trade between Belize (CARICOM) and the CACM countries, which is primarily by truck. There is also some air transport between the two blocks, not analysed in this report.

The basic statistics of the two blocks are given in Table 1 (page 41). Their areas are similar, 435,000 sq. km for CARICOM and 424,000 sq. km for CACM, although this is because of the inclusion in CARICOM of Guyana and Suriname, with a combined area of 378,000 sq. km. Without these South American countries, the area of CARICOM would be no more than 56,412 sq. km. The population of

² CARICOM: members are: Antigua & Barbuda, the Bahamas, Barbados, Belize, Dominica, Grenada, Guyana, Jamaica, Montserrat, St. Kitts & Nevis, Saint Lucia, St. Vincent & the Grenadines, Suriname and Trinidad & Tobago.

³ CACM (MCCA) countries are: Guatemala, El Salvador, Honduras, Nicaragua and Costa Rica.

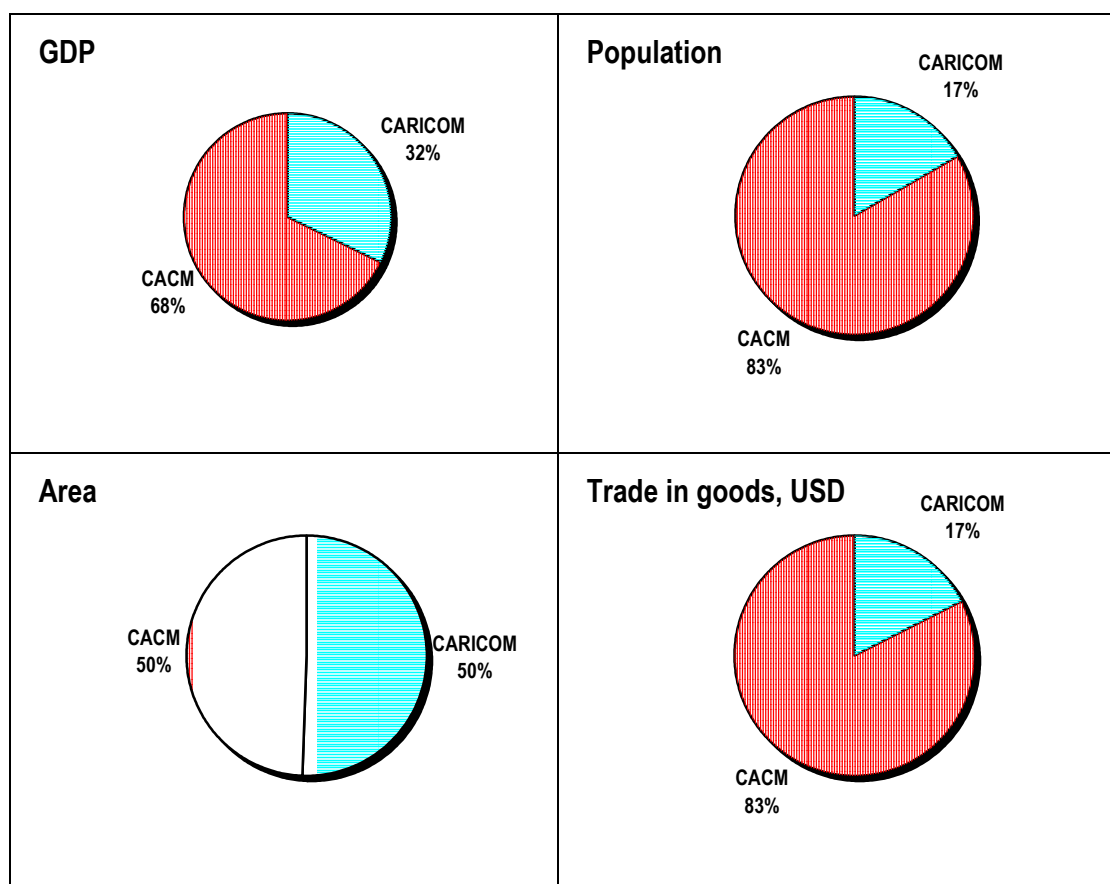
⁴ Haiti deposited the Instrument of Accession to CARICOM in July 2002.

CACM at 32 million is five times that of CARICOM, which has four countries with less than 100,000 people.⁵

The GDP of the CACM countries in the year 2000 was US\$56.5 billion, twice that of CARICOM countries with \$27 billion. The GDP per capita of the CARICOM countries was \$4 164 in the year 2000, more than twice that of the CACM countries at \$1 742. The two blocks, though geographically adjacent, are separated by language and history. The ACS was established in part to bridge these gaps, and to promote economic integration between Caribbean Basin countries.

After the oil shocks of the 1970s, there was a break with many traditional patterns and countries had to adapt by finding into new markets, establishing EPZs and adopting tariff measures such as, for the CARICOM countries, the CET (common external tariff). Later the reduction of traditional banana trades obliged many Caribbean countries to diversify their export economies (Ocampo, 2002). Institutions affecting trade, though not analysed in this report, include the Caribbean Basin Initiative (CBI), the Lome and the World Trade Organization (WTO). In the future, the goal of the realization of the Free Trade Area of the Americas (FTAA) by 2005, adopted at the Summit of the Americas in 1994, will further encourage trade.

Figure 1
ECONOMIC COMPARISON OF CACM AND CARICOM



Source and data: See Table 1, Table 2 and Table 3.

⁵ Except where specifically noted, statistics refer to the year 2000. This is the last year for which reasonably complete figures are available. It should be noted that figures reported by some countries are for earlier years and the resulting uneven up-dating of the data bases used gives rise to some minor inconsistencies in the reported totals.

Figure 2
INTRA REGIONAL TRADE PATTERNS



Source and data: Table 2 to Table 9, pp. 41. Year 2000 or latest year available. Note: Approximation based on data from different years and sources.

The boundaries and names shown on this map do not imply official endorsement or acceptance by the United Nations.

The report looks at trade flows between the two blocks in the context of their overall trade, then at shipping services and the ports, before identifying a number of issues (see Figure 2). The aim of the report is to identify obstacles and market inefficiencies which restrict trade increases, then to make suggestions how to overcome them.

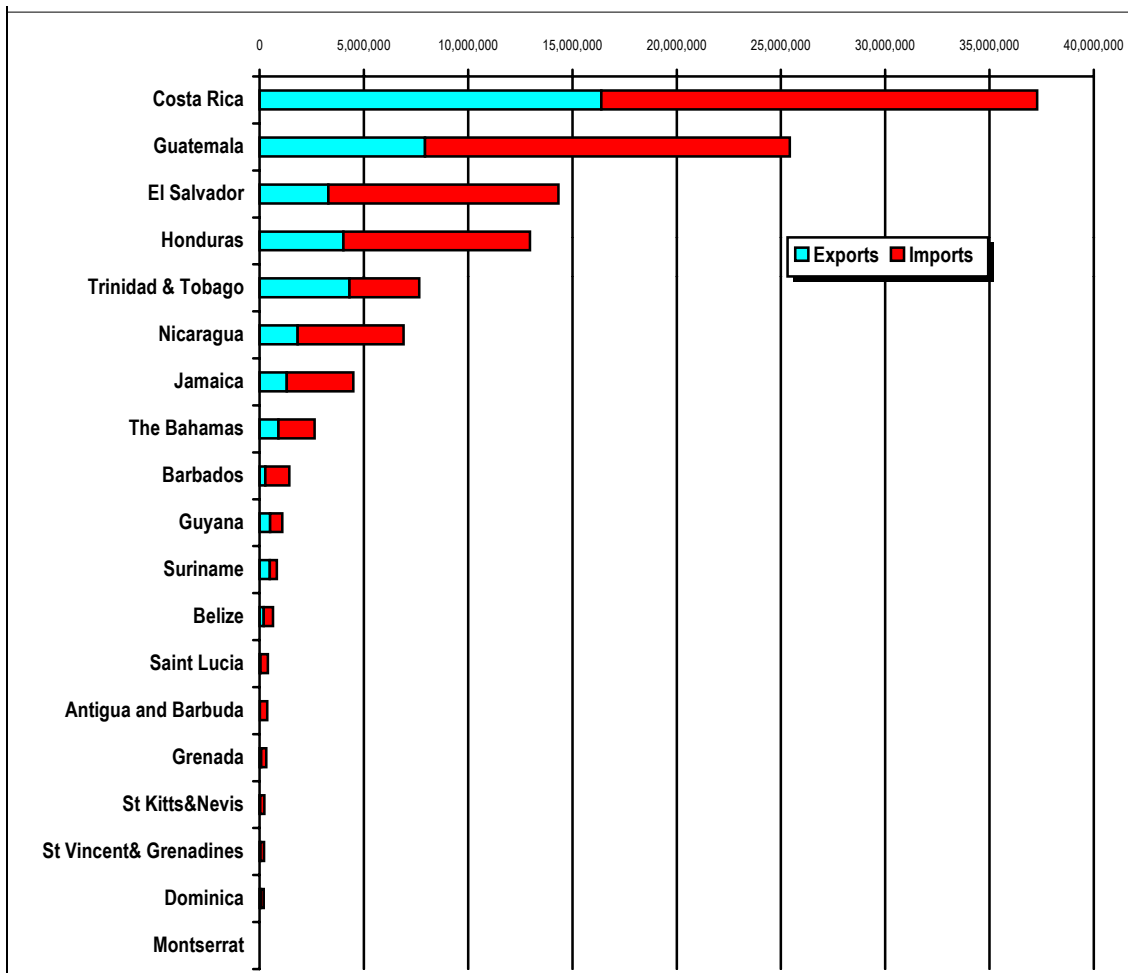
I. Trade Flows

The trade of each block is given in value and where possible in volume terms for the world (Table 2 and Table 3), intra-block trade (Table 4 and Table 5) and between the two blocks (Table 6). Relatively complete trade data between CARICOM and CACM were available from the SIECA, the Economic Secretariat of the CACM countries. In addition, more detailed but partial data for CARICOM trade with CACM countries were made available to the study by the CARICOM Statistics Unit. Trade between CARICOM countries and the CACM for the period 1990-1998, in value terms, is given in ECLAC (1999).

A. Trade with the World

In 2000, the CACM trade with the world amounted to US\$96.9 billion (imports \$63.4 billion and exports \$33.5 billion). CARICOM trade with the world for the same period amounted to US\$20.5 billion, (imports \$12.3 billion and exports \$8.3 billion), about one fifth of the CACM total. These figures are for trade in goods, i.e. do not include the receipts from tourism on which many of the CARICOM countries depend. Exports of primary products have decreased strongly in relative importance for CACM countries and to a lesser degree, in CARICOM. During the last decade, CACM showed a strong increase in low technology manufactures and, especially for Costa Rica, in high technology manufactures (ECLAC 2002b). CARICOM showed a moderate increase in low and intermediate technology manufactures, with increases in high technology associated with IT in some specific cases (Ocampo 2002).

Figure 3
CACM AND CARICOM TOTAL FOREIGN TRADE IN GOODS, 1000 US\$, 2000

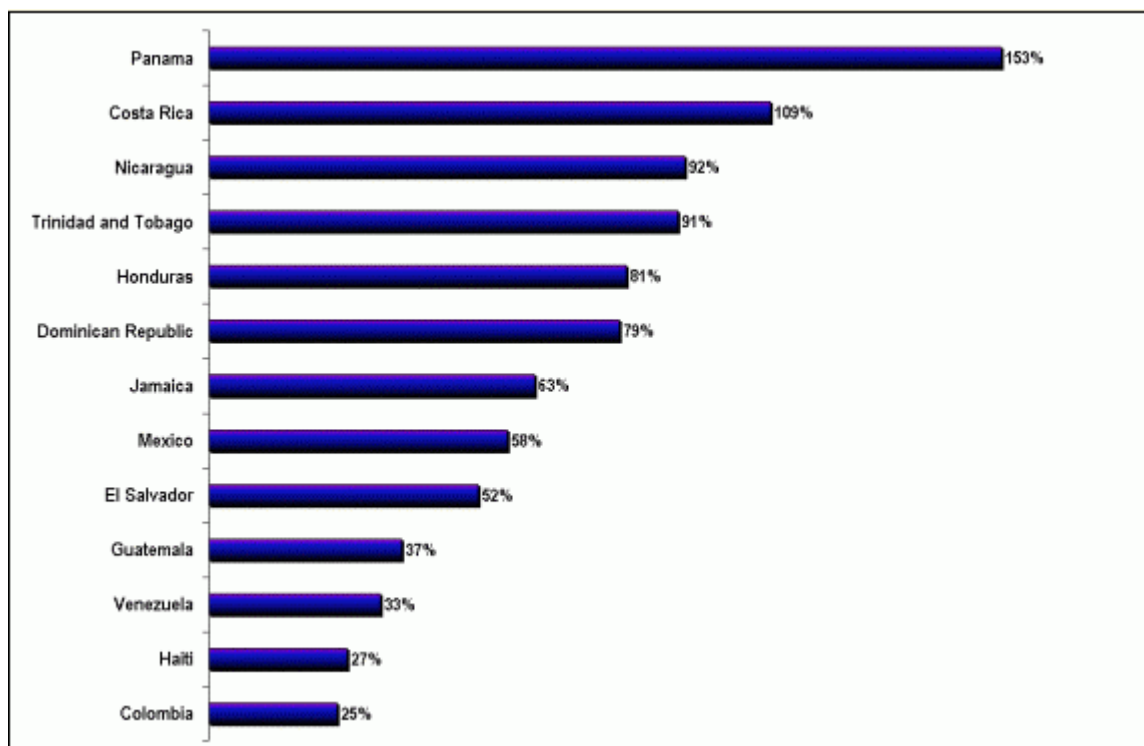


Source and data: See Table 2 and Table 3.

The Caribbean countries, especially the island states, are often said to depend more on trade in services – such as tourism and off-shore financial and commercial services – and not so much on trade in tangibles, such as merchandise and commodities. Yet, most Caribbean countries have very open economies and depend heavily on foreign merchandise trade. Being relatively small and specialized economies, they have to import a large proportion of their consumer goods. Also, any local production of goods and services depends on the import of raw materials and unfinished parts.

Figure 4

CARIBBEAN BASIN COUNTRIES' FOREIGN TRADE IN GOODS (IMPORTS PLUS EXPORTS) AS A PERCENTAGE OF GDP, ESTIMATE, 2000



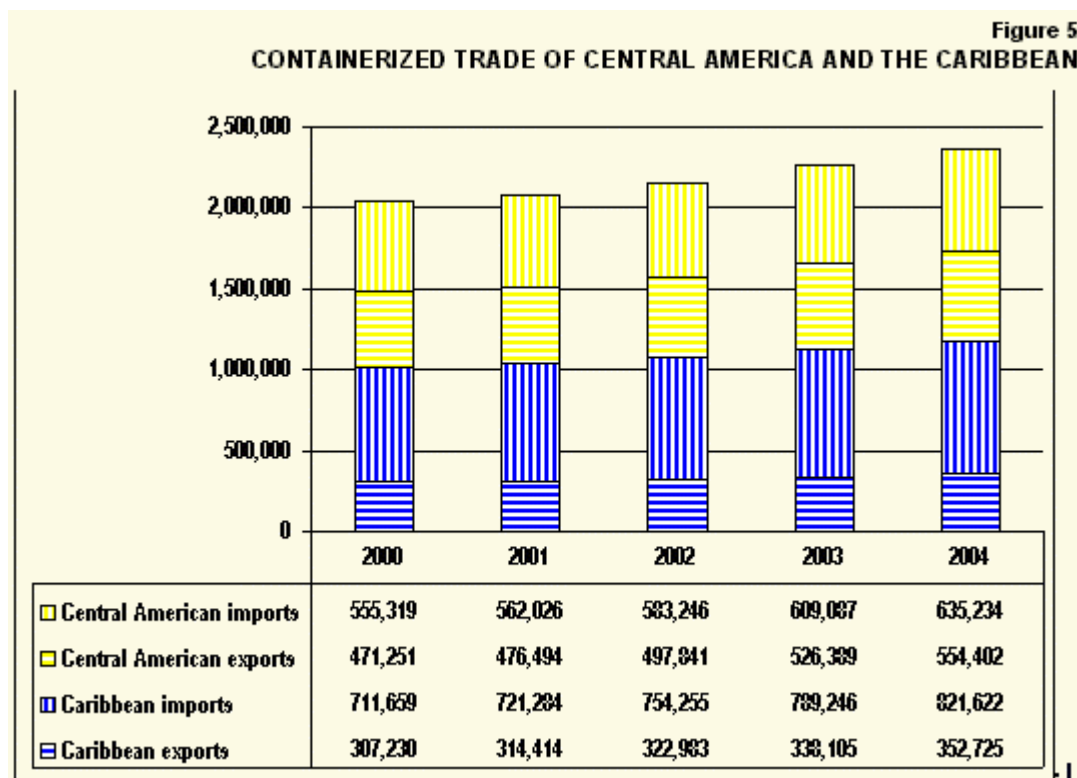
Source: Authors, based on ECLAC, Statistical Yearbook 2000.

In a few cases, the total value of trade in goods is even higher than a nation's Gross Domestic Product (GDP). As inputs are imported at a given value, and re-exported after some value adding process, it is possible that the added value (which contributed to GDP) is less than the combined value of the imported inputs and the exported final product. Expenditure on the transport of this trade directly reduces the countries' competitiveness and income.

Trade of both the CARICOM countries and the CACM with the Latin America and Caribbean countries overall increased in the period 1985-2000 (ECLAC 2002), though this increase was not reflected in the trade between CARICOM and CACM countries.

B. Containerized trade

The Caribbean countries have a large trade deficit as far as containerised trade is concerned. Central American countries have a more balanced trade, including important volumes of banana exports in refrigerated containers. Both subregions import and export slightly above one million TEU each per year; these numbers include non-CACM and non-CARICOM countries (see **Error! Reference source not found.**, page **Error! Bookmark not defined.**).

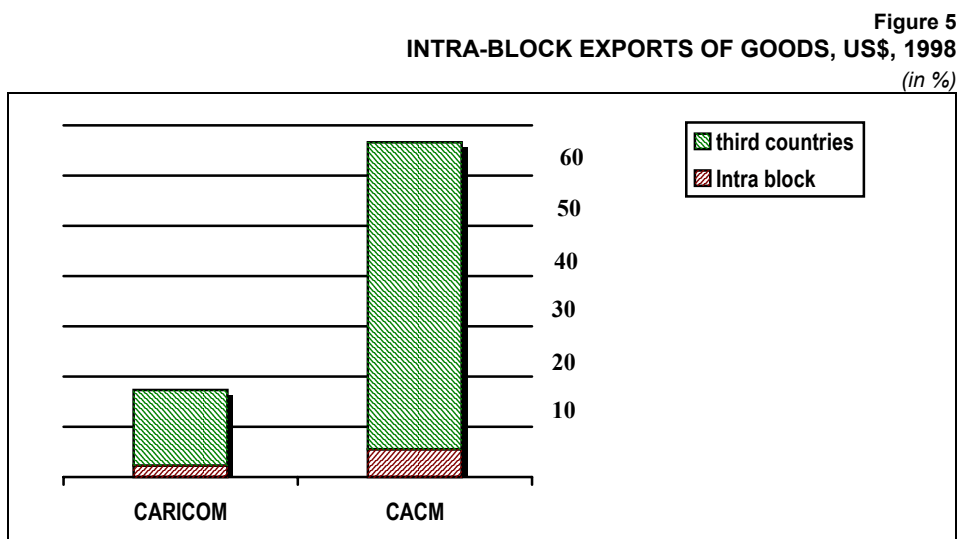


: Source: Table 27 and Table 28 after page 75.

Note: Includes all Central American and Caribbean countries.

C. Intra-block trade

Intra-CACM exports in the year 2000 amounted to about 7.9% of all CACM exports. Intra-CARICOM exports in 1998, the most recent year for which figures were available, amounted to about 15.5% of all CARICOM exports. However something like 60% of intra-CARICOM exports are accounted for by flows of petroleum and products from Trinidad & Tobago to other CARICOM countries. Without this flow, the Intra-CARICOM trade would be about 6.2%, rather lower than the CACM figures.



Source and data: See Table 4 and Table 5

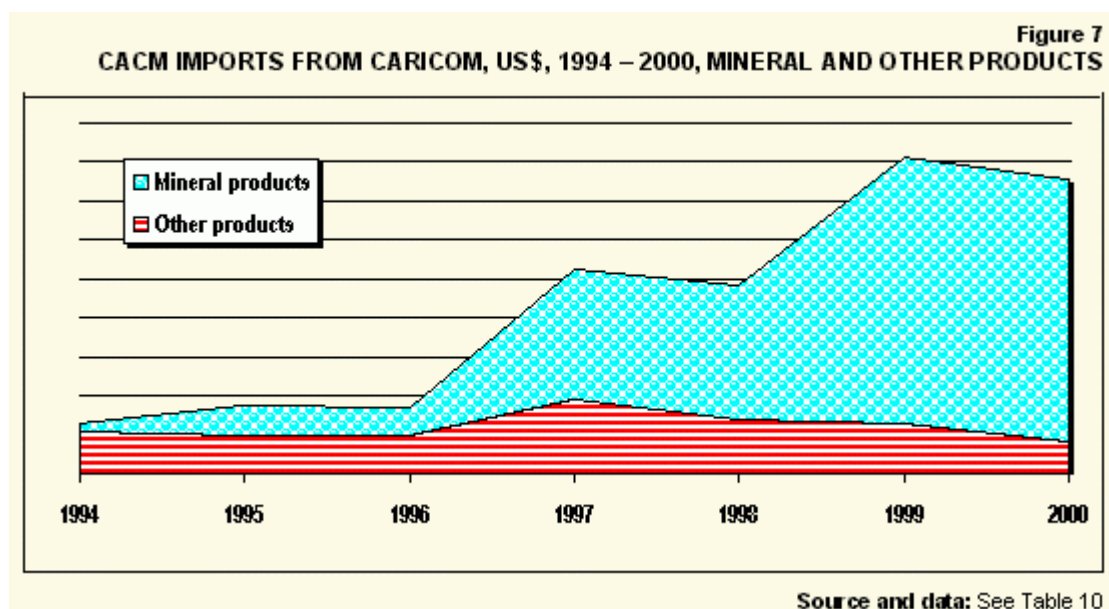
D.Trade between the blocks

Total trade between the two blocks amounted to US\$247.8 million in the year 2000, based on SIECA figures (Table 6), compared with the total trade of the two blocks with the world of US\$117.4 billion. Thus trade between the blocks was no more than 0.2% of their total trade. CACM exports to the CARICOM countries amounted to US\$97.0 million or 0.3% of all CACM exports. CACM imports from CARICOM countries amounted to US\$150.8 million or 2% of CARICOM exports.

In volume (tonnage) terms, total trade between CARICOM countries and the CACM amounted to 558 195 metric tons in the year 2000 - again based on SIECA figures. The movement from CARICOM countries to CACM was 387 204 metric tons and the movement from CACM to CARICOM countries amounted to 170 991 metric tons. The figures supplied by the CARICOM Statistics Office show some relatively minor differences from the SIECA figures arising from reporting periods and other factors.

The total movement from CARICOM to CACM countries included 345 074 metric tons of petroleum and products mostly from Trinidad & Tobago (302 106 metric tons). Without Section V “Mineral Products”, trade from CARICOM countries to the CACM would have been no more than 42 130 metric tons in the year 2000. Thus the dry cargo trade between the two blocks amounted in the year 2000 to about 213 121 metric tons. By comparison, a modern container berth has a capacity of about 1 million tons.

The period 1994–2000 shows a significant increase in trade between CARICOM and CACM countries in volume terms (Table 13, page 45). However most of this increase is attributable to increasing petroleum and products exports from Trinidad & Tobago; without this flow, the trend is declining since 1997. (see figure 7)

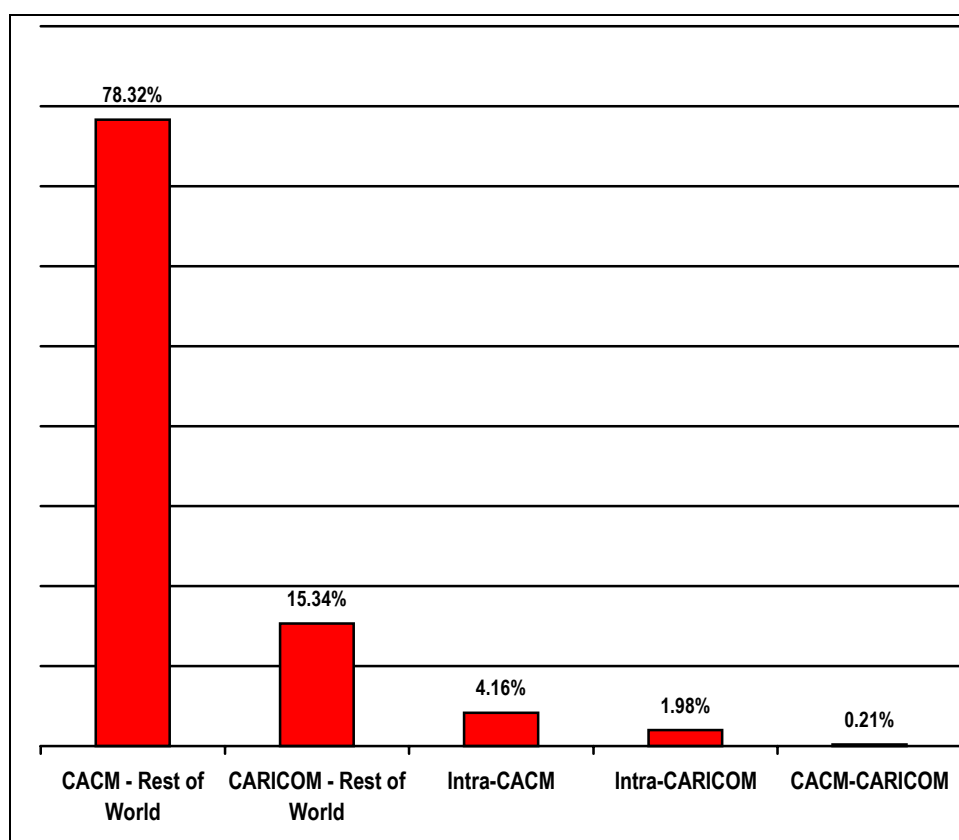


The principal countries engaged in trade between the CARICOM countries and the CACM are Trinidad & Tobago, Jamaica, Belize, and Barbados. For the CACM countries, the most important countries for trade with CARICOM are Costa Rica, Guatemala and El Salvador.

An analysis by products shows that apart from petroleum and products, the most traded items in terms of value are, from CACM to CARICOM countries, section 06, Products of the Chemical Industries, followed by section 04, Products of the Food Industry and section 13, Stone, cement etc. From CARICOM to CACM countries, the principal items are section 15, Common metals and manufactures, followed by section 06, Products of the Chemical Industries and section 16, Machinery, electric and electronic apparatus (Table 6).

Figure 6

APPROXIMATE SHARE OF TRADE BETWEEN CACM AND CARICOM, MILLION US\$



Source and data: Table 2 to Table 9. Year 2000 or latest year available.

Note: Approximation based on data from different years and sources.

ECLAC (1999) comments that “CARICOM trade with CACM is influenced by historical factors, language differences ...and the scarcity of established linkages”. Differences in commercial law and practices between the two blocks are a significant obstacle to greater trade. There are few direct air services between the countries of Central America and the CARICOM countries, impeding business contacts. The Chambers of Commerce have made limited efforts to foster contacts between CACM countries and CARICOM. In addition the official bodies for the encouragement of exports such as JAMPRO, Jamaica, TIDCO, Trinidad & Tobago, PRONACON, Guatemala, etc. have an important role to play in the formalization of contacts and the identification of obstacles to increased trade. Trade and transport interests in the region appear mostly to operate in their distinct areas without adequate discussion between them.

II. Shipping Services

A. Types of shipping services

Shipping services relevant to the present study have been classified into three categories:

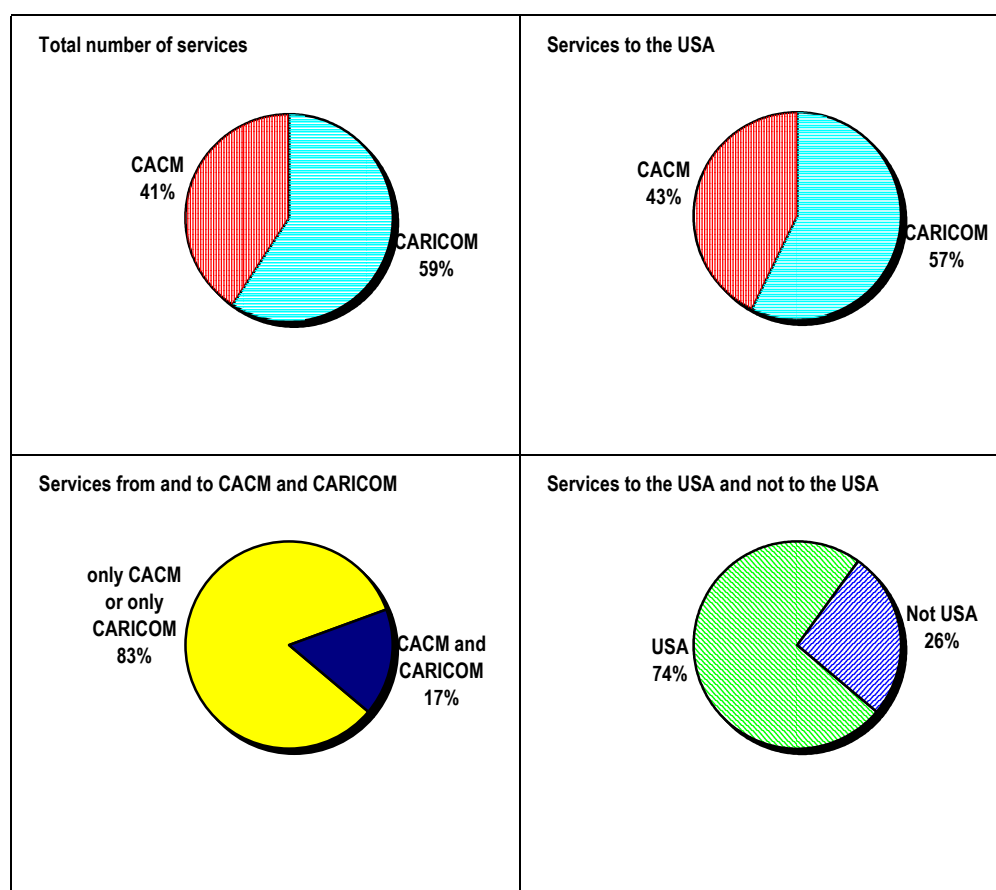
a) Regional, or “North-South” services calling at one or more ports in CACM and/or CARICOM: these typically are services arriving from the East or Gulf ports of the US or from Europe but not passing through the Panama Canal. The majority of the existing services fall into this group. Most of them call in the USA, and most of them call either only in CACM or only in CARICOM countries, but not in countries of both blocks.

b) East–West services passing through the Panama Canal and then through the Caribbean: These services call at one or more ports in the Caribbean or Central America en route, but not in any systematic manner.

c) Intra–regional services within the Caribbean Basin: These services are primarily local. They exist mainly for the purpose of feeding.

Figure 7

LINER SHIPPING SERVICES OF CACM AND CARICOM COUNTRIES, MID 2002



Source and data: Table 16.

The services in the first category above, i.e. the regional or “North South” services, include both a large number of ferry-type services between a US port and a limited number of Caribbean or Central American ports and more extensive itineraries. In both cases, the service will most likely call at one or more of the Caribbean transshipment or gateway ports: Kingston (Jamaica), Point Lisas or Port of Spain (Trinidad & Tobago), or Freeport (Bahamas).

It is evident from an analysis of the above table that there is no specifically CACM-CARICOM service, though some services call at both a Central American and a CARICOM transshipment port as part of a much more extensive itinerary. This is perhaps hardly surprising given the low level of traffic between CACM and CARICOM countries. It implies that to go from a specific Central American country to a CARICOM country, unless the latter itself has one of the transshipment ports, requires use of a transshipment port.

The services identified would themselves provide adequate coverage for all point pairs of ports in CACM and CARICOM countries, based on the use of one, or in some cases two, transshipment ports before the cargo reaches its final destination. In some cases the transshipment port may be Miami or another US port but in most cases it will be a Caribbean port. The onward movement to the smaller islands may be provided by a regional shipping service or ultimately by an inter-island schooners, once the cargo has been removed from the container. There appears to be a lack of articulation between the main-line services and the feeder and inter-island services, except where the same carrier undertakes both movements.

The need for more systematic overall information on shipping connections between the CARICOM and CACM ports is addressed by the proposal at the 6th Meeting of the Special Committee on Transport of the Association of Caribbean States (ACS 2002) for a Port and Maritime Data Base. The Interamerican Development Bank (IDB) has provided funding for the creation of the initial data base and funding is sought for its extension to the French Overseas Territories and to the Territories of the Netherlands Antilles. Separately, the Central American ports are working on the creation of a port and shipping data base for the five CACM countries.

A relatively new element is provided by the entry of Cuban shipping lines with a regional coverage. Services are now offered between Santiago de Cuba and Kingston (Jamaica), between Havana (Cuba), Rio Haina (Dominican Republic) and Puerto Cabello (Venezuela), and also between Havana, Santiago de Cuba and Cristobal (Panama).

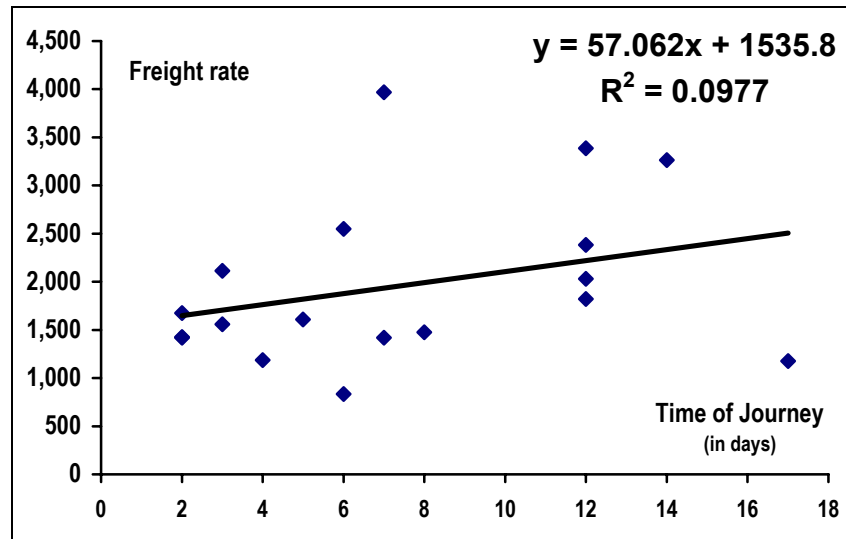
B. Tariffs

Some typical tariffs have been identified (see tables 20 and subsequent). From the available information, it appears that freight rates between CACM ports and CARICOM ports, except possibly when the CARICOM port is a major transshipment port, are relatively high. From Central America it is generally cheaper to ship to Miami or some other US port than to a CARICOM port. The same is true for CARICOM routes: it will usually be cheaper to ship to (or from) the US than to a CACM destination. Nevertheless, starting from a CACM port for a CARICOM destination, it is usually cheaper to transship in a CARICOM port than to go via the US, (though still expensive). These high tariffs possibly reflect the lack of interest of the major shipping carriers in a trade with small volume.

A very preliminary quantitative analysis of 17 intra-regional freight rates provided by Panalpina suggests the following (see also Table 21 and Table 22):

- As expected, longer distance and additional days of the journey entail freight rates surcharges. Although subject to a wide margin of error, each additional km of distance increases the tariff (all-in) by around half a US\$.
- A forty foot container is obviously more expensive than a twenty foot container, not only marginally and on average, but also in its fixed cost.
- A larger number of regular direct liner shipping services clearly reduces the freight rate. However, it is not possible to identify if this is due to the additional costs that are involved if transshipment services were required, or if the fundamental reason is rather the intensified competition, and the economies of scale that go hand in hand with a larger number of regular services – be these direct or not.

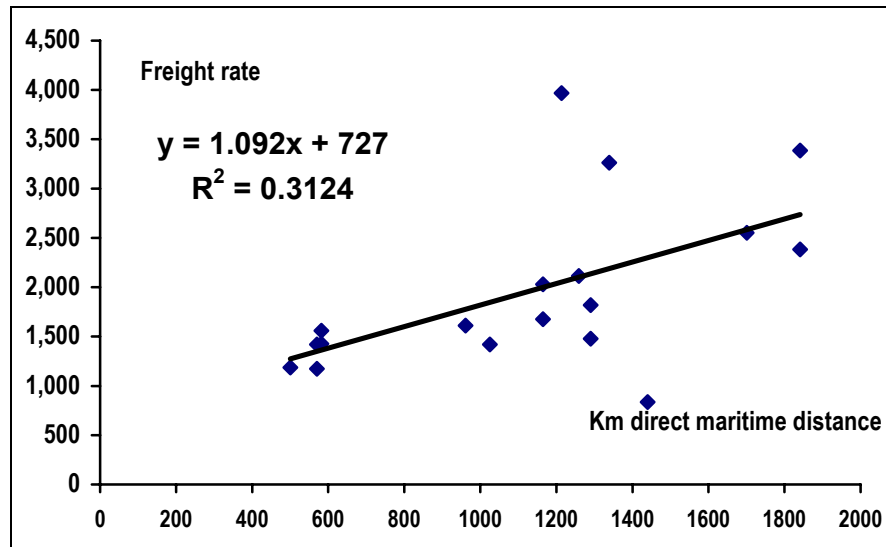
Figure 8
SCATTER PLOT BETWEEN FREIGHT RATE AND TRAVEL TIME



Source and data: See Table 20 on page 73.

Notes: Freight rate is average between 20' and 40' container. The point on the bottom right hand of the chart, at 17 days travel time, stands for the freight rate between Kingston and Puerto Limon. Other, far shorter services are available, but this is the lowest cost option.

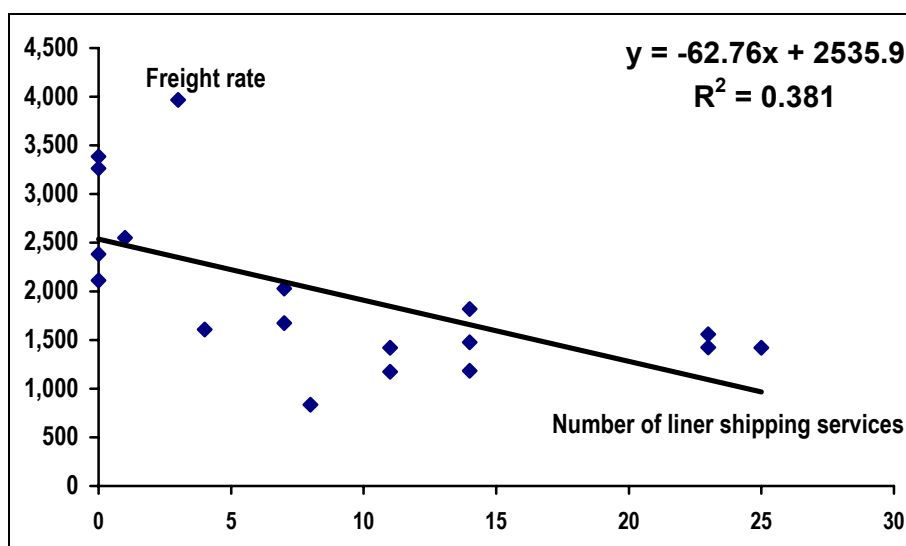
Figure 9
SCATTER PLOT BETWEEN FREIGHT RATE AND DISTANCE



Source and data: See Table 20 on page 73. For distance: www.distances.com.

Note: Freight rate is average between 20' and 40' container.

Figure 10
SCATTER PLOT BETWEEN FREIGHT RATE AND NUMBER OF LINER SERVICES



Source and data: See Table 20. For number of liner services: www.ci-online.co.uk.

Note: Freight rate is average between 20' and 40' container.

Above all, these figures show that the correlation between distance and the freight rate is relatively weak. Only 31% of the variance in freight rates can be explained by this factor on its own. In general, it is likely that the same factors that are valid for international maritime transport costs in other regions are also valid for the Caribbean and Central America. In the absence of more detailed information from the Caribbean Basin countries, the following conclusions from Hoffmann (2002) might be of interest:

Based on regressions on 70 492 commercial transactions between 15 Latin American countries (including CACM but not CARICOM countries) of containerizable cargo in the year 2000, analysing the difference between imports CIF and FOB per metric ton, it was found that – as expected - economies of scale reduce per ton transport costs. Shipping in one individual transaction 10,000 tons instead of 100 tons reduces transport costs per ton by 43%.

The greater the value of the merchandise (US\$ per ton), the greater the cost of transporting it. There is also a need for greater insurance cover, and the forwarder is prepared to pay more for better packaging or speed of delivery. In the case of shipping, a 1% increase in the value of merchandise goes hand to hand with an increase in the cost of transport of around 0.358%.

Distance, obviously, entails an increase in cost. Doubling the sea distance is accompanied by an increase in cost of 16.5%.

Having a larger number of liner services between two countries is closely linked to the total volume of bilateral trade. Economies of scale come into play, and as well (all things being equal) there are more options for the user. Having 20 instead of five services per month, for instance, results in a drop in freight and insurance costs of 12%.

The total annual volume of bilateral trade (sea-borne and potentially containerizable) also has a bearing on economies of scale and, as a result, reduced transport costs. If, for instance, the volume of trade increases from one million to 10 million tons, the saving on international transport costs (per ton) is approximately 6%.

Where sea-borne transport faces competition from the overland option, average costs also show a tendency to decrease. The likely reason is heightened competition; in addition, it is more

likely that the overland option will be favoured in the case of products that require speedier carriage. It is estimated that having available an overland transport link leads to a reduction in ocean freight rates per ton of between around 8–16%.

These conclusions are based on countries as a whole, but most containerised cargo is usually handled in one of the main state-owned ports. As would be expected, an expanded role for the private sector in these ports also translates into savings in transport. This is because port tariffs may drop, but more importantly there is generally a drop in the cost for the ship operator due to faster delivery, better security and more certainty that the itinerary will be adhered to. Using data from a poll about port privatisations, it can be estimated that the transport cost associated with El Salvador's exports would be 25% less had that country made as much progress as Panama in privatising its port operations.

Trade imbalances also influence the cost of transport. By way of example, if the volume of sea-borne exports of containerizable cargo to a given country is twice that of imports from that same country, it is estimated that the unit transport cost related to importing is around 19% less.

Assuming that all of the above general statistical correlations are also likely to be valid for trade between CARICOM and CACM countries, this may actually be sufficient to explain the high transport costs confronted especially concerning the Caribbean islands' imports.

C. Itineraries

Coupled with the tariff is the question of journey duration and frequency of service. From examination of some typical itineraries, it is evident that a relatively short journey from a CACM port to a CARICOM port may take up to four weeks including time spent waiting at the transshipment port and on an extended multi-port itinerary. The time required for these journeys is a specific point which has been raised by the El Salvador Chamber of Commerce and Industry during and interview about obstacles to trade. By way of contrast all CACM and CARICOM countries, even the smaller, have frequent services to and from the USA. Services to the USA actually outnumber those to Europe by a factor of four (see Table 17).

Figure 13
SAMPLE ROUTE MAP AND ITINERARY OF MAERSK SEALAND
CARIBBEAN FEEDER SERVICE

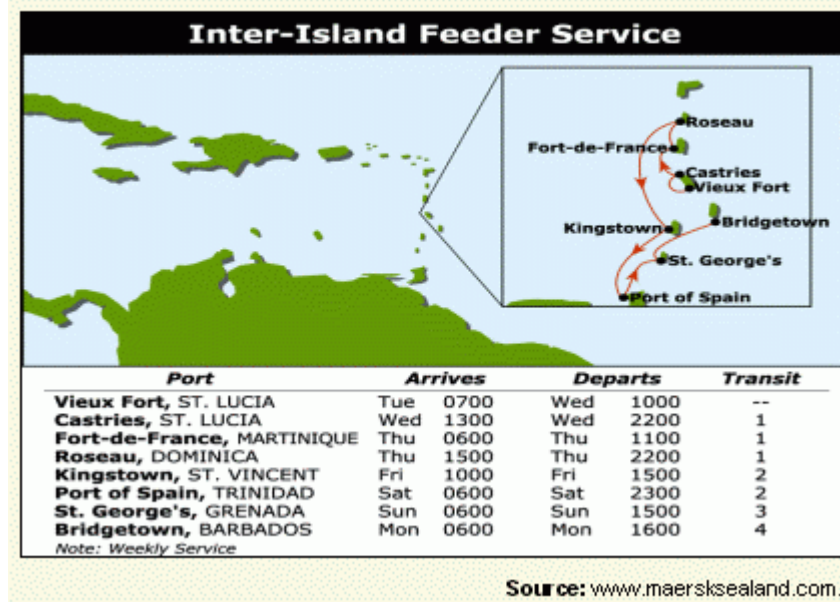


Figure 14
ROUTES OF MAERSK-SEALAND IN THE CARIBBEAN BASIN



Source: www.maersksealand.com.

Note: The inclusion of these sample routes are only meant as illustration, and are in no way to be interpreted as endorsement of one company or another.

D. Ship types

Feeder and inter-island services are predominately Load on/Load off (LoLo or conventional), with little use being made of Roll on/Roll off (RoRo) services. An earlier report (ECLAC 1985) on Caribbean shipping discusses the potential role of innovative ship types, including the use of barges and Ro/Ro vessels. These suggestions are probably still valid especially for the feeder services involved in double transshipment, though their success would depend, among other factors, on the renegotiation of current stevedoring labour agreements.

In terms of Twenty foot Equivalent Units (TEU), only 2% of vessels with container carrying capacity deployed in the Caribbean are RoRo vessels. In Central America, this proportion is 6%. With regard to the number of vessels, the proportion of RoRo type ships is 9% in the Caribbean and 12% in Central America (from calculations based on data from www.ci-online.co.uk, January 2002).

On average, comparing the vessels that call in Central America with those deployed in the Caribbean islands,

- vessels in the Caribbean are 16% more in numbers;
- have 29% less capacity in TEU in total;
- are 39% smaller; and
- are three years older.

(January 2002. Source and data: see Table 18 and Table 19)

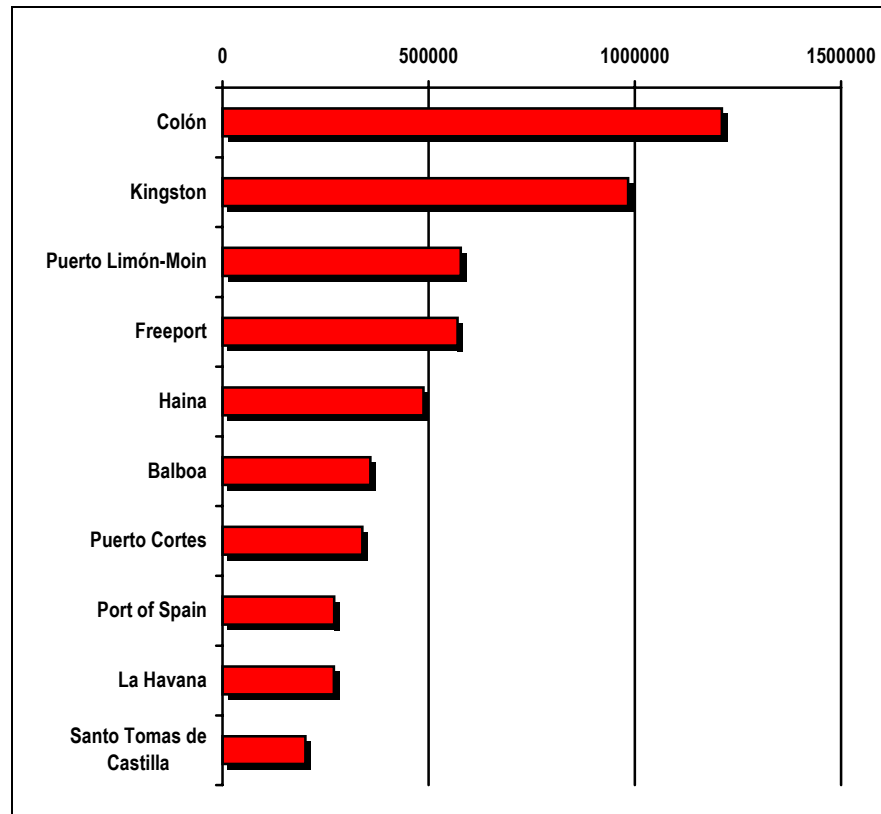
The vessels deployed in the different regions include those of East-West services that do not predominantly serve the region itself, but just pass through it for the purpose of crossing the Panama Canal. This is one of the reasons why vessels in Central America (which here includes Panama) are bigger than those in the Caribbean. Another reason for this difference is of course the many small islands that need to be served by smaller vessels whereas the fewer but larger ones serve in Central America.

III. Ports

A. Common user ports

The 14 countries which are members of CARICOM possess between them approximately 20 ports of significance in the sub-regional context, plus a substantial number of others on the outer islands serving a local but no less important market. The five CACM countries have between them about 10 ports of international significance plus another 10 or so of regional or local importance (ECLAC 1996). Reform of these ports has also been slow to start on account of labour resistance and other factors, but is now gathering momentum.

Figure 11
TOP 10 CENTRAL AMERICAN AND CARIBBEAN PORTS, 2001, TEU



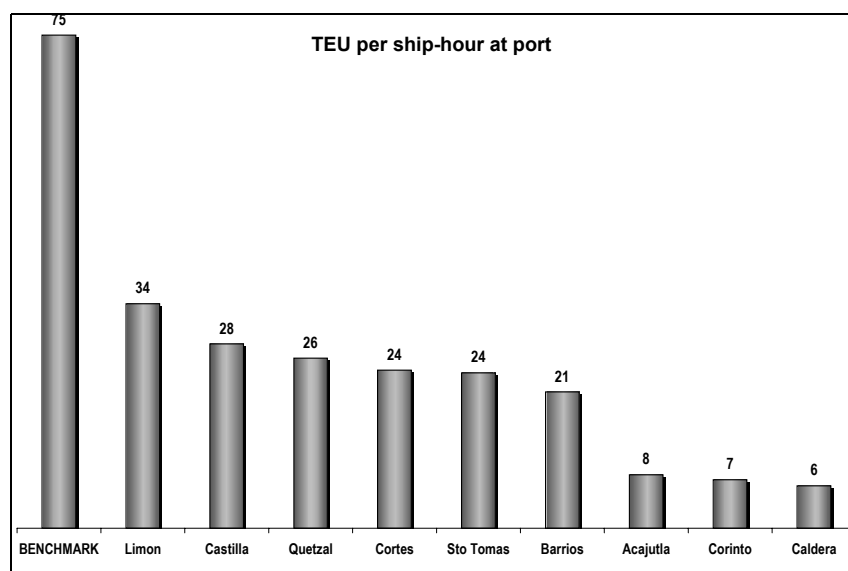
Source and data: See Table 29.

B. Port reform

In the case of the Caribbean, often there is only one port on an island which has a natural monopoly. This, in turn, has possibly delayed the introduction of port reforms involving greater participation by the private sector. There are notable exceptions to this generalization and further progress may be expected by CARICOM ports.

In Central America, According to SIECA (2001), on a regional level the need for new ports would not arise if port productivities could be increased to levels which are achieved elsewhere in Latin America. In many ports, present volumes are too low to achieve such productivity levels. This, however, could be interpreted as a reason to rationalize port traffic in fewer, but more modern and productive ports.

Figure 12
PORT PRODUCTIVITY IN CENTRAL AMERICAN PORTS



Source: Hoffmann (2001).

Note: Benchmark set according to ILO, the World Bank and productivities achieved by other ports in Latin America such as Buenos Aires, Cartagena, or MIT in Panama. Source for the Central American port data: SIECA, "Estudio Centroamericano de Transporte"

C. Transshipment ports

The need for transshipment of cargo from CACM countries is to reach CARICOM ports has been noted above. Indeed the complexity of shipping services in the region has meant that transshipment is a common feature of shipping in the Caribbean. The CACM ports do undertake a certain amount of transshipment and have plans to increase this business. However most transshipment related to Central America is focussed on Panama or Kingston, Jamaica.

The transshipment ports with an actual or potential role in the transport of goods between CACM ports and the CARICOM countries include:

- Panama: Manzanillo and Colon Container Terminal on the Caribbean, and Balboa on the Pacific.
- Kingston, Jamaica
- Freeport and Nassau, Bahamas
- Rio Haina, Dominican Republic
- Point Lisas and Port of Spain, Trinidad & Tobago
- Bridgetown, Barbados
- Vieux Port and Castries, St. Lucia
- Plymouth, Montserrat
- San Juan, PR
- Puerto Cabello, Venezuela
- Cartagena, Colombia

Under construction is port of Punta Caucedo, Dominican Republic. In the planning stage is one at Guayanilla (Port of the Americas), Puerto Rico, though with the uncertainties associated with the Jones Act. The Cuban ports of Havana and Santiago of Cuba may also be expected to offer transshipment services on an increasing scale. These new installations will increase the supply of transshipment ports within the region and thus offer the shipowner a wider choice of options. Provided there is some association or pooling of operations for the feeder and inter-island services, such developments should encourage increased trade between CARICOM and CACM countries.

The charges at the transshipment ports are evidently acceptable for the main-line carriers but may be proportionally more severe for regional carriers, with lower freight rates.

IV. Issues, conclusions and recommendations

A. The political agenda

The goal of increased trade between CARICOM and CACM countries has to overcome a number of obstacles: attractive products for exchange have to be identified, a way has to be found to reduce transport costs for such products and the commercial links between the countries have to be strengthened.

In the context of the 4th CARICOM-Central America Ministerial Meeting (Georgetown, Guyana, 1999) the need for the deepening of commercial linkages between the two sub-regions was emphasized. “Members also agreed on the need to combine the efforts of the public and private sectors and relevant specialised organisations to facilitate *inter alia* coordination between shipping companies, provide improved information on trade flows, identify hubs and improve port infrastructure” (Joint Communique issued at conclusion of Fourth CARICOM-Central America Ministerial meeting, 22 March 1999). At the CARICOM level, policy issues are addressed in the CARICOM Protocol VI - Transport Policy, which will, when implemented, amend the Treaty of Chaguaramas.

Costa Rica, Guatemala and El Salvador in the CACM and Jamaica and Trinidad & Tobago in CARICOM are already possess manufacturing sectors, potentially able to supply goods to the region, if other conditions are suitable. Diversification away from the

traditional mono-crop economies is already under way (ECLAC 2002) and improved transport links will be an essential element of further progress.

The low volume of trade makes the business relatively unattractive to the main-line shipping companies. Competition for business is therefore weak. However without competition, efficiency cannot improve and costs are unlikely to decline. Similarly the small scale of many of the ports makes the purchase of gantry cranes apparently uneconomic and tends to prevent high productivity in container handling.

The alleged lack of coordination between the different carriers offering feeder and inter-island services and between these carriers and the main-line services may tend to increase costs and impair service frequencies. One suggestion that has been made is to discuss the feasibility of a common feeder structure as used in the Mediterranean, whereby the main-line carriers agree to use regional feeders and inter-island carriers operating as a pool.

B. The increasing role of transshipment

The new element in the equation is the emergence of a geographically dispersed range of ports offering transshipment services. This offers the possibility of providing even the smaller destinations with access to increased regional trade. The principal transshipment ports on the basis of geography for the CARICOM–CACM trade will be Panama, Kingston (or Santiago de Cuba), Point Lisas (and Port of Spain), Trinidad & Tobago and Freeport, Bahamas. The ports of the Dominican Republic (Rio Haina and Punta Caucedo) are also important for transshipment to smaller CARICOM destination, in competition with Puerto Rico.

The transshipment ports need to be linked by connector shipping services, for example from Kingston, Jamaica to Point Lisas, Trinidad & Tobago. Additional feeder services are needed from the transshipment ports to final destinations. Transport costs may be lower with a pattern of main-line services, connector services and feeder services, concentrating on fewer routes and ports, rather than the present confusion of roles.

The existence of frequent and inexpensive liner shipping services does have a positive impact on trade and integration. Higher frequencies are statistically linked to lower transport costs (See for example Figure 10). Hence, with regard to trade between CACM and CARICOM, more and better services would also promote inter-regional trade. However, it appears that today there are actually already more services and options available than would be justified by existing trade levels. If we compare Figure 6 and Figure 7, we find that 17% of liner shipping services call at ports of both groups, although only 0.2% of the two groups' trade is between them – and this even includes a large proportion of oil and gas exports from Trinidad and Tobago. Trade of both groups with any part of the world increasingly involves at least one transshipment, and often main lines connect to the region's economies at the same transshipment ports for CACM and for CARICOM, thus also facilitating connection between those two groups. It can be expected that transshipment in the Caribbean will continue to grow, with the positive side effects of generating income for those ports and countries which supply such transshipment port services, and simultaneously helping the region's shippers to get access to additional transport options within and outside the Wider Caribbean. This trend of more point-to-point liner shipping services that connect smaller ports to the hub ports, combining regional and feeder services, will probably continue.

C. Supply might follow demand

Existing trade flows are small, freight rates are high and services frequencies and journey times are in general unsatisfactory. It is more expensive to ship goods between a CARICOM

country and a CACM destination than it to ship goods between a CARICOM/CACM port and the United States. Despite these obstacles, there are trade flows between the CARICOM countries and the CACM. What is needed is a program to encourage this traffic, through additional contacts between the exporters and importers of the two blocks and by the alleviation of present transport-related obstacles. Cheaper transport between CACM and CARICOM ports is the priority.

Contacts between trade associations and others concerned with trade between the CARICOM and CACM countries should be encouraged. The officially sponsored bodies for the promotion of exports, which exist in nearly all the countries concerned, have an important role in promoting such contacts.

What can be done to promote trade between CACM and CARICOM? The most promising ways to do this are not actually related to transport:

a) to encourage commercial contacts and at the same time to work to identify business opportunities, and

b) to identify other factors that promote trade: agreements, lower tariffs, etc, themes which are beyond the scope of the present study.

It is recommended to start with a structured meeting of interested parties, perhaps sponsored by regional organizations such as ACS, CSA, COCATRAM, or ECLAC, both public sector and private sector and including both trade and transport interests. This conference should expound the goal of increased CARICOM - CACM trade so that everyone may better understand the benefits and difficulties involved. Its aims will be to clarify the main issues, establish priorities and draft an action plan with responsibilities and a budget. Both trade and the transport elements should be centred on the Chambers of Commerce of the countries of the two blocks.

D. Improving transport services

What can be done to improve transport services between CACM and CARICOM? The proposal to establish a regional feeder service on a joint (governmental) basis is revived from time to time. Experience in the area with shipping lines such as WISCO in the Caribbean and with Namucar in Central America has not been encouraging. The basic problem is that such a service is unlikely to be profitable in itself and its finances have therefore to be linked in some way to the main-line carrier which would benefit from the additional cargo. A variant of this idea envisages the creation of a joint public-private Non Vessel Operator (NVO). This was proposed by an ACS recommendation first made by the delegate of the Secretariat of the Association of Caribbean States at the Working Group of the Special Committee on Transport in 1998 “to present at the next meeting of the Council of Ministers in Barbados, the proposal for the creation and articulation of an NVOCC system (Non-Vessel Operating Common carrier) and a time frame for making this system operational.” This idea was also presented at the 2002 meeting as the “Guidelines for the Constitution of a Caribbean and Andean Multinational Logistics Corporation “.

However it would seem more promising for governments to improve the conditions under which the existing NVOs operate, than to enter the business themselves. Unlike infrastructure investments, international transport services are not usually suitable to be provided by the public sector.

This does not mean, however, that the public sector has no options to promote regional integration between CACM and CARICOM. Some activities would be beneficial to trade in general, and not just between these two regions:

a) Work to reduce transport costs through international benchmarking and the provision of better information to shippers. A regional data base, such as the one planned by the ACS about port costs and productivities, might help to set benchmarks and encourage improvements.

b) General work to alleviate other transport restrictions in the fields of telematics, facilitation and port and labor reform. Central American and Caribbean ports, in particular, could learn from successful reforms in several South American countries and Mexico.

c) National legislations should be supportive of the NVOs and multimodal transport providers, with the identification of obstacles to their more effective functioning UNCTAD is currently carrying a consultation exercise in this area.

Some other possible activities could be of particular interest to CACM and CARICOM trade:

d) The public and academic sector could cooperate with service providers in the identification of ways to improve the linkage between main-line, feeder and inter-island services at the different transshipment ports, through common feeder services or other mechanisms.

e) The public and academic sector could cooperate in a review of the ports offering transshipment of ways in which they could encourage regional and inter-island feeder services (and gain additional business), including consideration of special tariffs and revised working practices/labor agreements.

f) Regional organizations could enhance the information available to actual and potential shippers for trade between CARICOM and CACM countries about services and freight rates. Better information would permit the definition of efficient goals and benchmarks.

The study concludes that there is potential for increased trade within the Caribbean region between CARICOM and CACM countries. This finding is supported by evidence from other areas, such as NAFTA, MERCOSUR and the European Union, where intra-regional trade is increasing rapidly and more rapidly than extra-regional trade.

Transport links between CARICOM and CACM countries are provided principally through transshipment. This gives the possibility of wide coverage even for the smaller economies. However the transport costs between CARICOM and CACM countries are high.

Whilst high transport costs are not the only reason for present low trade levels between CARICOM and CACM countries, they are a contributory factor. Transport is playing an increasing role in the countries' competitiveness in each others markets. Realization of the potential for increased trade between CARICOM and CACM countries will require action both by the private sector and by the concerned public sector institutions.

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Annexes

Table 1

BASIC ECONOMIC INFORMATION ABOUT CACM AND CARICOM COUNTRIES, 2000

	area 1000 km ²	population thousand	GDP million US\$	GDP per capita US\$
Antigua & Barbuda	0.44	68	181	2,780
The Bahamas	14.00	303	5,580	18,416
Barbados	0.43	269	2,702	10,123
Belize	23.00	235	755	3,341
Dominica	0.75	71	268	3,802
Grenada	0.34	94	410	4,391
Guyana	216.00	865	728	957
Jamaica	11.00	2,561	7,687	2,984
Montserrat (1)	0.10	6	31	5,000
St Kitts & Nevis	0.27	41	328	8,537
Saint Lucia	0.62	150	700	4,728
St Vincent & the Grenadines	0.39	116	324	2,858
Suriname (2)	164.00	418	809	1,948
Trinidad & Tobago (2)	0.44	1,291	6,514	5,054
TOTAL CARICOM	431.78	6,488	27,017	4,164
Guatemala	109.00	11,090	19,122	1,680
El Salvador	21.00	6,154	13,205	2,104
Honduras	112.00	6,316	5,898	910
Nicaragua	131.00	4,939	2,396	473
Costa Rica	51.00	3,933	15,884	3,949
TOTAL CACM	424.00	32,432	56,505	1,742
TOTAL	855.78	38,920	83,522	2,146

Source: Authors, based on ECLAC, Statistical Yearbook 2002, complemented by data from Caribbean Shipping Association Annual General Meeting in Port of Spain, 1998, and data provided by the Association of Caribbean States.

Notes: (1) affected by volcanic eruption. (2) data is for 1999.

Table 2

FOREIGN TRADE IN GOODS OF CARICOM COUNTRIES, 1000 US\$, 2000

	Exports	Imports	Total
Antigua and Barbuda (1)	14,976	356,040	371,016
The Bahamas	910,000	1,730,000	2,640,000
Barbados	272,838	1,156,038	1,428,876
Belize	200,215	447,247	647,462
Dominica	54,083	147,278	201,361
Grenada	75,844	238,791	314,635
Guyana	505,000	585,000	1,090,000
Jamaica	1,307,600	3,191,808	4,499,408
Montserrat (2)	1,118	21,618	22,736
St Kitts&Nevis	32,799	195,976	228,774
Saint Lucia	45,160	349,985	395,145
St Vincent& Grenadines	50,590	161,779	212,369
Suriname	484,000	342,000	826,000
Trinidad & Tobago	4,317,753	3,346,151	7,663,904
TOTAL	8,271,977	12,269,709	20,541,686

Source: Authors, based data provided by CARICOM Secretariat; data for Guyana, Suriname and The Bahamas from World Bank. **Notes:** (1) data for imports is for 1999. (2) data for 1999.

Table 3
FOREIGN TRADE IN GOODS OF CACM COUNTRIES, 1000 US\$, 2000

	Exports	Imports	Total
Guatemala	7,926,909	17,497,782	25,424,691
El Salvador	3,297,729	11,031,468	14,329,197
Honduras	4,026,065	8,944,625	12,970,690
Nicaragua	1,831,422	5,075,667	6,907,089
Costa Rica	16,389,975	20,898,458	37,288,433
TOTAL	33,472,100	63,448,000	96,920,100

Source: Authors, based on data provided by SIECA.

Table 4
INTRA-CARICOM TRADE, MILLION US\$

	1994	1995	1996	1997	1998	1999	2000
Total CARICOM exports	5,069	5,531	5,439	6,008	7,500	N.A.	8,271
Intra-CARICOM exports	693	882	872	925	1,159	N.A.	N.A.
Intra-CARICOM exports % of total	13.7%	15.9%	16.0%	15.4%	15.5%	N.A.	N.A.

Source: Interamerican Development Bank, "Integration and Development in America", Washington, 1999 and 2000

Table 5
INTRA-CACM TRADE, MILLION US\$

	1994	1995	1996	1997	1998	1999	2000
Total CACM exports	15,793	20,359	24,280	28,336	30,562	33,760	33,472
Intra-CACM exports	1,235	1,544	1,684	1,992	2,756	2,437	2,653
Intra-CACM exports % of total	7.8%	7.6%	6.9%	7.0%	9.0%	7.2%	7.9%

Source: Data provided by SIECA

Table 6
TRADE BETWEEN CACM AND CARICOM, 2000

SA-1996 classification code	CACM Imports from CARICOM		CACM Exports to CARICOM	
	US\$	Metr. Ton.	US\$	Metr. Ton.
1 Live animals; animal products	58,671	46	81,558	57
2 Vegetable products	337,743	704	1,404,943	1,939
3 Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal or vegetable waxes	---	---	300,704	511
4 Prepared foodstuffs; beverages, spirits and vinegar; tobacco and manufactured tobacco	603,327	326	16,698,275	48,228
5 Wood and articles of wood; wood charcoal; cork and articles of cork; manufactures of straw, of esparto or of other plaiting materials; basketware and wickerwork	118,702	737	8,513,706	11,022
6 Mineral products	130,887,127	332,639	4,911,175	34,413
7 Products of the chemical or allied industries	5,374,068	18,856	30,444,799	29,407
8 Plastics and articles thereof; rubber and articles thereof	567,540	453	6,379,175	12,145
9 Raw hides and skins, leather, furskins and articles thereof; saddlery and harness; travel goods, handbags and similar containers; articles of animal gut (other than silk-worm gut)	20,382	86	17,691	1
10 Pulp of wood or of other fibrous cellulosic material; recovered (waste and scrap) paper or paperboard; paper and paperboard and articles thereof	533,324	456	4,345,237	3,791
11 Textiles and textile articles	74,398	32	1,345,988	864
12 Footwear, headgear, umbrellas, sun umbrellas, walking-sticks, seat-sticks, whips, riding-crops and parts thereof; prepared feathers and articles made therewith; artificial flowers; articles of human hair	5,987	2	117,334	27
13 Articles of stone, plaster, cement, asbestos, mica or similar materials, ceramic products; glass and glassware	77,288	95	12,035,343	23,033
14 Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad with precious metal and articles thereof; imitation jewellery; coin thereof; imitation jewellery; coin	5,181	0	3,904	0
15 Arms and ammunition; parts and accessories thereof	1,827	0	---	---
16 Base metals and articles of base metal	8,122,306	20,809	6,720,078	3,920
17 Machinery and mechanical appliances; electrical equipment; parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles	1,701,832	371	2,184,067	466
18 Vehicles, aircraft, vessels and associated transport equipment	240,552	122	650,257	116
19 Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical instruments and apparatus; clocks and watches; musical instruments; parts and accessories thereof	59,241	7	136,088	2
20 Miscellaneous manufactured articles	58,336	33	758,305	1,049
21 Works of art, collectors' pieces and antiques	288	0	59	0
(Reserved for particular use)	3,671	6	---	---
	148,851,791	375,781	97,048,686	170,991

Source: SIECA

Table 7
TRADE OF CARICOM COUNTRIES WITH CACM, 2000

	Exports to CACM		Imports from CACM	
	US\$	Metr. Ton.	US\$	Metr. Ton.
Antigua & Barbuda	1,179	0	122,636	4
The Bahamas (1998 data)	120,000	N.A.	650,000	N.A.
Barbados	2,166,832	2,545	8,292,986	6,562
Belize	2,125,543	4,464	23,003,700	62,336
Dominica	20,300	14	1,394,123	733
Grenada	3,782	1	146,188	123
Guyana	144,844	712	2,352,218	4,250
Jamaica	2,532,906	3,315	37,053,875	58,677
Montserrat	185	0	0	0
St. Kitts & Nevis	N.A.	N.A.	N.A.	N.A.
Saint Lucia	4,890	1	1,412,090	1,764
St. Vincent & Grenadines	14,205	20	330,630	126
Suriname	84,984	14	1,866,271	1,848
Trinidad & Tobago	131,528,549	338,880	16,006,313	12,030

Source: Authors, based on data from SIECA and World Bank

Note: Trinidad & Tobago exports include 120 014 133 US\$ (302 106 metric tons) of mineral products.

Table 8
TRADE OF CACM COUNTRIES WITH CARICOM, 2000

	Imports from CARICOM		Exports to CARICOM	
	US\$	TM	\$	TM
Guatemala	25,575,396	94,326	28,965,911	60,841
El Salvador	28,662,253	89,235	9,809,583	37,098
Honduras	36,727,336	14,760	15,718,506	19,032
Nicaragua	21,668,736	67,510	1,681,412	7,046
Costa Rica	38,151,995	121,371	40,873,274	46,974

Source: Authors, based on data from SIECA and World Bank

Table 9
CACM IMPORTS OF MINERAL PRODUCTS FROM CARICOM

	US\$	Metric tons
Guatemala	20,313,050	78,608
El Salvador	27,580,774	88,992
Honduras	33,237,107	13,502
Nicaragua	21,468,298	67,435
Costa Rica	31,953,618	96,537

Source: Authors, based on data from SIECA and World Bank

Note: "Mineral products" are those classified as "Section V" by SIECA.

Table 10

CACM IMPORTS FROM CARICOM COUNTRIES, 1994 – 2000, US\$

	1994	1995	1996	1997	1998	1999	2000
1 Live animals; animal products	12,780	0	496,025	91,394	381,365	411,561	58,671
2 Vegetable products	2,011	57,978	107,148	214,099	1,116,021	91,027	337,743
3 Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal or vegetable waxes	0	1,249	29,713	17,867	22	249,236	0
4 Prepared foodstuffs; beverages, spirits and vinegar; tobacco and manufactured tobacco substitutes	318,172	358,163	861,745	1,154,114	918,116	1,013,718	603,055
5 Mineral products	3,553,925	15,825,571	14,989,586	66,926,082	69,395,622	136,829,896	134,552,847
6 Products of the chemical or allied industries	8,678,361	8,687,936	2,881,933	10,636,394	4,588,874	12,827,796	3,894,864
7 Plastics and articles thereof; rubber and articles thereof	54,319	130,125	785,037	1,178,467	1,367,865	548,021	565,493
8 Raw hides and skins, leather, furskins and articles thereof; saddlery and harness; travel goods, handbags and similar containers; articles of animal gut (other than silkworm gut)	13,251	9,934	18	141,781	5,270	4,348	20,304
9 Wood and articles of wood; wood charcoal; cork and articles of cork; manufactures of straw, of esparto or of other plaiting materials; basketware and wickerwork	11,909	706,377	219,680	113,816	89,700	72,821	118,702
10 Pulp of woods or other fibrous cellulosic material; recovered(waste and scrap) paper or paperboard; paper and paperboard and articles thereof	177,406	236,354	130,021	457,997	697,229	412,590	518,701
11 Textiles and textile articles	233,720	170,515	179,295	208,645	430,821	58,748	74,398

	Table 10 (Conclusion)						
12 Footwear, headgear, umbrellas, sun umbrellas, walking-sticks, seat-sticks, whips, riding-crops and parts thereof; prepared feathers and articles made therewith; artificial flowers; articles of human hair	9,160	29,685	11,841	2,803	122,342	3,165	5,987
13 Articles of stone , plaster, cement, asbestos, mica or similar materials; ceramic products; glass and glassware	750,323	173,179	174,791	108,576	381,899	52,910	77,263
14 Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad with precious metal and articles thereof; imitation jewellery; coin thereof; imitation jewellery; coin	9,483	128	78	10,000	1,366	25,974	5,181
15 Base metals and articles of base metal	10,531,499	8,062,626	9,223,156	13,560,972	12,515,539	7,404,161	7,889,012
16 Machinery and mechanical appliances; electrical equipment; parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles	521,648	572,940	3,365,352	1,932,102	4,251,523	1,729,099	1,701,832
17 Vehicles, aircraft, vessels and associated transport equipment	58,142	130,335	489,565	429,426	668,916	301,602	240,552
18 Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical instruments and apparatus; clocks and watches; musical instruments; parts and accessories thereof	253,723	163,100	161,451	5,712,886	62,771	40,837	58,795
19 Arms and ammunition; parts and accessories thereof	0	0	0	0	0	0	1,827
20 Miscellaneous manufactured articles	380,760	59,522	108,844	2,047,229	177,542	161,218	56,530
21 Works of art, collectors' pieces and antiques	1,131	40	484	477	3,141	723	288
22 Reserved for particular use	17,957	5,877	64,566	4,193	3,363	31,145	3,671
TOTAL	25,589,680	35,381,634	34,280,329	104,949,320	97,179,307	162,270,596	150,785,716
Total, without V Products minerales	22,035,755	19,556,063	19,290,743	38,023,238	27,783,685	25,440,700	16,232,869

Source: SIECA

Table 11
CACM IMPORTS FROM CARICOM COUNTRIES, 1994 – 2000, METRIC TONES

	1994	1995	1996	1997	1998	1999	2000
1 Live animals; animal products	15	0	800	46	252	214	46
2 Vegetable products	1	39	332	793	3,406	175	704
3 Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal or vegetable waxes	0	0	43	18	0	0	0
4 Prepared foodstuffs; beverages, spirits and vinegar; tobacco and manufactured tobacco substitutes	297	198	541	1,028	532	616	326
5 Mineral products	16,214	77,730	63,651	301,756	414,759	657,362	345,074
6 Products of the chemical or allied industries	35,990	19,398	8,370	48,877	20,905	78,023	18,824
7 Plastics and articles thereof; rubber and articles thereof	23	65	370	991	2,146	869	453
8 Raw hides and skins, leather, furskins and articles thereof; saddlery and harness; travel goods, handbags and similar containers; articles of animal gut (other than silkworm gut)	1	3	0	39	0	6	86
9 Wood and articles of wood; wood charcoal; cork and articles of cork; manufactures of straw, of esparto or of other plaiting materials; basketware and wickerwork	6	1,771	883	212	44	145	737
10 Pulp of woods or other fibrous cellulosic material; recovered(waste and scrap) paper or paperboard; paper and paperboard and articles thereof	51	345	51	723	746	509	451
11 Textiles and textile articles	38	31	36	42	129	26	32

Table 11 (Conclusion)

12 Footwear, headgear, umbrellas, sun umbrellas, walking-sticks, seat-sticks, whips, riding-crops and parts thereof; prepared feathers and articles made therewith; artificial flowers; articles of human hair	3	4	2	0	13	2	2
13 Articles of stone , plaster, cement, asbestos, mica or similar materials; ceramic products; glass and glassware	2,186	117	211	202	1,173	91	95
14 Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad with precious metal and articles thereof; imitation jewellery; coin thereof; imitation jewellery; coin	0	0	0	0	0	0	0
15 Base metals and articles of base metal	25,399	16,228	26,154	36,825	30,815	13,625	19,843
16 Machinery and mechanical appliances; electrical equipment; parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles	91	143	800	345	538	366	371
17 Vehicles, aircraft, vessels and associated transport equipment	37	33	966	159	212	156	122
18 Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical instruments and apparatus; clocks and watches; musical instruments; parts and accessories thereof	7	2	5	85	3	3	7
19 Arms and ammunition; parts and accessories thereof	0	0	0	0	0	0	0
20 Miscellaneous manufactured articles	58	19	15	54	71	21	25
21 Works of art, collectors' pieces and antiques	0	0	0	0	0	0	0
22 Reserved for particular use	2	0	7	3	8	152	6
TOTAL	80,419	116,126	103,237	392,198	475,752	752,361	387,204
Total, without V "Productos minerales"	64,205	38,396	39,586	90,442	60,993	94,999	42,130

Source: SIECA

Table 12
CACM EXPORTS TO CARICOM COUNTRIES, 1994 – 2000, US\$

	1994	1995	1996	1997	1998	1999	2000
1 Live animals; animal products	1,061,298	1,385,767	1,556,842	228,296	1,140,231	536,882	81,558
2 Vegetable products	1,268,856	3,018,857	5,943,054	4,973,036	5,510,590	1,612,274	1,404,943
3 Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal or vegetable waxes	2,917,053	799,131	741,504	837,938	110,003	298,081	300,704
4 Prepared foodstuffs; beverages, spirits and vinegar; tobacco and manufactured tobacco substitutes	1,534,416	1,495,759	12,343,261	8,625,319	14,053,251	10,965,559	16,698,275
5 Mineral products	5,196,034	553,873	950,972	1,038,526	1,537,989	2,456,999	4,911,175
6 Products of the chemical or allied industries	8,922,391	10,387,812	16,022,943	23,221,213	18,310,440	24,196,056	30,444,799
7 Plastics and articles thereof; rubber and articles thereof	3,955,008	4,934,533	4,615,457	6,048,555	6,952,736	5,609,997	6,379,175
8 Raw hides and skins, leather, furskins and articles thereof; saddlery and harness; travel goods, handbags and similar containers; articles of animal gut (other than silkworm gut)	388,896	544,642	368,399	264,706	721,147	180,499	17,691
9 Wood and articles of wood; wood charcoal; cork and articles of cork; manufactures of straw, of esparto or of other plaiting materials; basketware and wickerwork	6,523,610	4,228,963	896,395	2,915,368	7,852,687	7,067,112	8,513,706
10 Pulp of woods or other fibrous cellulosic material; recovered(waste and scrap) paper or paperboard; paper and paperboard and articles thereof	2,439,947	7,777,424	8,044,911	8,426,870	4,818,498	1,974,333	4,345,237
11 Textiles and textile articles	718,652	190,919	784,454	1,128,906	2,403,715	1,749,424	1,345,988

12 Footwear, headgear, umbrellas, sun umbrellas, walking-sticks, seat-sticks, whips, riding-crops and parts thereof; prepared feathers and articles made therewith; artificial flowers; articles of human hair	90,017	125,039	141,449	177,932	73,893	106,980	117,334
13 Articles of stone , plaster, cement, asbestos, mica or similar materials; ceramic products; glass and glassware	1,831,310	1,101,207	2,811,729	2,551,560	2,363,126	4,713,330	12,035,343
14 Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad with precious metal and articles thereof; imitation jewellery; coin thereof; imitation jewellery; coin	0	2,578,764	4,106,464	3,847,934	3,545,100	1,963	3,904
15 Base metals and articles of base metal	1,685,684	3,219,400	6,836,418	5,500,916	5,971,355	7,130,382	6,720,078
16 Machinery and mechanical appliances; electrical equipment; parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles	884,661	3,331,053	4,812,464	4,579,165	9,727,372	3,383,781	2,184,067
17 Vehicles, aircraft, vessels and associated transport equipment	125,933	233,577	632,125	86,297	82,951	127,139	650,257
18 Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical instruments and apparatus; clocks and watches; musical instruments; parts and accessories thereof	11,237	7,352	29,836	19,715	9,555	10,263	136,088
19 Arms and ammunition; parts and accessories thereof	0	0	0	0	0	0	0
20 Miscellaneous manufactured articles	355,622	398,345	941,645	815,732	872,912	470,122	758,305
21 Works of art, collectors' pieces and antiques	0	0	55,488	0	0	0	59
22 Reserved for particular use	216,587	70,723	1,666,661	504,567	2	0	0
TOTAL	40,127,212	46,383,140	74,302,471	75,792,551	86,057,553	72,591,176	97,048,686

Source: SIECA

Table 13
CACM EXPORTS TO CARICOM COUNTRIES, 1994 – 2000, METRIC TONES

	1994	1995	1996	1997	1998	1999	2000
1 Live animals; animal products	313	294	400	114	107	158	57
2 Vegetable products	1,783	18,443	40,875	24,557	45,561	2,030	1,939
3 Animal or vegetable fats and oils and their cleavage products; prepared edible fats; animal or vegetable waxes	4,053	1,082	979	1,101	137	383	511
4 Prepared foodstuffs; beverages, spirits and vinegar; tobacco and manufactured tobacco substitutes	8,001	1,387	45,387	52,772	119,519	70,126	48,228
5 Mineral products	55,217	2,064	2,575	3,303	5,303	18,591	34,413
6 Products of the chemical or allied industries	4,877	4,007	11,430	15,528	13,163	21,825	29,407
7 Plastics and articles thereof; rubber and articles thereof	2,494	1,973	2,128	2,284	4,353	4,765	12,145
8 Raw hides and skins, leather, furskins and articles thereof; saddlery and harness; travel goods, handbags and similar containers; articles of animal gut (other than silkworm gut)	40	48	32	19	40	177	1
9 Wood and articles of wood; wood charcoal; cork and articles of cork; manufactures of straw, of esparto or of other plaiting materials; basketware and wickerwork	24,311	6,323	2,145	5,530	14,351	11,004	11,022
10 Pulp of woods or other fibrous cellulosic material; recovered(waste and scrap) paper or paperboard; paper and paperboard and articles thereof	1,164	4,014	4,559	6,437	3,278	1,153	3,791
11 Textiles and textile articles	136	47	149	230	288	753	864

	Table 13 (conclusion)						
12 Footwear, headgear, umbrellas, sun umbrellas, walking-sticks, seat-sticks, whips, riding-crops and parts thereof; prepared feathers and articles made therewith; artificial flowers; articles of human hair	22	21	16	20	12	35	27
13 Articles of stone , plaster, cement, asbestos, mica or similar materials; ceramic products; glass and glassware	3,046	1,854	4,873	4,510	4,281	9,389	23,033
14 Natural or cultured pearls, precious or semi-precious stones, precious metals, metals clad with precious metal and articles thereof; imitation jewellery; coin thereof; imitation jewellery; coin	0	17	1	1	19	2	0
15 Base metals and articles of base metal	913	1,944	12,815	3,242	3,371	3,954	3,920
16 Machinery and mechanical appliances; electrical equipment; parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles	266	1,072	1,369	1,180	1,923	453	466
17 Vehicles, aircraft, vessels and associated transport equipment	15	48	58	20	19	13	116
18 Optical, photographic, cinematographic, measuring, checking, precision, medical or surgical instruments and apparatus; clocks and watches; musical instruments; parts and accessories thereof	0	0	0	1	1	0	2
19 Arms and ammunition; parts and accessories thereof	0	0	0	0	0	0	0
20 Miscellaneous manufactured articles	111	104	125	152	202	128	1,049
21 Works of art, collectors' pieces and antiques	0	0	0	0	0	0	0
22 Reserved for particular use	34	59	221	173	0	0	0
TOTAL	106,796	44,801	130,137	121,174	215,928	144,939	170,991

Source: SIECA

Table 14
INTRA-REGIONAL TRADE, METRIC TONS, 1998

Importing country:	Antigua Y Barbuda	Barbados	Belize	Colombia	Costa Rica	Cuba	Dominica	El Salvador	Grenada	Guatemala	Guyana	Haiti	Honduras	Jamaica	Mexico	Nicaragua	Panamá	Dominican Republic	St. Kitts y Nevis	St. Lucia	St. Vicente y Granadinas	Trinidad y Tobago	Venezuela
Exporting country:	Antigua Y Barbuda	Barbados	Belize	Colombia	Costa Rica	Cuba	Dominica	El Salvador	Grenada	Guatemala	Guyana	Haiti	Honduras	Jamaica	Mexico	Nicaragua	Panamá	Dominican Republic	St. Kitts y Nevis	St. Lucia	St. Vicente y Granadinas	Trinidad y Tobago	Venezuela
Antigua Y Barbuda		168	3	1	7	n.a.	229	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	7	2	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	2	81
Barbados	3163		329	2	17	n.a.	3408	62	2222	8	2580	32	29	8270	64	20	n.a.	34	966	4421	6667	80761	1218
Belize	54	173		n.a.	509	15	937	1493	n.a.	3690	678	n.a.	9	7508	6829	56	n.a.	n.a.	n.a.	45	898	10347	n.a.
Colombia	103	3744	264		144483	24792	1589	141776	27	59180	6595	235931	18506	33894	237869	186479	95557	345991	n.a.	13201	5453	1833392	569238
Costa Rica	29	512	161	19755		4083	450	69047	77	85111	397	6346	30065	10501	57168	250344	102569	16557	30	35	187	1713	7368
Cuba	n.a.	5	n.a.	36752	1094		n.a.	106	n.a.	2020	n.a.	n.a.	4017	16525	n.a.	609	135	n.a.	n.a.	n.a.	n.a.	80	2653
Dominica	6371	4284	152	157	54	n.a.		n.a.	389	n.a.	2171	76	n.a.	8622	4	47	50110	n.a.	1484	1031	317	2203	195
El Salvador	n.a.	13860	2180	1940	48823	89	n.a.		1	426001	4	91	81033	96	22694	72012	8775	2321	n.a.	n.a.	n.a.	432	1564
Grenada	n.a.	243	n.a.	16	n.a.	n.a.	1457	n.a.		n.a.	n.a.	n.a.	n.a.	43	15	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	269	64
Guatemala	n.a.	320	8097	8209	100674	625	253	462116	25		183	30328	134275	6407	107773	109714	18140	10630	n.a.	72	15	581	51677
Guyana	n.a.	17002	29	13013	n.a.	n.a.	483	n.a.	n.a.	1		n.a.	n.a.	41471	3175	2654	9	n.a.	n.a.	n.a.	n.a.	28243	8281
Haiti	n.a.	28	n.a.	20	n.a.	n.a.	n.a.	382	n.a.	6	n.a.		22	23	1071	1	6	n.a.	n.a.	n.a.	n.a.	37	n.a.
Honduras	n.a.	1219	236	4298	20583	n.a.	2	144246	1763	125908	n.a.	21		332	13192	100553	8036	1256	n.a.	n.a.	n.a.	9091	3559
Jamaica	1005	12470	2248	80561	256624	7701	830	33	943	359	18331	4618	2334		2559	83	5947	7079	660	2789	375	16892	69916
Mexico	30857	15072	132047	607853	326394	n.a.	894	401071	741	638347	923	113570	68509	404975		463009	286088	1692052	3	582	6262	56577	423438
Nicaragua	n.a.	117	2	270	58450	5197	12	58477	n.a.	22162	n.a.	7639	41258	32	16302		1241	1931	n.a.	n.a.	n.a.	5016	5002
Panamá	1	n.a.	78	18378	63691	3041	2	11911	n.a.	16328	n.a.	512	70050	348	70299	8052		4008	n.a.	n.a.	n.a.	129	392
Dominican Republic	n.a.	9653	2	6978	2590	n.a.	972	3671	n.a.	706	n.a.	n.a.	7449	2507	72617	419	5135		n.a.	n.a.	n.a.	15501	109872
St. Kitts and Nevis	n.a.	57	n.a.	n.a.	n.a.	n.a.	231	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	17	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	132	n.a.
St. Lucia	n.a.	2163	124	11	n.a.	n.a.	2965	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	28	2	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	3740	981
St. Vicente y Granadinas	n.a.	7189	18	n.a.	n.a.	n.a.	3928	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	2496	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	11959	1
Trinidad y Tobago	58298	181664	4054	128685	69343	122670	37460	45402	186502	66910	368043	36525	3194	984713	248051	10039	70657	264953	59026	142836	117023		86063
Venezuela	142	236371	3516	2818190	1053491	25466	10858	165421	1173	894415	21318	80968	62883	419095	833179	429340	1128113	224406	1061	3211	8463	2184485	

Source: ECLAC, International Trade Data Base, BADECEL, as reported in Estrada and Hoffmann (2000). **Notes:** n.a. data not available (in several cases likely to be near zero). Data supplied by the importing country and by the exporting country does not usually coincide 100%; if available, the table includes data supplied by the importing country, otherwise from the exporting country.

Table 15

BILATERAL TRADE STATISTICS SAMPLE, GUATEMALA AND TRINIDAD AND TOBAGO, 2000

	Imports		Exports	
	US\$	Metric tons	US\$	Metric tons
4 prepared foodstuffs; beverages, spirits and vinegar; tobacco and manufactured tobacco substitutes	2 080	112	315 502	189 694
5 mineral products	17 594 489	72 791 806	---	---
6 products of the chemical or allied industries	277	500	502 848	144 860
7 plastics and articles thereof; rubber and articles thereof	30 047	57 420	235 169	163 115
8 raw hides and skins, leather, furskins and articles thereof; saddlery and harness; travel goods, handbags and similar containers; articles of animal gut(other than silk-worm gut)	193	2	---	---
9 pulp of wood or of other fibrous cellulosic material; recovered(waste and scrap) paper or paperboard; paper and paperboard and articles thereof	124 812	13 934	1 925	1 319
10 textiles and textile articles	---	---	6 507	946
11 Footwear, headgear, umbrellas, sun umbrellas, walking-sticks, seat-sticks, whips, riding-crops and parts thereof; prepared feathers and articles made therewith; artificial flowers; articles of human hair	---	---	41 449	53 768
12 Base metals and articles of base metal	3 907 072	12 914 429	536 957	186 238
13 Machinery and mechanical appliances; electrical equipment; parts thereof; sound recorders and reproducers, television image and sound recorders and reproducers, and parts and accessories of such articles	77	1	106 095	26 131
14 Vehicles, aircraft, vessels and associated transport equipment	---	---	9 625	2 316
15 Miscellaneous manufactured articles	---	---	14 805	10 314
TOTAL	21 659 047	85 778 204	1 770 882	778 701

Source: SIECA.

Note: Under <http://estadisticas.sieca.org.gt/siecadb4/estadisticas/menuestadisticas.asp> the specific trade flows between all CACM countries and their trading partners can be searched and downloaded.

Table 16
CACM AND CARICOM SHIPPING SERVICES

1. Services calling at one or more ports in both CARICOM and CACM countries and the USA
 - Concorde Line: USA, Honduras, Belize
 - Maersk Fashion Express II: USA then Bahamas, Honduras and Guatemala.
 - Maersk Venezuela-Gulf: USA then Trinidad, Panama and Costa Rica.
 - Maersk Venezuela-Gulf: USA then Costa Rica and Trinidad.
2. Services calling at one or more ports in CARICOM and the USA, but not at CACM
 - Bernuth Lines: Miami then Antigua, Barbados, Dominica, Grenada, Guyana, Montserrat, St Kitts, Saint Lucia, St Vincent, Suriname and Trinidad.
 - CAGEMA leeward service main-liner: Miami then Antigua, Bahamas, Barbados, Jamaica, Saint Lucia and Trinidad. (transshipment at Vieux Fort, Saint Lucia, Kingston, Jamaica and Freeport, Bahamas).
 - Crowley Virgin Is/Eastern Caribbean Service: USA then Antigua, Barbados, Montserrat, St Kitts, St Vincent and Trinidad.
 - Maersk Windward: Miami, then Bahamas, Antigua, Barbados, Saint Lucia, and Trinidad.
 - MSC Eur/N.Caribbean: USA, Bahamas, Jamaica (also New Caribbean: Miami-Bahamas-Jamaica).
 - MSC Eur/S.Caribbean: USA, Bahamas, Barbados, Guyana, Suriname, Trinidad.
 - Seaboard US/Trinidad: USA and Trinidad.
 - Seaboard US and E. Caribbean: US then Antigua, Barbados, Guyana and Trinidad.
 - Seaboard Miami and Jamaica: USA then Jamaica.
 - Seaboard Miami and Bahamas: USA then Bahamas.
 - Seaboard Miami and S. CA: USA then Costa Rica and Panama.
 - Tecmarine N. Atlantic/Jamaica/Haiti/DR: USA then Jamaica (also from Port Everglades)
 - Tecmarine Eastern Caribbean Express: USA then Antigua, Barbados, Dominica, Grenada, Montserrat, St Kitts, Saint Lucia, St Vincent and Suriname.
 - Tropical Freeport: USA then Bahamas.
 - Tropical various services: USA then Antigua, Bahamas (Nassau), Barbados, Dominica, Grenada, St Kitts, Saint Lucia, St Vincent and Trinidad.
 - Zim Caribbean-Gulf: USA then Kingston, San Juan, DR
3. Services calling at one or more ports in CACM and in the USA, but not at CARICOM
 - Crowley Central America Service (1): USA, then CACM Honduras, Guatemala.
 - Crowley Central America Service (2): USA then Costa Rica, Guatemala, Panama.
 - Crowley Gulf Latin America Service: USA, then Costa Rica, Panama.
 - Great White Fleet: Us then Honduras, Costa Rica.
 - King Ocean Services: USA then Costa Rica, Nicaragua.
 - Maersk W. Coast of CA: Guatemala, El Salvador, USA (Long Beach)
 - Maersk N. CA/Fashion : USA then Honduras, Guatemala (services from Miami & New Orleans).
 - MOL GEX service: USA then Costa Rica, Panama.
 - Nordana USA/Mex/Central American: USA then Costa Rica, Guatemala and Panama
 - Seaboard Miami/N. CA: USA then Guatemala, Honduras
 - TMM Gulf-Mexico-Caribbean: USA then Costa Rica, Panama.

TABLE 16 (Conclusion)

4. Services that call at CARICOM and CACM ports, but not in the USA
 - Hamburg Sud (Joint Service): Europe, then Trinidad, Costa Rica, Jamaica
 - Seaboard SCANSAs: Costa Rica, Panama, Barbados, Guyana, Trinidad
 - Zim CA Express: Belize, Guatemala, Honduras, Jamaica and Panama.
5. Services that call at CARICOM ports, but not in the USA
 - CAGEMAs Windward Inter-Island service: Barbados, Dominica, Grenada, Saint Lucia, St Vincent, Trinidad (based on Vieux Fort, Saint Lucia)
 - Europe West Indies lines: Europe and Caricom: Barbados, Guyana, Suriname and Trinidad
 - CAGEMAs Guyana service: Guyana, Suriname and Trinidad (based on Port of Spain, Trinidad)
 - Maersk Inter-Island feeder: Barbados, Dominica, Grenada, Saint Lucia, Trinidad.
 - Maersk feeder: Jamaica, Bahamas.
 - Nordana Med/Caribbean: Europe then PR (for transshipment), Antigua, Barbados, Saint Lucia, St Kitts, and Trinidad.
6. Services that call at CACM ports, but not in the USA
 - Great White Fleet: calls within Central America and Central America to Europe.
 - Maersk N.Coast of SA II: Panama, Costa Rica

Source: Authors, based on conversations with carriers, carriers' web sites, and Containerization International www.ci-online.co.uk

Note: Calls other than CARICOM and CACM countries, the USA and Panama are not identified.

Table 17
INTER-REGIONAL LINER SHIPPING SERVICES IN THE CARIBBEAN, JUNE 2000

Country or Island	Number of regular liner shipping services	
	From/ to Europe	From/ to North America
Antigua		6
Anguilla		2
Aruba	1	3
Bahamas		2
Barbados	2	8
Belize		1
Bermuda		4
Bonaire		1
Cayenne	3	
Cayman Islands		5
Costa Rica	8	11
Cuba	2	
Curaçao	2	4
Dominica		3
Dominican Republic	6	18
El Salvador		1
Grenada		2
Guadeloupe	4	3
Guatemala	2	26
Guyana	3	4
Haiti		8
Honduras	2	22
Jamaica	4	20
Martinique	4	3
Montserrat		1
Nevis		2
Nicaragua		2
Panama	11	27
St. Barthelemy		2
St. Croix (Virgin Islands)		4
St. Eustatius		1
St. John (Virgin Islands)		2
St. Kitts		3
St. Lucia		6
St. Maarten		5
St. Thomas (Virgin Islands)		4
St. Vincent		4
Surinam	3	2
Tortola (Virgin Islands)		2
Trinidad	4	13
Turk Islands		2
Virgin Gorda (Virgin Islands)		2

Source: CompairData, <http://www.compairdata.com/>, 16. June 2000, as quoted in Estrada and Hoffmann (2000).

Note: Almost all services to North America are weekly. Most services to Europe are weekly or fortnightly. "North America" includes Mexico.

Table 18
FLEET DEPLOYMENT, CACM AND PANAMA

Vessel name Deployed in Central America	TEU	Year built	Vessel Type	Owner	Operator
Singapore Express	4,890	2000	FC	Costamare	Hapag-Lloyd
Tokyo Express	4,890	2000	FC	Hapag-Lloyd	Hapag-Lloyd
Dresden Express	4,639	1991	FC	Hapag-Lloyd	Hapag-Lloyd
Essen Express	4,639	1993	FC	Hapag-Lloyd	Hapag-Lloyd
Hannover Express	4,639	1991	FC	Hapag-Lloyd	Hapag-Lloyd
Hoechst Express	4,639	1991	FC	Hapag-Lloyd	Hapag-Lloyd
Leverkusen Express	4,639	1991	FC	Hapag-Lloyd	Hapag-Lloyd
Ludwigshafen Express	4,639	1992	FC	Hapag-Lloyd	Hapag-Lloyd
Paris Express	4,639	1994	FC	Hapag-Lloyd	Hapag-Lloyd
Stuttgart Express	4,639	1993	FC	Hapag-Lloyd	Hapag-Lloyd
Dusseldorf Express	4,612	1998	FC	Hapag-Lloyd	Hapag-Lloyd
London Express	4,612	1998	FC	Hapag-Lloyd	Hapag-Lloyd
Shanghai Express	4,612	1997	FC	Hapag-Lloyd	Hapag-Lloyd
Madison Maersk	4,437	1991	FC	Maersk Sealand	Maersk Sealand
Magleby Maersk	4,437	1990	FC	Maersk Sealand	Maersk Sealand
Majestic Maersk	4,437	1990	FC	Maersk Sealand	Maersk Sealand
Marchen Maersk	4,437	1988	FC	Maersk Sealand	Maersk Sealand
Maren Maersk	4,437	1989	FC	Maersk Sealand	Maersk Sealand
Marie Maersk	4,437	1990	FC	Maersk Sealand	Maersk Sealand
Marit Maersk	4,437	1988	FC	Maersk Sealand	Maersk Sealand
Mathilde Maersk	4,437	1989	FC	Maersk Sealand	Maersk Sealand
Mayview Maersk	4,437	1991	FC	Maersk Sealand	Maersk Sealand
McKinney Maersk	4,437	1991	FC	Maersk Sealand	Maersk Sealand
APL Turquoise	4,434	1996	FC	APL	APL
Glasgow Maersk	4,338	1999	FC	Maersk Sealand	Maersk Sealand
Dirch Maersk	4,306	1996	FC	Maersk Sealand	Maersk Sealand
Sealand Mercury	4,296	1995	FC	Maersk Sealand	Maersk Sealand
Sealand Racer	4,296	1996	FC	Maersk Sealand	Maersk Sealand
Sealand Champion	4,292	1995	FC	Maersk Sealand	Maersk Sealand
Sealand Charger	4,292	1997	FC	Maersk Sealand	Maersk Sealand
Sealand Eagle	4,292	1997	FC	Maersk Sealand	Maersk Sealand
Sealand Lightning	4,292	1997	FC	Maersk Sealand	Maersk Sealand
Sealand Meteor	4,292	1996	FC	Maersk Sealand	Maersk Sealand
Providence Bay	4,230	1994	FC	PONL	PONL
Ever Racer	4,229	1994	FC	Evergreen	Evergreen
Ever Reach	4,229	1994	FC	Evergreen	Evergreen
Ever Refine	4,229	1995	FC	Evergreen	Evergreen
Ever Renown	4,229	1994	FC	Evergreen	Evergreen
Ever Repute	4,229	1995	FC	Evergreen	Evergreen
Ever Result	4,229	1995	FC	Evergreen	Evergreen
Ever Reward	4,229	1994	FC	Evergreen	Evergreen
Ever Right	4,229	1993	FC	Evergreen	Evergreen
Ever Round	4,229	1993	FC	Evergreen	Evergreen
Ever Royal	4,229	1993	FC	Evergreen	Evergreen

Table 18 (continued)

Ever Divine	4,211	1998	FC	Evergreen	Evergreen
Peninsular Bay	4,180	1989	FC	PONL	PONL
MOL Danube	4,082	1992	FC	MOL	MOL
APL Alexandrite	3,821	1992	FC	APL	APL
APL Almandine	3,821	1993	FC	APL	APL
APL Amazonite	3,821	1993	FC	APL	APL
MOL Thames	3,820	1990	FC	MOL	MOL
MOL Elbe	3,806	1990	FC	MOL	MOL
La Seine	3,780	1988	FC	MOL	MOL
Northern Pioneer	3,538	1994	FC	NSB	Hanjin
APL Topaz	3,502	1988	FC	APL	APL
Ever Group	3,428	1986	FC	Evergreen	Evergreen
Congo	3,359	1998	FC	Detjen	Evergreen
Edinburgh	3,187	1973	FC	n.d.	CSCCL
APL Venezuela	3,091	2001	FC	Dohle	APL
MOL Triumph	3,090	1988	FC	MOL	MOL
MOL Independence	3,044	1986	FC	Toyo Sangy	MOL
Alligator Liberty	3,033	1986	FC	MOL	MOL
CSCCL Bremen	3,032	1988	FC	Target	CSCCL
Baikal Senator	3,005	1991	FC	Sovcomflot	Senator
Bremen Senator	3,005	1993	FC	Sovcomflot	Senator
German Senator	3,005	1992	FC	Sovcomflot	Senator
Hamburg Senator	3,005	1993	FC	Sovcomflot	Senator
Sovcomflot Senator	3,005	1993	FC	Sovcomflot	Senator
St Petersburg Senator	3,005	1992	FC	Sovcomflot	Senator
Vladivostok Senator	3,005	1992	FC	Sovcomflot	Senator
LT Genova	2,987	1993	FC	Lloyd Triestino	Lloyd Triestino
LT Trieste	2,987	1993	FC	Lloyd Triestino	Lloyd Triestino
P&O Nedlloyd Xiamen	2,986	1991	FC	Actinor	PONL
Ville De Mars	2,954	1990	FC	CMA CGM	CMA CGM
Hanjin Bremen	2,932	1991	FC	Danaos	Hanjin
Taronga	2,833	1996	RR	WWL	WWL
Pan Crystal	2,808	1996	FC	Detjen	CSCCL
Maersk Pelepas	2,732	2000	FC	Patjens	Maersk Sealand
Ever Gather	2,728	1984	FC	Evergreen	Evergreen
Ever Genius	2,728	1984	FC	Evergreen	Evergreen
Ever Gentle	2,728	1984	FC	Evergreen	Evergreen
Ever Govern	2,728	1985	FC	Evergreen	Evergreen
Ever Growth	2,728	1985	FC	Evergreen	Evergreen
Ever Guide	2,728	1983	FC	Evergreen	Evergreen
LT Going	2,728	1983	FC	Evergreen	Lloyd Triestino
LT Grand	2,728	1984	FC	Lloyd Triestino	Lloyd Triestino
Hanjin Felixstowe	2,692	1990	FC	Cardiff Marine	Hanjin
Hanjin Hamburg	2,692	1990	FC	Cardiff Marine	Hanjin
Hanjin Vancouver	2,692	1990	FC	Samartzis	Hanjin
P&O Nedlloyd Brisbane	2,686	1985	FC	PONL	PONL
P&O Nedlloyd Acapulco	2,556	2001	FC	B Schulte	PONL
P&O Nedlloyd Aconcagua	2,556	2001	FC	B Schulte	PONL

						Table 18 (continued)
P&O Nedlloyd Andes	2,556	2001	FC	B Schulte	PONL	
P&O Nedlloyd Atacama	2,556	2001	FC	B Schulte	PONL	
Donata Schulte	2,550	2001	FC	B Schulte	CSAV	
P&O Nedlloyd Altiplano	2,550	2001	FC	B Schulte	PONL	
P&O Nedlloyd Antisana	2,550	2001	FC	B Schulte	PONL	
CSAV Callao	2,524	2001	FC	Oskar Wehr	CSAV	
Priwall	2,480	1997	FC	Laeisz	Hanjin	
CMA CGM Monet	2,480	1995	FC	Toepfer	CMA CGM	
CMA CGM Seurat	2,480	1996	FC	Vinnen	CMA CGM	
Sea Cheetah	2,476	2000	FC	H Buss	Hamburg Sud	
Cielo del Canada	2,470	1998	FC	H Buss	Italia	
Cielo di San Francisco	2,470	1998	FC	Oltmann	Italia	
CMA CGM Chilli	2,470	2000	FC	Oltmann	CMA CGM	
Nedlloyd Clement	2,470	1983	FC	PONL	PONL	
CSAV Chicago	2,468	1997	FC	Dohle	CSAV	
Taiko	2,455	1984	RR	WWL	WWL	
Tampa	2,455	1984	RR	WWL	WWL	
Texas	2,455	1984	RR	WWL	WWL	
CMA CGM Delacroix	2,442	1998	FC	Martime	CMA CGM	
Amerigo Vespucci	2,232	1989	FC	Italia	Italia	
CMA CGM La Tour	2,226	2001	FC	CMA CGM	CMA CGM	
CMA CGM Manet	2,226	2001	FC	CMA CGM	CMA CGM	
CMA CGM Matisse	2,226	1999	FC	CMA CGM	CMA CGM	
CMA CGM Utrillo	2,226	1999	FC	CMA CGM	CMA CGM	
Jaguar Max	2,226	2000	FC	Enterprises	Maersk Sealand	
Lion Max	2,226	2000	FC	Enterprises	K Line	
Ocelot Max	2,226	2000	FC	Enterprises	CCNI	
Puma Max	2,226	2000	FC	Enterprises	CCNI	
Las Americas Bridge	2,226	1998	FC	ER Schifffahrt	K Line	
Nexo Maersk	2,226	2001	FC	Maersk Sealand	Maersk Sealand	
Nysted Maersk	2,226	2001	FC	Maersk Sealand	Maersk Sealand	
Andreas	2,226	1998	FC	Rickmers	K Line	
Contship Auckland	2,226	1998	FC	Rickmers	Contship	
Contship London	2,226	1997	FC	Rickmers	Contship	
Contship Rome	2,226	1998	FC	Rickmers	Contship	
Contship Washington	2,226	1998	FC	Rickmers	Contship	
CSAV Atlanta	2,226	1998	FC	Rickmers	CSAV	
Marfret Provence	2,226	1998	FC	Rickmers	Marfret	
Sea Puma	2,226	1998	FC	Rickmers	CSAV	
Maipo	2,196	1984	FC	Inman Ent	CSAV	
Humboldt Express	2,181	1984	FC	Hapag-Lloyd	Hapag-Lloyd	
Santiago Express	2,181	1984	FC	Hapag-Lloyd	Hapag-Lloyd	
MOL Valparaiso	2,135	1999	FC	Mitsui	MOL	
Cap Blanco	2,130	1984	FC	Ofer	Hamburg Sud	
APL Chile	2,109	1997	FC	Rickmers	CAT	
CCNI Antartico	2,109	1997	FC	Rickmers	Columbus	
Sea Jaguar	2,109	1997	FC	Rickmers	CAT	

Table 18 (continued)

Nordeagle	2,105	1997	FC	Klaus Oldendorff	Zim
Cielo di Valencia	2,097	1987	FC	JDB	Italia
Marivia	2,078	2001	FC	Dauelsberg	Maersk Sealand
CMA CGM Paris	2,078	1997	FC	Projex	CMA CGM
Cap Domingo	2,070	1984	FC	Ofer	Hamburg Sud
P&O Nedlloyd Kingston	2,052	1997	FC	Offen	PONL
Santa Giuliana	2,051	1996	FC	Offen	CCNI
Dole Chile	2,046	1999	FC	Dole Ocean	Dole Ocean
Dole Colombia	2,046	1999	FC	Dole Ocean	Dole Ocean
Cielo d'America	2,008	1998	FC	H Buss	Italia
Talisman	1,937	2000	RR	WWL	WWL
Tamerlane	1,937	2001	RR	WWL	WWL
Tamesis	1,937	2000	RR	WWL	WWL
Tarago	1,937	2000	RR	WWL	WWL
Ever Loading	1,894	1983	FC	Technomar	Evergreen
Tampere	1,814	1979	RR	WWL	WWL
P&O Nedlloyd Caribbean	1,808	1994	FC	Offen	PONL
Talabot	1,778	1979	RR	WWL	WWL
Tapiola	1,772	1978	RR	WWL	WWL
Toba	1,772	1979	RR	WWL	WWL
Tourcoing	1,772	1978	RR	WWL	WWL
Santa Isabella	1,742	1986	FC	Offen	MOL
Maruba Trader	1,728	1998	FC	H Buss	Maruba
CMA CGM Karukera	1,728	1996	FC	Komrowski	CMA CGM
Lykes Pathfinder	1,728	1997	FC	Oskar Wehr	Lykes
Wehr Muden	1,728	1998	FC	Oskar Wehr	Unknown
Columbus Hong Kong	1,728	1995	FC	Rickmers	Columbus
Lykes Crusader	1,728	1998	FC	Rickmers	Lykes
Venezuela	1,700	1987	FC	Vinnen	Crowley
Uni Patriot	1,618	1999	FC	Uniglory	Evergreen
Columbia	1,610	1996	FC	Dioryx	Crowley
Maersk Tennessee	1,606	1994	FC	Maersk Sealand	Maersk Sealand
Maersk Texas	1,606	1994	FC	Maersk Sealand	Maersk Sealand
Conti Asia	1,599	1993	FC	Conti Reederei	MOL
Caribia Express	1,560	1976	FC	Costamare	Hapag-Lloyd
Sierra Express	1,560	1977	FC	Costamare	Hapag-Lloyd
Columbus Pacific	1,518	1996	FC	Martime	Columbus
Cielo del Chile	1,512	1994	FC	Offen	Italia
Maersk Colorado	1,410	1992	FC	Maersk Sealand	Maersk Sealand
Queensland Star	1,360	1972	FC	PONL	PONL
America Star	1,334	1971	FC	PONL	PONL
Melbourne Star	1,334	1971	FC	PONL	PONL
Sydney Star	1,334	1972	FC	PONL	PONL
Marienborg	1,316	1990	FC	Maersk Sealand	Maersk Sealand
Tobias Maersk	1,316	1990	FC	Maersk Sealand	Maersk Sealand
Torben Maersk	1,316	1990	FC	Maersk Sealand	Maersk Sealand
Trein Maersk	1,316	1990	FC	Maersk Sealand	Maersk Sealand

Table 18 (continued)

Cielo del Peru	1,302	1998	BC	Oldendorff	Italia
Cielo di Caracas	1,300	1998	SC	Briese	Italia
Cielo del Caribe	1,300	2000	FC	Oldendorff	Italia
Andino	1,291	1993	FC	CCNI	Lykes
Argentina Star	1,230	1979	FC	PONL	PONL
California	1,183	1989	FC	Italia	Italia
Cape Sable	1,170	1995	FC	Hanse B	Maersk Sealand
La Bonita	1,168	1993	FC	Nissan Kai	NYK
Laurita	1,162	1998	FC	Rickmers	Coral
Settsu	1,157	1997	FC	Interocean	NYK
Sanuki	1,157	1997	FC	NYK	NYK
Shima	1,157	1997	FC	NYK	NYK
Sumida	1,157	1997	FC	NYK	NYK
Soga	1,157	1998	FC	Tagashira Kaiun	NYK
Maersk Rio Haina	1,139	1993	FC	Rohden Ber	Maersk Sealand
Pollux	1,129	1998	FC	Alpha Ship	Maersk Sealand
MOL Amazonas	1,122	1996	FC	Contal Shp	MOL
Jade Trader	1,122	1995	FC	H Buss	Coral
Maersk La Guaira	1,122	1995	FC	H Buss	Maersk Sealand
Hispaniola	1,122	1996	FC	Heinz-Corleis	CMA CGM
Jork	1,122	1996	FC	Rischer	Maersk Sealand
MOL Manaus	1,104	1995	FC	Schepers	MOL
EWL Costa Rica	1,033	1983	SC	MTC	EWIL
Olympia	1,022	1986	FC	MTC	Coral
EWL Central America	1,020	1986	FC	Thien & Heyenga	EWIL
P&O Nedlloyd Cartagena	1,012	1994	FC	Eckhoff	PONL
P&O Nedlloyd Curacao	1,012	1993	FC	Schulte Group	PONL
EWL Suriname	1,012	1994	FC	Vinnen	EWIL
EWL Venezuela	1,006	1984	FC	MTC	EWIL
MOL Kauri	1,001	1996	FC	MOL	MOL
MOL Silver Fern	1,001	1996	FC	Shoei Kisen	MOL
Herm Kiepe	976	1997	FC	K Schepers	Maersk Sealand
Battersea Bridge	973	1992	SC	Silver Line	Lykes
Maersk Santo Tomas	970	1992	FC	DMK Leasin	Maersk Sealand
Courtney L	950	1992	FC	Great White Fleet	Great White Fleet
Edyth L	950	1990	FC	Great White Fleet	Great White Fleet
Frances L	950	1991	FC	Great White Fleet	Great White Fleet
Dole Costa Rica	910	1991	FC	Tropical Italiana	Dole Ocean
Dole Honduras	910	1991	FC	Tropical Italiana	Dole Ocean
Berulan	907	1995	FC	Rickmers	Maersk Sealand
Celia	884	1986	FC	Rickmers	Coral
Vilma VIII	884	1987	FC	Rickmers	Coral
Seaboard Voyager	859	1985	RR	Seaboard Marine	Seaboard Marine
Coral Wilma	856	1984	FC	CF Peters	Coral
APL Belem	841	1995	FC	CNC	MOL
Box New York	797	2000	FC	Urkmez	PONL
Seaboard Costa Rica	792	1984	RR	Seaboard Marine	Seaboard Marine
Seaboard Victory	792	1983	RR	Seaboard Marine	Seaboard Marine

Table 18 (continued)

Mercosul Uruguay	740	1997	SC	Hartmann	PONL
Yardimci	726	1997	FC	Moliva	PONL
Amalia	724	1988	FC	Millenium	Coral
Rita	724	1989	FC	Millenium	Coral
Ana	712	1988	SC	Millenium	Coral
Green Handsome	694	1976	CC	Evergreen	Evergreen
Green Humanity	694	1975	CC	Evergreen	Evergreen
Seaboard Intrepid	691	1980	RR	Seaboard Marine	Seaboard Marine
Global Africa	608	1994	RR	GTO	GTO
APL Miami	600	1999	SC	Astor	APL
Oasis	589	1986	RR	Oceanbulk	GTO
Sentinel	583	1989	RR	Oceanbulk	GTO
P&O Nedlloyd Panama	580	1997	SC	Urkmez	PONL
Emerald Sea	576	1984	RR	Fesco	Lykes
Caribe Merchant	558	1984	RR	Interorient	Crowley
Crowley Universe	553	1986	RR	Armada Shpp	Crowley
Express	553	1986	RR	Armada Shpp	Crowley
Stjerneborg	530	1979	RR	Demline	Nordana
Schackenborg	526	1979	RR	Dannebrog	Nordana
Skanderborg	526	1979	RR	Dannebrog	Nordana
Skodsborg	526	1979	RR	Dannebrog	Nordana
Arafat	520	1978	SC	UASC	Lykes
Hafentor	516	1998	SC	Phoenix Reederei	APL
MOL Caribe	516	1999	SC	Phoenix Reederei	APL
Green Better	510	1984	FC	Evergreen	Evergreen
Green Breeze	510	1984	FC	Evergreen	Evergreen
Green Bridge	510	1984	FC	Evergreen	Evergreen
Europe Feeder	494	1993	BB	Zeppenfeld	Maersk Sealand
Crowley Ambassador	400	1980	RR	Interorient	Crowley
Crowley Senator	400	1981	RR	Interorient	Crowley
Stena Tender	394	1983	RR	Stena	Crowley
Mar Caribe	385	1985	RR	Armada Shpp	Crowley
Katharina	376	1982	SC	n.d.	Lykes
Assets Victory	374	1980	SC	Assets	Assets
Bute	372	1979	SC	Star Express	Lykes
Hornbay	322	1990	RR	Horn	Horn
Horncap	322	1991	RR	Horn	Horn
Horncliff	322	1992	RR	Horn	Horn
Concorde Spirit	299	1991	BB	Seatrade Group	Concorde
Chiquita Belgie	296	1992	BB	Great White Fleet	Great White Fleet
Chiquita Deutschland	296	1991	BB	Great White Fleet	Great White Fleet
Chiquita Italia	296	1992	BB	Great White Fleet	Great White Fleet
Chiquita Nederland	296	1991	BB	Great White Fleet	Great White Fleet
Chiquita Scandinavia	296	1992	BB	Great White Fleet	Great White Fleet
Chiquita Schweiz	296	1992	BB	Great White Fleet	Great White Fleet
Ocean Hanne	274	1991	RR	Orion Red	King Ocean
Marie Therese	270	1990	BB	Harmstorf	Nordana
Dole Africa	264	1994	BB	Dole Ocean	Dole Ocean

Table 18 (conclusion)

Dole Asia	264	1994	BB	Dole Ocean	Dole Ocean
Dole Europa	264	1994	BB	Dole Ocean	Dole Ocean
Cote D'Ivorian Star	220	1998	BB	Kyowa Kise	Great White Fleet
Polarstern	220	1998	BB	Rudolf A O	Great White Fleet
Colombian Star	220	1998	BB	Southern R	Great White Fleet
Chiquita Bremen	202	1992	BB	Great White Fleet	Great White Fleet
Chiquita Rostock	202	1993	BB	Great White Fleet	Great White Fleet
Ola	132	1978	FC	Melfi Marine	Melfi
Chiquita Brenda	126	1993	BB	Great White Fleet	Great White Fleet
Chiquita Elke	126	1994	BB	Great White Fleet	Great White Fleet
Chiquita Joy	126	1994	BB	Great White Fleet	Great White Fleet
Estrella I	122	1978	FC	Melfi Marine	Coral
Cape Cavo	116	1991	SC	Hanse B	Seatrade Group
Cape Vincente	116	1991	SC	Hanse B	Seatrade Group
Chiquita Jean	98	1993	BB	Great White Fleet	Great White Fleet
Chiquita Frances	96	1992	BB	Great White Fleet	Great White Fleet
Pacific	94	1996	SC	Seatrade Group	Seatrade Group
Prince of Waves	90	1993	SC	n.d.	Seatrade Group
Painkira	24	1968	RC	Matra	Matra
TOTAL: 301	610 593	Average: 1992			

Source: CI-online, January 2002

Notes: FC = Full Containership; RR = Ro-Ro vessel.

Table 19
FLEET DEPLOYMENT, CARIBBEAN ISLANDS

Vessel name Deployed in the Caribbean	TEU	Year built	Vessel Type	Owner	Operator
Sealand Value	3,918	1984	FC	Maersk Sealand	Maersk Sealand
Sealand Quality	3,460	1985	FC	Maersk Sealand	Maersk Sealand
Sealand Commitment	3,460	1985	FC	Maersk Sealand	Maersk Sealand
Sealand Atlantic	3,460	1985	FC	Maersk Sealand	Maersk Sealand
Sealand Integrity	3,460	1985	FC	Maersk Sealand	Maersk Sealand
Sealand Performance	3,460	1985	FC	Maersk Sealand	Maersk Sealand
Zim Asia	3,429	1996	FC	Zim	Zim
Zim Pacific	3,429	1996	FC	Zim	Zim
Zim Atlantic	3,429	1996	FC	Zim	Zim
Zim Jamaica	3,429	1997	FC	Zim	Zim
Zim Europa	3,429	1997	FC	Zim	Zim
Zim USA	3,429	1997	FC	Zim	Zim
Zim Iberia	3,429	1997	FC	Zim	Zim
Zim China	3,429	1997	FC	Zim	Zim
Edinburgh	3,187	1973	FC	n.d.	CSCL
CSCL Bremen	3,032	1988	FC	Target	CSCL
Zim America	3,029	1990	FC	Zim	Zim
Zim Canada	3,029	1990	FC	Zim	Zim
Zim Italia	3,029	1991	FC	Zim	Zim
Zim Korea	3,029	1991	FC	Zim	Zim
Zim Japan	3,029	1991	FC	Zim	Zim
Zim Hong Kong	3,029	1992	FC	Zim	Zim
Zim Israel	3,029	1992	FC	Zim	Zim
P&O Nedlloyd Xiamen	2,986	1991	FC	Actinor	PONL
Ville De Mars	2,954	1990	FC	CMA CGM	CMA CGM
MSC Florida	2,810	1997	FC	Hansa Shipmgmt	MSC
Pan Crystal	2,808	1996	FC	Detjen	CSCL
MSC Andes	2,764	2001	FC	G Winter	MSC
Westermoor	2,764	2001	FC	Hans Peterson	Maersk Sealand
Maersk Pelepas	2,732	2000	FC	Patjens	Maersk Sealand
P&O Nedlloyd Brisbane	2,686	1985	FC	PONL	PONL
P&O Nedlloyd Altiplano	2,550	2001	FC	B Schulte	PONL
CSAV Callao	2,524	2001	FC	Oskar Wehr	CSAV
Libra New York	2,524	2001	FC	Oskar Wehr	Libra
CMA CGM Monet	2,480	1995	FC	Toepfer	CMA CGM
CMA CGM Seurat	2,480	1996	FC	Vinnen	CMA CGM
Sea Cheetah	2,476	2000	FC	H Buss	Hamburg Sud
Maersk Valencia	2,474	1999	FC	ER Schifffahrt	Maersk Sealand
Maersk Mendoza	2,474	1999	FC	ER Schifffahrt	Maersk Sealand
CMA CGM Chili	2,470	2000	FC	Oltmann	CMA CGM
Nedlloyd Clement	2,470	1983	FC	PONL	PONL
Brasilia	2,460	1997	FC	Conti Reederei	CSAV
MSC Chile	2,460	1997	FC	Conti Reederei	MSC

Table 19 (continued)

MSC Lauren	2,450	1982	FC	MSC	MSC
CMA CGM Delacroix	2,442	1998	FC	Martime	CMA CGM
P&O Nedlloyd Eagle	2,442	1998	FC	Martime	PONL
Contship Inspiration	2,394	1994	FC	Zodiac	Contship
Lykes Commander	2,394	1994	FC	Zodiac	Lykes
TMM Nuevo Leon	2,394	1994	FC	Zodiac	TMM
TMM Sonora	2,394	1994	FC	Zodiac	TMM
Alianca Ipanema	2,233	1992	RC	Transroll	Alianca
Alianca Maracana	2,233	1992	RC	Transroll	Alianca
CMA CGM Matisse	2,226	1999	FC	CMA CGM	CMA CGM
CMA CGM Utrillo	2,226	1999	FC	CMA CGM	CMA CGM
CMA CGM Manet	2,226	2001	FC	CMA CGM	CMA CGM
CMA CGM La Tour	2,226	2001	FC	CMA CGM	CMA CGM
Jaguar Max	2,226	2000	FC	Enterprises	Maersk Sealand
Nexo Maersk	2,226	2001	FC	Maersk Sealand	Maersk Sealand
Nysted Maersk	2,226	2001	FC	Maersk Sealand	Maersk Sealand
Contship Rome	2,226	1998	FC	Rickmers	Contship
Contship London	2,226	1997	FC	Rickmers	Contship
Contship Washington	2,226	1998	FC	Rickmers	Contship
Contship Auckland	2,226	1998	FC	Rickmers	Contship
Marfret Provence	2,226	1998	FC	Rickmers	Marfret
Maipo	2,196	1984	FC	Inman Ent	CSAV
Santiago Express	2,181	1984	FC	Hapag-Lloyd	Hapag-Lloyd
Humboldt Express	2,181	1984	FC	Hapag-Lloyd	Hapag-Lloyd
Cap Blanco	2,130	1984	FC	Ofer	Hamburg Sud
Nordhawk	2,113	1997	FC	Klaus Oldendorff	CSAV
P&O Nedlloyd Falcon	2,097	1987	FC	JDB	MSC
Safmarine Tugela	2,078	1995	FC	Dauelsberg	Maersk Sealand
Lobivia	2,078	2001	FC	Dauelsberg	Maersk Sealand
Marivia	2,078	2001	FC	Dauelsberg	Maersk Sealand
CMA CGM Paris	2,078	1997	FC	Projex	CMA CGM
Cap Domingo	2,070	1984	FC	Ofer	Hamburg Sud
Safmarine Maluti	2,063	1995	FC	Dauelsberg	Maersk Sealand
P&O Nedlloyd Kingston	2,052	1997	FC	Offen	PONL
Claes Maersk	1,879	1994	FC	Maersk Sealand	Maersk Sealand
Cecilie Maersk	1,879	1994	FC	Maersk Sealand	Maersk Sealand
Maersk California	1,879	1994	FC	Maersk Sealand	Safmarine
CCNI Potrerillos	1,830	1997	BC	Rickmers	CCNI
CCNI Arauco	1,830	1999	BC	Rickmers	CCNI
CCNI Chagres	1,830	1998	BC	Rickmers	CCNI
CCNI Atacama	1,830	1998	BC	Schulte Group	CCNI
CCNI Angol	1,830	1998	BC	Schulte Group	CCNI
CSAV Valencia	1,830	1998	BC	Schulte Group	CSAV
P&O Nedlloyd Caribbean	1,808	1994	FC	Offen	PONL
MSC Recife	1,800	1985	BC	Dioryx	MSC
MSC Bahia	1,799	1989	FC	Magnus	MSC

Table 19 (continued)

MSC Quito	1,798	1988	FC	H Schuldt	MSC
MSC Callao	1,798	1988	FC	H Schuldt	MSC
P&O Nedlloyd Houston	1,779	1983	FC	PONL	PONL
P&O Nedlloyd Veracruz	1,779	1984	FC	PONL	PONL
P&O Nedlloyd Buenos Aires	1,779	1984	FC	PONL	PONL
MSC Amazonia	1,743	1989	FC	Laeisz	MSC
Safmarine Cotonou	1,737	1986	FC	Safmarine	Maersk Sealand
Panatantic	1,728	1995	FC	ER Schiffahrt	Montemar
CMA CGM Karukera	1,728	1996	FC	Komrowski	CMA CGM
Elqui	1,728	1999	FC	Oskar Wehr	Montemar
Zim Sao Paulo II	1,728	1997	FC	Rickmers	Zim
MSC Katrina	1,727	1979	FC	MSC	MSC
MSC Yokohoma	1,725	1979	FC	Costamare	MSC
August Oldendorff	1,708	1979	BC	Leif Hoegh	Oldendorff
Max Oldendorff	1,708	1979	BC	Leif Hoegh	Oldendorff
Venezuela	1,700	1987	FC	Vinnen	Crowley
Zim Buenos Aires	1,684	1995	FC	Schepers	Zim
Fort Fleur d'Epee	1,668	1980	FC	CMA CGM	CMA CGM
Fort Royal	1,668	1979	FC	CMA CGM	CMA CGM
Edward Oldendorff	1,656	1984	SC	Oldendorff	Oldendorff
Gitta Oldendorff	1,656	1984	SC	Oldendorff	Oldendorff
Ingrid Oldendorff	1,656	1984	SC	Oldendorff	Oldendorff
Albert Oldendorff	1,656	1984	SC	Oldendorff	Oldendorff
Providence	1,654	1995	FC	Marfret	Marfret
Fort Desaix	1,645	1980	FC	CMA CGM	CMA CGM
Douce France	1,645	1980	FC	CMA CGM	CMA CGM
Hansa Commodore	1,645	1997	FC	Leonhardt	Hanjin
Hansa Caledonia	1,645	1998	FC	Leonhardt	Hanjin
CSAV Barcelona	1,644	1999	BC	Schulte Group	CSAV
CSAV Genova	1,644	1999	BC	Schulte Group	CSAV
Columbia	1,610	1996	FC	Dioryx	Crowley
Atlantic Trader	1,608	1996	FC	H Buss	Dole Ocean
Calaparana	1,608	1998	FC	Vinnen	Costa
Safmarine Infanta	1,584	1981	FC	Target	Safmarine
Caribia Express	1,560	1976	FC	Costamare	Hapag-Lloyd
Sierra Express	1,560	1977	FC	Costamare	Hapag-Lloyd
MSC Australia	1,552	1982	FC	Tsakos	MSC
Clara Maersk	1,550	1992	FC	Maersk Sealand	Maersk Sealand
Christian Maersk	1,550	1992	FC	Maersk Sealand	Maersk Sealand
Algarve	1,540	1998	BC	FH Bertling	CCNI
MSC Namibia	1,538	1977	FC	Costamare	MSC
Cala Piedad	1,452	1995	FC	G Ritscher	Costa
CSX Expedition	1,446	1973	FC	CSX Lines	CSX Lines
CSX Hawaii	1,446	1973	FC	CSX Lines	CSX Lines

Table 19 (continued)

Queensland Star	1,360	1972	FC	PONL	PONL
CSX Crusader	1,342	1969	FC	CSX Lines	CSX Lines
CSX Challenger	1,342	1968	FC	CSX Lines	CSX Lines
Intrepido	1,341	1991	RC	Transroll	Alianca
Independente	1,341	1992	RC	Transroll	Alianca
Melbourne Star	1,334	1971	FC	PONL	PONL
America Star	1,334	1971	FC	PONL	PONL
Sydney Star	1,334	1972	FC	PONL	PONL
DG Columbia	1,330	1993	RC	DGN	DGN
MSC Denisse	1,323	1978	FC	MSC	MSC
Marcon	1,318	1984	FC	Jorg Kopping	Maersk Sealand
Trein Maersk	1,316	1990	FC	Maersk Sealand	Maersk Sealand
Tobias Maersk	1,316	1990	FC	Maersk Sealand	Maersk Sealand
Marienburg	1,316	1990	FC	Maersk Sealand	Maersk Sealand
Torben Maersk	1,316	1990	FC	Maersk Sealand	Maersk Sealand
Guayama	1,250	1969	FC	Navieras	Navieras
Argentina Star	1,230	1979	FC	PONL	PONL
Columbus Canterbury	1,211	1981	FC	Hamburg Sud	Columbus
Columbus Victoria	1,211	1979	FC	Ofer	Columbus
Columbus Canada	1,211	1979	FC	Ofer	Columbus
Carolina	1,200	1971	FC	Navieras	Navieras
Humacao	1,200	1968	FC	Navieras	Navieras
Mayaguez	1,200	1968	FC	Navieras	Navieras
Tropic Atlantic	1,174	1999	FC	Kent	Tropical
Tropic Canada	1,174	2000	FC	Kent	Tropical
Cape Sable	1,170	1995	FC	Hanse B	Maersk Sealand
Zim Houston III	1,162	1993	FC	Oltmann	Zim
CMA CGM St Martin	1,162	1998	FC	Rickmers	CMA CGM
Laurita	1,162	1998	FC	Rickmers	Coral
Maria Rickmers	1,162	1993	FC	Rickmers	Marfret
Zim Mexico III	1,162	1993	FC	Rickmers	Zim
Zim Caribe IV	1,162	1997	FC	Rickmers	Zim
Columbus Queensland	1,157	1979	FC	Ofer	Columbus
Maersk Rio Haina	1,139	1993	FC	Rohden Ber	Maersk Sealand
CSAV Livorno	1,130	1996	BC	Oldendorff	CSAV
Pollux	1,129	1998	FC	Alpha Ship	Maersk Sealand
Jade Trader	1,122	1995	FC	H Buss	Coral
Hispaniola	1,122	1996	FC	Heinz-Corleis	CMA CGM
Maersk San Juan	1,120	1993	FC	Rohden Ber	Maersk Sealand
Katrin S	1,104	1995	FC	Schepers	Maersk Sealand
Stadt Munchen	1,102	1999	FC	Thien & Heyenga	Maersk Sealand
EWL Costa Rica	1,033	1983	SC	MTC	EWIL
Fortaleza	1,024	1970	TB	Crowley	Crowley
Jacksonville	1,024	1970	TB	Crowley	Crowley
Miami	1,024	1976	TB	Crowley	Crowley
San Juan	1,024	1976	TB	Crowley	Crowley
Ponce	1,024	1975	TB	Crowley	Crowley

Table 19 (continued)

Olympia	1,022	1986	FC	MTC	Coral
EWL Central America	1,020	1986	FC	Thien & Heyenga	EWIL
EWL Antilles	1,016	1993	FC	Leonhardt	EWIL
EWL West Indies	1,016	1996	FC	Leonhardt	EWIL
Melbridge Berlin	1,016	1993	FC	Leonhardt	MelBridge
P&O Nedlloyd Cartagena	1,012	1994	FC	Eckhoff	PONL
Melbridge Bilbao	1,012	1996	FC	Jan Kahrs	MelBridge
P&O Nedlloyd Curacao	1,012	1993	FC	Schulte Group	PONL
EWL Suriname	1,012	1994	FC	Vinnen	EWIL
EWL Venezuela	1,006	1984	FC	MTC	EWIL
Tropic Caribe	990	2001	SC	Tropical	Tropical
Nirint Voyager	962	1999	FC	Genchart	Nirint
Ridvan Ozerler	951	1998	FC	Pinat	Maersk Sealand
Dole Honduras	910	1991	FC	Tropical Italiana	Dole Ocean
EWL Trinidad	908	1990	FC	Wagenborg	EWIL
Cala Ponente	907	2000	FC	Danz & Tie	Costa
Sea Gale	907	1995	FC	Danz & Tie	Crowley
Sea Cloud	907	1996	FC	Manfred Draxl	Crowley
Aurora	907	1995	FC	Oltmann	Tropical
Angela Jurgens	889	1999	FC	Jurgens	CMA CGM
Vilma VIII	884	1987	FC	Rickmers	Coral
Celia	884	1986	FC	Rickmers	Coral
Coral Wilma	856	1984	FC	CF Peters	Coral
Cagama St Lucia	812	1999	FC	Urkmez Grp	Maersk Sealand
Sea-Barge Trader	800	1992	TB	Sea-Barge	Sea-Barge
Cala Puebla	800	1999	FC	Urkmez	Costa
Box New York	797	2000	FC	Urkmez	PONL
El Conquistador	796	1978	TB	Crowley	Crowley
El Rey	796	1979	TB	Crowley	Crowley
La Princesa	796	1979	TB	Crowley	Crowley
La Reina	796	1978	TB	Crowley	Crowley
Columbia Trader	760		TB	Sea-Barge	Sea-Barge
Mercosul Uruguay	740	1997	SC	Hartmann	PONL
Yardimci	726	1997	FC	Moliva	PONL
Amalia	724	1988	FC	Millenium	Coral
Rita	724	1989	FC	Millenium	Coral
Ana	712	1988	SC	Millenium	Coral
Mira J	698	1997	FC	Jungerhans	Maersk Sealand
Green Handsome	694	1976	CC	Evergreen	Evergreen
Green Humanity	694	1975	CC	Evergreen	Evergreen
Seaboard Express	691	1980	RR	Seaboard Marine	Seaboard Marine
Frota Belem	666	1994	SC	Frota Oceanica	Frota Oceanica
Frotamans	666	1994	SC	Frota Oceanica	Frota Oceanica
Industrial Challenger	640	2000	BC	IMC (USA)	IMC (USA)
Industrial Chief	640	2000	BC	Jungerhans	IMC (USA)
Industrial Charger	640	2000	BC	Jungerhans	IMC (USA)

Table 19 (continued)

Industrial Century	640	2001	BC	Jungerhans	IMC (USA)
Heinrich J	640	1998	FC	Jungerhans	SeaFreight
Seaboard Liberty	600	1997	BB	KG Fisser	Seaboard Marine
Zim Kingston IV	591	2001	FC	Harren	Zim
Anibal	584	1998	SC	Zeppenfeld	Maersk Sealand
America Feeder	584	1997	SC	Zeppenfeld	SeaFreight
Husum	582	1983	FC	Thien & Heyenga	CMA CGM
P&O Nedlloyd Panama	580	1997	SC	Urkmez	PONL
Sea-Barge 102	576	1988	TB	Sea-Barge	Sea-Barge
Sea-Barge 101	576	1988	TB	Sea-Barge	Sea-Barge
Stena Clipper	568	1978	RR	Stena	Crowley
Crowley Sun	553	1986	RR	Armada Shpp	Crowley
Stjerneborg	530	1979	RR	Demline	Nordana
Skodsborg	526	1979	RR	Dannebrog	Nordana
Schackenborg	526	1979	RR	Dannebrog	Nordana
Skanderborg	526	1979	RR	Dannebrog	Nordana
Jade	519	1997	FC	MTC	Crowley
Topas	519	1999	SC	MTC	Maersk Sealand
Sea Cherokee	518	1999	FC	Komrowski	CAT
Hafentor	516	1998	SC	Phoenix Reederei	APL
MOL Caribe	516	1999	SC	Phoenix Reederei	APL
Green Breeze	510	1984	FC	Evergreen	Evergreen
Green Better	510	1984	FC	Evergreen	Evergreen
Green Bridge	510	1984	FC	Evergreen	Evergreen
Orso	510	2000	SC	Phoenix Reederei	Crowley
Hub Achiever	504	1980	FC	Brodrene K	King Ocean
Europe Feeder	494	1993	BB	Zeppenfeld	Maersk Sealand
Fortunia	490	1996	FC	MTC	SeaFreight
Cala Palma	485	2000	SC	Orsero Grp	Costa
Cala Pedra	485	2000	BC	Orsero Grp	Costa
Sea Express	480	1978	BB	Navigo Mgm	Frota Oceanica
Bakkafoss	458	1982	SC	Eimskip	MSC
Mexica	445	1984	SC	Firico Shp	Stinnes
Olmecca	445	1983	SC	Myrrha Shp	Stinnes
Zim Honduras	432	1997	SC	Harren	Zim
Azteca	428	1985	SC	Hans Kruge	Stinnes
Zapoteca	428	1984	SC	Jutha	Stinnes
Nirint Traveller	428	1982	SC	Pikey Nav	Nirint
Melfi Atlantic	418	1993	SC	Thien & Heyenga	Coral
Seaboard Endeavor	406	1998	BB	K Braack	Seaboard Marine
Nuevitas	400	1991	SC	Machaira Shpp	Coral
Mariel	400	1991	SC	Mecata Shpp	Coral
Tropic Sun	400	1992	RC	Tropical	Tropical
Tropic Tide	400	1993	RC	Tropical	Tropical
Cala Pino	397	1999	BC	Orsero Grp	Costa
Cala Pula	397	1999	BC	Orsero Grp	Costa

Table 19 (continued)

Stena Timer	394	1982	RR	Stena	Crowley
Industrial Accord	390	1999	BB	Briese	IMC (USA)
Crown Ruby	388	1987	BC	n.d.	Dole Ocean
Sea Explorer	384	1997	SC	Jungerhans	CAT
P&O Nedlloyd Trinidad	384	1997	SC	Jungerhans	PONL
Nirint Explorer	380	1977	RR	n.d.	Nirint
SCM Mexico	377	2000	SC	Briese	Evergreen
Stadt Kiel	373	1996	FC	Thien & Heyenga	Cagema
Seaboard Freedom	372	1998	SC	KG Fisser	Seaboard Marine
Nirint Progress	371	1978	RR	n.d.	Nirint
Industrial Future	360	1999	BB	H Buss	IMC (USA)
Industrial Horizon	360	1999	BB	H Buss	IMC (USA)
Industrial Frontier	360	2000	BB	H Buss	IMC (USA)
Industrial Millenium	360	1998	SC	Interscan	IMC (USA)
MSC Bahamas	340	1991	FC	Lauterjung	MSC
Tyr	323	1997	SC	Feederlines BV	Tecmarine
Hornbay	322	1990	RR	Horn	Horn
Horncap	322	1991	RR	Horn	Horn
Horncliff	322	1992	RR	Horn	Horn
Southampton Star	306	1999	SC	Orient Marine	Geest
Solent Star	306	2001	SC	Orient Marine	Geest
Helen T	301	1998	BB	R Schoning	Tropical
Anne Catharina	298	1986	SC	J Claussen	Cagema
Tropic Palm	296	1978	RR	Tropical	Tropical
Lengai	290	1997	SC	n.d.	Tecmarine
Morant Bay	282	1981	RR	Seaboard Marine	Seaboard Marine
Santa Lucia	276	1999	SC	Seatrade Group	Geest
Santa Maria	276	1985	SC	Seatrade Group	Geest
Marie Therese	270	1990	BB	Harmstorf	Nordana
Dole Africa	264	1994	BB	Dole Ocean	Dole Ocean
Dole Asia	264	1994	BB	Dole Ocean	Dole Ocean
Dole Europa	264	1994	BB	Dole Ocean	Dole Ocean
Jan Caribe	262	1988	SC	Bahia Shpp	Thompson
Ivory Dawn	256	1991	SC	Unicool	Marfret
Ivory Falcon	254	1993	SC	Maruta San	Marfret
Komet	250	1976	FC	Reed Marti	King Ocean
Sunshine II	250	1987	RR	Vertom Sch	Cagema
Seaboard Spirit	234	1985	RR	Jungerhans	Seaboard Marine
Helsinki	221	1997	BB	Bojen Schi	AMSC
Seaboard Mariner	220	1973	RR	Caricom	Seaboard Marine
Sagitta J	202	1991	SC	Jungerhans	Seaboard Marine
Crown Garnet	200	1996	SC	n.d.	Dole Ocean
Crown Jade	200	1997	SC	n.d.	Dole Ocean
Crown Opal	200	1997	SC	n.d.	Dole Ocean

Table 19 (conclusion)

Crown Emerald	200	1996	SC	Wellink	Dole Ocean
Odyssey	181	1972	BB	n.d.	CMA CGM
Pelicano I	180	1979	RR	King Ocean	King Ocean
Caribbean Reef	178	1993	BB	Unicool	Marfret
Coral Reef	178	1993	BB	Unicool	Marfret
Rio Miami	162	1988	SC	IMSAC	AMSC
Miami Super	162	1991	SC	IMSAC	AMSC
Titan Express	162	1992	SC	IMSAC	AMSC
Tropic Lure	162	1983	RR	Tropical	Tropical
Tropic Mist	162	1983	RR	Tropical	Tropical
Tropic Key	162	1980	RR	Tropical	Tropical
Canouan	158	1984	FC	Harald Win	Bernuth
Tropic Opal	157	1979	RR	Tropical	Tropical
Tropic Night	157	1976	RR	Tropical	Tropical
Rio Haina	153	1988	SC	IMSAC	AMSC
Sara Express	150	1991	SC	IMSAC	AMSC
Seaboard Venture	148	1978	RR	Seaboard Marine	Seaboard Marine
Erizo	135	1978	FC	Melfi Marine	Coral
Ola	132	1978	FC	Melfi Marine	Melfi
Island Clipper	124	1971	FC	Bernuth	Bernuth
Estrella I	122	1978	FC	Melfi Marine	Coral
Ocean Fleet	120	1975	SC	IMSAC	AMSC
Florida Star	120	1975	SC	IMSAC	AMSC
Carib Trader	120	1975	SC	IMSAC	AMSC
Linaki	112	1976	SC	Bernuth	Bernuth
Discovery Sun	100	1968	RR	Discovery	Seaboard Marine
Yerimu	94	1969	BB	Bernuth	Bernuth
Nikos II	92	1969	BB	Bernuth	Bernuth
Korimu	86	1970	BB	Bernuth	Bernuth
Cavalier I	80	1983	RR	n.d.	IIRR
Bahamas Ranger	75	1980	RR	n.d.	IIRR
Gaby II	70	1978	RR	n.d.	IIRR
Tropic Flyer	62	1973	RR	Tropical	Tropical
Tropic Isle	62	1977	RR	Tropical	Tropical
TOTAL: 350	434 718	Average: 1989			

Source: CI-online, January 2002

Notes: FC = Full Containership; RR = Ro-Ro vessel.

Table 20
SAMPLE FREIGHT RATES PROVIDED BY PANALPINA, OCTOBER 2002, US\$

ORIGEN	DESTINACION	20'FCL	40'FCL	FREQUENCY	T/TIME
Panamá (P. Manzanillo)	Miami	US\$ 1 230.00 (All In)	US\$ 1 610.00 (All In)	Semanal	7 days
Panamá(P. Manzanillo)	Kingston	US\$ 900.00 Thc 120.00 Baf 130.00 Thc 100.00 Doc fee 25.00	US\$ 1 100.00 Thc 120.00 Baf 230.00 Thc 100.00 Doc Fee 25.00	Semanal	2 days
Panamá (P. Manzanillo)	Port of Spain	US\$ 1 000.00 Thc 120.00 Baf 130.00 Thc 100.00 Doc fee 25.00	US\$ 1 500.00 Thc 120.00 Baf 230.00 Thc 100.00 Doc fee 25.00	Semanal	2 days
Pto Limón	Miami	US\$ 1 270.00 Manejo 75.00 Courier 35.00 T.aduanal 60.00	US\$ 1 670.00 Manejo 75.00 Courier 35.00 T.aduanal 60.00	Semanal	5 days
Pto Limón	Kingston	US\$ 1 150.00 Manejo 75.00 Courier 35.00 T.aduanal 60.00	US\$ 1 350.00 Manejo 75.00 Courier 35.00 T.aduanal 60.00	Semanal	2 days
Pto Limón	Port of Spain	US\$ 1 500.00 Manejo 75.00 Courier 35.00 T.aduanal 60.00	US\$ 1 800.00 Manejo 75.00 Courier 35.00 T.aduanal 60.00	Semanal	12 dias
Pto Limón	St John's	US\$ 2 505.00 Manejo 75.00 Courier 35.00 T.Aduanal 60.00	US\$ 3 680.00 Manejo 75.00 Courier 35.00 T.Aduanal 60.00	Semanales	14 dias
Acajutla	Miami	US\$ 1 500.00 I/F a STC 565.00 Thc 120.00 Muellaje Exp 75.00 Baf 130.00 Handling 75.00 Courier 35.00	US\$ 1 600.00 I/F a STC 565.00 Thc 120.00 Muellaje Ex 75.00 Baf 130.00 Handling 75.00 Courier 35.00	Semanal	5-6 days
Acajutla	Kingston	US\$ 950.00 I/F a STC 565.00 Thc 120.00 Muellaje Exp 75.00 Baf 130.00 Handling 75.00 Courier 35.00	US\$ 1 275.00 I/F a STC 565.00 Thc 120.00 Muellaje Exp 75.00 Baf 130.00 Handling 75.00 Courier 35.00	Semanales	3 dias
Acajutla	Port of Spain	Not available	Not available		
Kingston	Mia (P.Ever)	US\$ 900.00 Thc 75.00 C.Hire 60.00 Doc 50.00	US\$ 1 100.00 Thc 75.00 C. hire 60.00 Doc 50.00	Semanal	4 days

Table 20 (conclusion)

Kingston	Pto Limón	US\$ 700.00 Bunker S. 80.00 Thc K 120.00 Thc PL 47.00	US\$ 1 100.00 Bunker S 135.00 Thc K 120.00 Thc PL 47.00	Semanal	17 days
Kingston	Panama (Manzanillo)	US\$ 1 100.00 Bunker 80.00 Doc 50.00 Thc 100.00	US\$ 1 500.00 Bunker 135.00 Doc 50.00 Thc 100.00	Semanal	3 days
Port of Spain	Miami	US\$ 660.00 (all in)	US\$ 1 010.00 (all in)	Semanal	6 days
Port of Spain	Panama (Manzanillo)	US\$ 1 500.00 Baf 130.00 Thc Pos 100.00 Thc Pty 100.00	US\$ 1 800.00 Baf 230.00 Thc 100.00 Thc Pty 100.00	Semanal	10/12 days
Port of Spain	Pto Limon	US\$ 1 000.00 Baf 130.00 Thc POS 100.00 Thc C.R 47.00	US\$ 1 300.00 Baf 230.00 Thc POS 100.00 Thc C.R. 47.00	Semanal	8 days
Port of Spain	Acajutla (via Santo Tomas de Castilla)	US\$ 1 100.00 Baf 130.00 Thc POS 100.00 Thc STC 52.00 I/F STC 750.00	US\$ 1 500.00 Baf 230.00 Thc POS 100.00 Thc STC 52.00 I/F STC 750.00	Semanal	10/12 days
St. John's	Miami (Palm Beach)	US\$ 2 240.00 Chassis 40.00 U.S. Handling 270.00 B/Lproces. 50.00 Bunker 155.00	US\$ 4 405.00 Chassis 40.00 U.S. Handling 405.00 B/Lproces. 50.00 Bunker 280.00	Semanal	7 days

Source: Panalpina, jaime.jean-francois@panalpina.com

Table 21

**PARTIAL CORRELATION COEFFICIENTS BETWEEN FREIGHT RATES AND
POSSIBLE EXPLANATORY VARIABLES**

	20'FCL, all in	40' FCL, all in
Voyage number of days	+ 0.32	+ 0.29
Km direct distance	+ 0.64	+ 0.48
Number of direct services	- 0.65	- 0.57

Source: Authors, based on data from Table 20.

Table 22

REGRESSION RESULTS ON INTRA-CARRIBEAN FREIGHT RATES

	20'FCL	40'FCL
Number of observations	18	18
R ²	0.51	0.35
Adjusted R ²	0.40	0.21
Fixed term (constant)	1 302 US\$ (2.07)	1 464 US\$ (2.06)
Each additional day of travel time	+ 11 US\$ (0.37)	+ 24 US\$ (0.46)
Each additional km of distance	+ 0.55 US\$ (1.33)	+ 0.38 US\$ (0.52)
Each additional regular liner service	-33 US\$ (-1.58)	-54 US\$ (-1.49)

Source: Authors, based on data from Table 20. Km distance from www.distances.com; number of liner services from www.ci-online.co.uk.

Note: t-values in parenthesis.

Table 23

SAMPLE FREIGHT RATES FROM STO. TOMÁS, GUATEMALA, US\$, MID 2002

	20 foot container	40 foot container
Kingston (Jamaica)	2 200	2 600
Rio Haina (Dominican Republic)	1 500	1 800
Freeport (Bahamas)	1 200	1 400
Port of Spain (Trinidad & Tobago)	1 900	2 200
Castries (St. Lucia)	2 800	3 200
Bridgetown (Barbados)	2 150	2 850

Source: Authors, based on information provided by Guatemalan shippers

Table 24

**SAMPLE FREIGHT RATES BETWEEN STO. TOMÁS
AND PORT EVERGLADES, US\$, 1996**

	20 foot container	40 foot container
To Port Everglades	1 100 – 1 300	1 200 – 1 500
From Port Everglades	1 300 – 1 900	1 700 – 2 400

Source: ECLAC, 1996

Table 25
SAMPLE FREIGHT RATES FROM US
PORTS, US\$ 2000

Bridgetown, BB	1900
Georgetown, GU	1455
Kingston, JM	900
Paramarimbo, SR	2000
Port of Spain, TT	1400

Source: ECLAC (2000)

Table 26
SAMPLE FREIGHT RATES FROM EL SALVADOR,
US\$ MID 2002

Dominican Republic	3000 (via Jamaica)
inland point USA	2300

Source: Camera de Comercia e Industria of El Salvador

Table 27
CARIBBEAN CONTAINERIZED TRADE, TEU

	EXPORTS					IMPORTS				
	2000	2001	2002	2003	2004	2000	2001	2002	2003	2004
Asia Pacific	4 561	4 685	4 804	4 990	5 288	129 801	132 149	139 294	146 818	154 608
Europe	90 182	92 084	93 222	96 149	98 396	130 493	131 645	137 524	143 843	149 373
Canada and USA	189 371	194 099	200 892	211 982	223 224	358 783	359 393	374 292	389 570	403 728
Africa	1 845	1 903	1 937	2 019	2 066	1 179	1 263	1 301	1 342	1 378
Latin America (Incl. Mexico-Caribbean)	20 113	20 463	20 921	21 707	22 454	69 207	73 298	77 243	81 845	85 769
World Total	307 230	314 414	322 983	338 105	352 725	711 659	721 284	754 255	789 246	821 622

Source: DRI/WEFA, robert.west@dri-wefa.com

Notes: Does not include transshipment and transit. Includes Dominican Republic, Cuba and other Non-CARICOM countries. Does not include Puerto Rico.

Table 28
CENTRAL AMERICAN CONTAINERIZED EVERGLADES, US\$, 1996

	EXPORTS					IMPORTS				
	2000	2001	2002	2003	2004	2000	2001	2002	2003	2004
Asia Pacific	11 364	11 092	11 433	11 839	12 282	95 377	101 279	105 311	111 557	117 591
Europe	116 307	117 603	120 768	125 582	129 775	60 218	60 779	63 129	66 155	69 156
Canada and USA	314 416	317 843	334 858	356 931	379 057	329 954	326 514	338 077	350 539	363 860
Africa	1 092	1 117	1 165	1 214	1 260	471	488	509	535	557
Latin America (Incl. Mexico-Caribbean)	25 402	26 086	26 751	27 828	28 886	39 259	41 110	43 163	45 462	47 581
World Total	471 251	476 494	497 841	526 389	554 402	555 319	562 026	583 246	609 087	635 234

Source: DRI/WEFA, robert.west@dri-wefa.com.

Notes: Does not include transshipment and transit. Includes CACM plus Panama and Belize

Table 29

CENTRAL AMERICAN AND CARIBBEAN COUNTRIES' PORTS, TEU, 2001

Port	Country	TEU
Colón (MIT, Evergreen, Panamá Port)	Panamá	1,210,852
Kingston	Jamaica	983,400
Puerto Limón-Moin	Costa Rica	577,621
Freeport	Bahamas	570,000
Haina	República Dominicana	487,827
Balboa	Panamá	358,868
Puerto Cortes	Honduras	338,932
Port of Spain	Trinidad y Tobago	271,156
La Havana	Cuba	270,000
Santo Tomas de Castilla	Guatemala	201,090
Puerto Barrios	Guatemala	188,044
Puerto Quetzal	Guatemala	137,500
Jarry	Guadalupe	119,560
Port Au Prince (estimate)	Haití	100,000
Willemstad/ Curacao	Antillas Neerlandesas	78,439
Bridgetown	Barbados	68,600
Point Lisas	Trinidad y Tobago	65,447
Puerto Castilla	Honduras	64,424
Oranjestad (estimate)	Aruba	60,000
Puerto Plata	República Dominicana	48,228
St John (estimate)	Antigua y Barbuda	35,000
Caldera (estimate)	Costa Rica	35,000
Belize city	Bélice	25,514
Paramaribo (estimate)	Surinam	25,000
Castries	Santa Lucía	22,836
Santo Domingo	República Dominicana	22,477
Boca Chica	República Dominicana	19,052
Almirante	Panamá	17,827
Acajutla	El Salvador	14,815
Vieux Fort	Santa Lucía	13,987
St George's	Granada	11,708
Cayman Brac (estimate)	Islas Caimán	11,000
Corinto	Nicaragua	10,493
Manzanillo	República Dominicana	5,038
San Lorenzo	Honduras	3,003
Mariel	Cuba	3,000
Basse-Terre	Guadalupe	2,814
Chiriqui Grande Terminal	Panamá	2,538
Cap Haitien	Haití	2,000
La Romana	República Dominicana	768
Arlen Siu	Nicaragua	631
El Bluff	Nicaragua	328
Pointe-à-Pitre	Guadalupe	226
Puerto Cabezas (estimate)	Nicaragua	100
Bahia las Minas (estimate)	Panamá	100

Source: www.eclac.cl/transporte/perfil



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