

UNITED NATIONS CONFERENCE ON TRADE AND DEVELOPMENT
Geneva

REVIEW OF
MARITIME TRANSPORT
2005

Chapter 7



UNITED NATIONS
New York and Geneva, 2005

Chapter 7

REVIEW OF REGIONAL DEVELOPMENTS: LATIN AMERICA

This chapter focuses on developments in Latin America. It covers the economic background, merchandise trade, merchant fleet development and shipping services.

A. ECONOMIC BACKGROUND

During the period covered by this review (2002–2004), the economies of Latin America and the Caribbean rebounded from the depths of the crisis generated in the previous year by the collapse of Argentina's economy, which had resulted in the regional GDP's contracting by 0.5 per cent in 2002 (see table 46). In 2002, the economies of Latin America contracted 0.6 per cent, with Argentina and Uruguay recording negative economic growth of 10.8 and 12.7 per cent respectively. Venezuela's economy contracted 8.9 per cent owing to domestic upheaval. The Andean countries performed well, with Peru and Ecuador leading with 4.9 and 3.8 per cent growth respectively. Brazil, the largest economy in South America, recorded modest 1.5 per cent GDP growth, partly because of the crisis in neighbouring countries. The economic performance of the Caribbean countries was positive, with 1.8 per cent GDP growth (although this was less than the 2.3 per cent achieved the previous year), with only three out of 12 countries recording negative growth. The regional economic contraction resulted in increased unemployment, which reached 10.8 per cent in 2002, and in an expansion of informal activities together with a considerable drop in regional consumption. Investment too was low, about 18 per cent of GDP measured in 1995 constant prices, comparable to the lowest figure recorded in the 1980s and down from the 19.5 per cent average recorded during the 1990s.

The recovery started in 2003 and gained momentum during 2004, with average GDP growth for the region being 1.9 and 5.5 per cent respectively for the two years. Only three countries, Venezuela, the Dominican

Republic and Guyana, saw their economies contract in 2003. For Venezuela the drop was substantial, 9.7 per cent, and caused by protracted domestic problems. For the other two countries the contraction was modest, less than 1 per cent. The economic rebound in Argentina was remarkable – a GDP increase of more than 8 per cent for 2003 and 2004. Uruguay followed strongly in 2004, when it reached 12 per cent GDP growth, followed by Chile and Brazil with 5.8 and 5.1 per cent respectively. Output increases in the Andean countries and countries of Central America were also significant during 2003 and 2004, and Mexico more than trebled its GDP growth in these years. For 2003, countries in the Caribbean recorded better performance than Latin American countries – GDP growth of 3.4 per cent for the former against 1.9 per cent for the latter. The situation was reversed during 2004, when Latin American countries achieved 5.5 per cent growth. The 2003–2004 recovery reduced the overall unemployment rate to 10 per cent in 2004 as the economies of most of these countries, which had been under intense reform during the 1990s, took advantage of booming international trade. Nevertheless, other structural shortcomings, such as wealth concentration and decreased social security coverage for employed workers, remained.

As table 47 shows, the commercial balance for Latin American and Caribbean countries was positive for the period 2002 to 2004. Increased demand from the main world markets and the remarkable expansion of trade in China accounted for the increased levels of exports during these years, which reached \$460.7 billion in 2004. Poor domestic demand in most Latin American and Caribbean countries, coupled with modest investment levels, reduced imports below the figure reached in

Table 46

Percentage growth of GDP at 1995 constant market prices for countries in Latin America and the Caribbean,
2001–2004
(percentage change)

Country	2001	2002	2003	2004
Argentina ^a	-4.4	-10.8	8.7	9.0
Bolivia ^a	1.5	2.8	2.9	3.6
Brazil ^a	1.5	1.5	0.6	4.9
Chile ^a	3.1	2.2	3.3	6.1
Colombia ^a	1.1	2.5	2.0	4.0
Costa Rica	1.2	2.7	6.4	4.1
Cuba	3.0	1.2	2.5	3.0
Dominican Republic	4.0	4.3	-0.4	1.8
Ecuador ^a	5.1	3.8	3.1	6.9
El Salvador	1.7	2.1	2.0	1.8
Guatemala	2.6	2.2	2.0	2.6
Haiti	-0.6	-0.3	0.5	-3.0
Honduras	2.7	2.6	3.5	4.3
Mexico ^a	-0.2	0.9	1.3	4.4
Nicaragua	3.0	0.9	2.3	4.0
Panama	0.7	2.1	4.7	6.0
Paraguay ^a	2.7	-2.3	2.6	4.0
Peru ^a	0.3	4.9	4.0	4.8
Uruguay ^a	-3.4	11.2	2.5	12.3
Venezuela ^a	2.8	-8.9	-7.5	17.9
Subtotal	0.4	-0.6	1.9	5.5
Antigua and Barbuda	1.6	2.1	5.8	5.9
Barbados	-2.2	-0.5	2.2	3.0
Belize	5.0	4.2	4.9	7.0
Dominica	-3.3	-5.8	2.5	0.0
Grenada	-3.8	-1.1	4.7	-1.4
Guyana	2.3	1.1	-0.6	1.5
Jamaica	1.8	0.9	2.3	1.9
Saint Kitts and Nevis	2.0	0.9	0.1	5.7
Saint Vincent and the Grenadines	0.0	1.3	3.9	5.8
Saint Lucia	-4.1	0.2	3.7	5.1
Suriname	5.0	3.0	5.6	4.0
Trinidad and Tobago	4.3	3.0	4.2	6.2
Subtotal	2.3	1.8	3.4	4.3
Total	0.4	-0.5	1.9	5.5

Source: Balance preliminar de las economías de América Latina y el Caribe 2003–2004, statistical appendix, Table A-2.

^a UNCTAD secretariat calculations based on UNCTAD, *Handbook of Statistics 2004*; UNDESA/Development Policy and Planning Office.

Table 47

Value of international trade of countries in Latin America and the Caribbean and several groups of countries and individual countries
(in billions of current US dollars)

	Exports (fob)			Imports (fob)		
	2002	2003	2004	2002	2003	2004
Value of trade for countries in Latin America and the Caribbean	346.6	376.3	460.7	322.8	333	398.8
Mercosur	89.9	107	134.6	59.7	66	89.1
CAN (Andean Community of Nations)	53.3	57.3	77.6	40.7	39.6	50.3
Caribbean countries	5.4	5.8	6	9.8	9	9.2
MCCA (Central American Common Market)	13.8	15.2	15.9	21.6	23.7	25.9
Mexico	160.6	164.9	189	168.7	170.5	195.2
Chile	18.2	21	31.6	15.4	18	22.4
Panama	5.3	5.1	5.9	6.3	6.1	6.7
Percentage growth in volume of merchandise trade for countries in Latin America and the Caribbean	1.3	4.5	10.8	-7.2	0.6	14.4

Source: From *Balance preliminar de las economías de América Latina y el Caribe 2003–2004*, statistical appendix, Tables A-6 and A-8; ECLAC publication, 2005, LC/G.2265-P/E. Data for 2004 are provisional and from balance of payments.

2000, which was exceeded only in 2004, when imports reached \$398.8 billion. These trade values resulted from the combined effect of increases in dollar terms of the prices of traded goods and substantial increases in volume, which for 2004 were 10.8 per cent for exports and 14.4 per cent for imports.

The contribution of the different country groupings to the value of the international trade of the region is also shown in table 47. Mercosur comprises four countries (Argentina, Brazil, Paraguay and Uruguay), and its exports made up 29.2 per cent of the region's exports in 2004, up from 25.9 per cent in 2002. The Andean Community (CAN) comprises five countries (Bolivia, Colombia, Ecuador, Peru and Venezuela) and contributed 16.9 per cent of the region's 2004 exports. The Caribbean region includes 20 countries and territories (Anguilla, Antigua and Barbuda, Aruba, the Bahamas, Barbados, Belize, Cuba, Dominica, the Dominican Republic, Grenada, Guyana, Haiti, Jamaica, Montserrat, the

Netherlands Antilles, Saint Kitts and Nevis, Saint Lucia, Saint Vincent and the Grenadines, Suriname, and Trinidad and Tobago), including those belonging to the Caribbean Common Market (CARICOM), the Organisation of Eastern Caribbean States (OECS) and the Caribbean Basin Initiative of the Government of the United States. In 2004, these countries together contributed 1.3 per cent of regional exports. For the same year, the five countries (Costa Rica, El Salvador, Guatemala, Honduras and Nicaragua) of the Central American Common Market (MCCA) contributed 3.5 per cent of regional exports. The remaining three countries, Chile, Mexico and Panama, do not belong to any of the above groupings and contributed 41 per cent, 6.9 per cent and 1.2 per cent respectively of regional exports. Exports from Mexico, a partner in the North America Free Trade Agreement (NAFTA) together with the United States and Canada, included "maquila", goods produced in foreign-owned assembly plants.

B. MERCHANDISE TRADE

The structure of the foreign trade of the countries of Latin America and the Caribbean is indicated in table 48, which shows figures for 2002. The important share of commodities (food items, agricultural products, ores and fuels) in exports is reflected in their 32.4 per cent share of the value of total exports. Within this category, crude oil stands out with a total of \$42.4 billion. The main destination of Latin American and Caribbean exports is the US market, with a share of almost 60 per cent of the total, which reflects the important role of Mexican exports. Other countries within the region are a clear second destination, with a share of 14.8 per cent. Therefore, destinations within the hemisphere account for almost three quarters of exports from countries in Latin America and the Caribbean. This share may increase in the following years; trade within the Andean Community increased 59 per cent from 2003 to 2004,

with trade in non-traditional commodities increasing 56 per cent. The share of exports from Latin America and the Caribbean countries to Europe accounts for 11.5 per cent, and that of exports to Japan and other Asian countries accounts for 6.5 per cent.

The share of commodities in the imports of countries in Latin America and the Caribbean reached 11.4 per cent. Expenses fluctuated around \$13 billion for each of the three major commodities imported, namely food items, agricultural products and fuel. Again, the US market took the major share of these imports (45.9 per cent), while countries within the region accounted for 15.9 per cent. Therefore, imports originating within the hemisphere accounted for two thirds of total imports. The share of imports from Japan and other Asian countries reached 16.3 per cent and was larger than that of imports from Europe (14.1 per cent).

Table 48

Structure of foreign trade of countries in Latin America and the Caribbean for 2002

(world total in billions of US dollars; all regional allocations in percentages)

EXPORTS from Latin American countries							
	World	United States	Japan	European Union	Asia-Pacific ^a	Latin America	Other
ALL products	326.1	58.9	1.8	11.5	4.7	14.8	8.3
<i>of which:</i>							
Food items	26.3	19.0	3.3	29.0	7.6	20.1	20.9
Agricultural raw materials	28.5	35.5	5.1	28.6	8.8	11.4	10.5
Ores	8.3	8.6	18.5	27.1	22.8	8.5	14.5
Fuels	42.4	61.6	0.3	8.6	1.2	16.3	12.0
All other manufactured	220.6	68.1	0.8	7.2	3.8	14.5	5.5
IMPORTS to Latin American + Caribbean countries							
	World	United States	Japan	European Union	Asia-Pacific ^a	Latin America	Other
ALL products	317.4	45.9	5.1	14.1	11.2	15.9	7.7
<i>of which:</i>							
Food items	13.8	41.2	0.1	11.0	5.0	37.8	4.9
Agricultural raw materials	12.4	50.3	0.1	4.5	4.5	30.0	10.7
Ores	1.7	20.4	2.2	10.6	5.0	45.3	16.6
Fuels	11.7	15.7	0.4	1.0	6.8	43.7	32.3
All other manufactured	277.8	47.4	5.8	15.3	12.1	12.8	6.6

Source: *Balance preliminar de las economías de América Latina y el Caribe 2003–2004*, ECLAC publication, 2005, (LC/G.2265-P/E). Data were collected from trade sources following a different methodology than that indicated in table 47.

^a Eleven countries in the Asia-Pacific region: China, Hong Kong (China), Taiwan Province of China, the Philippines, Malaysia, the Republic of Korea, Singapore, Thailand, India, Australia and New Zealand.

Table 49

Structure of foreign trade of selected countries in Latin America and the Caribbean, 2003

Country	\$ billion	Destination of exports in percentage					
		World	USA	Japan	EU-15	Asia developing	Region
Argentina	29.6	10.6	1.2	19.7	19.9	38.8	9.9
Brazil	73.1	23.1	3.2	24.8	16.9	20.2	11.8
Chile	20.1	17.8	11.2	24.3	20.9	19.3	6.5
Colombia	13.1	47.1	1.5	14.4	2.6	28.7	5.7
Costa Rica	5.8	47.1	1.0	18.2	9.5	22.7	1.4
Mexico	165.4	88.9	0.4	3.4	1.1	3.7	2.6
Panama	0.8	52.0	0.8	23.2	3.7	17.7	2.6
Peru	8.7	26.5	4.5	25.4	13.6	18.2	11.9
Venezuela	25.0	44.3	0.5	12.6	1.9	31.9	8.8
Country	\$ billion	Origin of imports in percentage					
		World	USA	Japan	EU-15	Asia developing	Region
Argentina	13.8	16.4	2.9	19.6	11.1	42.1	8.0
Brazil	50.8	20.0	5.2	26.0	16.1	17.6	15.2
Chile	17.4	14.6	3.7	18.5	14.2	42.0	7.0
Colombia	13.9	29.6	4.6	15.5	11.6	27.4	11.2
Costa Rica	7.4	49.8	4.2	13.4	5.9	23.3	3.4
Mexico	171.3	61.9	4.5	10.6	14.0	4.5	4.5
Panama	3.1	35.0	6.2	7.4	5.4	29.6	16.5
Peru	8.4	18.6	4.4	12.6	15.7	41.6	7.1
Venezuela	8.4	33.0	2.3	21.6	5.5	31.5	6.1

Source: Data from UN COMTRADE database as of 5 July 2005.

Note: Trade data are not available for the Dominican Republic.

For the top 10 countries in Latin America and the Caribbean, the destination of exports and origin of imports for the year 2002 are indicated in table 49. The share of the US market in the foreign trade of developing countries of Latin America and the Caribbean is larger for those countries closer to it. The share of regional trade is greater in South America, notably between Mercosur countries.

C. MERCHANT FLEET IN DEVELOPING COUNTRIES AND TERRITORIES IN THE AMERICAS

Table 50 shows the merchant fleet registered in developing countries of America, excluding major open

registries (the Bahamas, Bermuda and Panama). The share of the merchant fleet registered in these countries increased steadily from 1980 to 2000 and then stalled at the level reached that year. In 1980, the share of the merchant fleet of these countries stood at 3.2 per cent of the world fleet; it increased to 3.5 per cent by 1990 and reached 4.2 per cent in 2000. The same share was maintained until 2003; in 2004 there was a modest decrease to 4.1 per cent. The current tonnage owned by these countries amounts to 36.74 million dwt.

The geographical ownership has changed dramatically since 1980. Countries on the east coast of South America owned 58 per cent of the regional fleet in 1980. The share decreased slightly to 56.6 per cent by 1990 and

Table 50

Merchant fleet of the world and that of Latin American and Caribbean countries, selected years
(in thousands dwt)

	Year	Total	Tanker	Dry bulker	General	Container ship	Other
World total	1980	682 768	339 324	185 652	115 824	11 243	30 725
	1990	658 377	245 936	234 659	102 676	25 955	49 151
	2000	808 377	285 442	281 655	102 653	69 216	69 412
	2002	844 234	304 396	300 131	97 185	82 793	59 730
	2003	856 974	316 759	307 660	94 767	90 461	47 327
	2004	895 843	336 156	320 584	92 048	98 064	48 991
Latin America - total^a	1980	21 794	7 914	6 183	6 547	37	1 113
	1990	25 529	7 501	9 025	6 348	364	2 291
	2000	34 051	7 645	9 934	9 837	3 540	3 095
	2002	35 648	8 946	9 760	9 265	4 096	3 581
	2003	36 001	9 387	9 899	9 092	4 889	2 732
	2004	36 741	8 687	10 299	9 672	5 345	2 738
East Coast South America	1980	12 649	4 866	3 893	3 491	0	399
	1990	14 459	5 119	6 303	1 907	214	916
	2000	6 923	3 039	2 625	687	196	376
	2002	6 663	2 992	2 409	578	188	495
	2003	6 418	2 867	2 201	622	189	539
	2004	5 131	2 444	1 403	528	189	567
West Coast South America	1980	2 717	484	929	1 212	0	92
	1990	2 770	558	973	1 022	0	217
	2000	1 646	615	370	236	77	348
	2002	1 746	770	286	204	76	409
	2003	1 817	859	328	209	51	369
	2004	1 740	818	323	189	21	389
Others (including Mexico, Caribbean and Central America)	1980	6 428	2 564	1 361	1 844	37	622
	1990	8 300	1 824	1 749	3 419	150	1 158
	2000	25 482	3 991	6 939	8 914	3 267	2 371
	2002	27 239	5 183	7 065	8 483	3 832	2 677
	2003	27 766	5 661	7 370	8 262	4 650	1 823
	2004	29 871	5 425	8 574	8 955	5 135	1 783

Source: *Review of Maritime Transport*, various issues.

^a Tonnages registered in the Bahamas, Bermuda and Panama are not included in the Latin American subregion total, since these are classified as open registries.

by more than half by the year 2000, to only 20.4 per cent. This share has continued to decrease and in 2004 stood at 14 per cent of the regional fleet. For the period 1980 to 2000, this trend was mirrored by countries on South America's west coast; their share decreased from 12.5 per cent in 1980 to 10.8 per cent by 1990 and was halved to 4.8 per cent in the year 2000. This long-term decline seems to be over: the share increased to 5 per cent in 2003 and slipped to 4.7 per cent last year. The gains were for countries located in and around the Caribbean, including Mexico and others in Central America. They have almost trebled their share, from 29.5 per cent in 1980 to 32.6 per cent in 1990 and 74.8 per cent in 2000. Their fleets now account for more than four fifths of the regional fleet. The substantial share achieved by these countries reflects the expansion of three minor open registries, Antigua and Barbuda, the Cayman Islands and Saint Vincent and the Grenadines, which together account for three quarters of the tonnage recorded by countries of the Caribbean, Central America and Mexico.

The composition of the fleet in the year 2004 was as follows: 23.6 per cent were tankers, 28 per cent dry bulk carriers, 26.3 per cent general cargo vessels, 14.5 per cent container ships and 7.5 per cent were other types of vessels. Since 2000, the share of tankers (23.6 per cent) and container ships (14.5 per cent), particularly the latter has increased, while the shares of other types of ships have decreased. The share of tankers may increase in the next few years given that PDVSA (Petróleos de Venezuela S.A.) plans to build 42 tankers. Still, the shares of general cargo (26.3 per cent) and other vessels (7.5 per cent) in the regional fleet are above the world averages (10.3 and 5.5 per cent respectively). Tankers make up a substantial share, close to 50 per cent, of the fleets of countries along the east and west coasts of South America, while container ships make up 17.2 per cent of the fleet of countries in and around the Caribbean, Mexico and Central America.

Age distribution of merchant fleets

At the end of 2004, the average age of the fleet of developing countries in America, excluding major open registries, was 16.7 years (see table 51). The fleet was thus older than those of developing countries and the world, which by the end of 2004 were 13.1 and 12.3 years old respectively. However, the fleet of developing countries in America was younger than at the end of 2001, when the average age was 17.1 years. The fleet of bulk carriers and other vessels of developing countries in America was the oldest (19.1 years), followed closely by the fleet of

general cargo ships (18.3 years). Tankers were slightly younger (16.3 years). The container ship fleet, however, at only 8.3 years old, was younger than the container ship fleets of developing countries as a whole or of the world, which were 9.3 and 9.4 years old respectively.

D. SHIPPING SERVICES IN LATIN AMERICA AND THE CARIBBEAN

Shipping services for countries of Latin America and the Caribbean are organized to serve bulk and liner cargoes. In the year 2003, the region's ports loaded 897.8 million tons; this is equivalent to 27.9 per cent of loaded cargoes from ports of developing countries and 13.9 per cent of loaded cargoes from world ports.

Table 52 gives estimates of the amount of tanker, dry bulk and liner cargoes for each of the subcodes of code 9 (see annex 1). The share of tanker cargo in the total loaded by the whole region was 39.4 per cent, and 44.5 per cent were dry bulk cargoes. Unloaded cargoes were 374.3 million tons, equivalent to 18.4 per cent of unloaded cargoes in developing-country ports and 5.7 per cent of unloaded cargoes in world ports. Liner cargo reached 144.6 million tons, or 16.1 per cent of loaded cargo, and 96.5 million tons, or about a quarter of unloaded cargo, and therefore there was an imbalance in favour of exports. Preliminary figures for 2004 show an increment of 1.7 per cent in loaded tonnage to 913.5 million tons.

Tanker services

Exports of crude oil are made through specialized terminals integrated within the operations of the oil companies. For instance, PDVSA own a number of oil export terminals and a tanker fleet to carry crude oil abroad, partly to its network of refineries in the Caribbean, the United States and Europe. Export terminals are located mainly around the Caribbean, as is the case with the three major terminals Cayo Arcas, Dos Bocas and Pajaritos – operated by the Mexican oil company PEMEX (Petróleos Mexicanos) – and the Venezuelan terminals located on the Maracaibo Lake and along the north coast of South America. The Colombian terminal at Coveñas, which in 2003 loaded about 13.6 million tons, is also located on this coast. Ecuador has terminals along the west coast of South America.

Aframax tonnage is mostly chartered for shipping oil from the Caribbean to the Louisiana Oil Offshore Platform

Table 51

Age distribution of merchant fleet in Latin America and the Caribbean by type of vessel

Country grouping	Types of vessel	0-4 years	5-9 years	10-14 years	15-19 years	20 years and over	Age end 2004	Age end 2001
World fleet	ALL	23.0	21.9	16.5	11.3	27.3	12.3	13.9
	Tanker	29.0	22.8	20.9	11.7	15.7	10.3	
	Dry bulk carrier	20.2	22.0	14.6	12.4	30.8	13.0	
	General cargo	7.3	15.0	10.7	10.9	56.1	17.5	
	Container ship	31.9	29.3	16.3	8.8	13.7	9.4	
	Others	16.0	15.7	11.9	8.1	48.4	15.6	
Developing countries (including major open-registry)	ALL	23.3	25.1	15.2	10.0	26.3	11.9	14.3
	Tanker	27.4	25.8	20.7	9.7	16.4	10.3	
	Dry bulk carrier	23.7	26.4	12.9	11.2	25.8	11.8	
	General cargo	8.1	18.2	11.4	9.1	53.1	16.8	
	Container ship	29.4	29.9	16.4	10.1	14.1	9.7	
	Others	17.1	16.2	8.8	5.2	52.6	15.8	
Developing countries (excluding major open-registry)	ALL	10.2	16.1	10.9	10.9	51.9	16.7	17.1
	Tanker	9.2	18.8	10.5	14.3	47.3	16.3	
	Dry bulk carrier	8.3	5.0	6.4	16.5	63.7	19.1	
	General cargo	6.6	12.0	11.5	7.0	62.9	18.3	
	Container ship	25.0	44.5	20.4	2.2	7.9	8.3	
	Others	4.9	10.2	8.4	11.0	65.4	19.1	
Anguilla	ALL	0.0	0.0	0.0	0.0	100.0	23.5	20.0
	Tanker	0.0	0.0	0.0	0.0	0.0	0.0	
	Dry bulk carrier	0.0	0.0	0.0	0.0	0.0	0.0	
	General cargo	0.0	0.0	0.0	0.0	100.0	23.5	
	Container ship	0.0	0.0	0.0	0.0	0.0	0.0	
	Others	0.0	0.0	0.0	0.0	0.0	0.0	
Antigua and Barbuda	ALL	26.1	38.7	18.8	3.6	12.7	9.1	
	Tanker	0.0	33.6	0.0	4.1	62.3	17.7	
	Dry bulk carrier	44.2	13.4	8.7	0.0	33.7	10.8	
	General cargo	18.4	33.8	19.9	7.8	20.1	11.2	
	Container ship	27.2	47.0	20.5	1.8	3.5	7.4	
	Others	36.1	35.0	8.7	0.1	20.1	9.0	
Argentina	ALL	0.8	7.4	2.9	9.1	79.9	21.2	
	Tanker	0.0	34.0	0.0	0.0	66.0	17.9	
	Dry bulk carrier	0.0	0.0	0.0	0.0	100.0	23.5	
	General cargo	4.1	0.0	6.2	0.0	89.7	21.9	
	Container ship	0.0	0.0	0.0	0.0	0.0	0.0	
	Others	0.0	0.2	3.4	18.8	77.6	21.9	

Country grouping	Types of vessel	0-4 years	5-9 years	10-14 years	15-19 years	20 years and over	Age end 2004	Age end 2001
Barbados	ALL	16.2	27.3	11.8	4.5	40.1	13.9	
	Tanker	53.5	18.5	0.0	0.0	28.0	8.9	
	Dry bulk carrier	0.0	43.5	22.2	0.0	34.3	13.8	
	General cargo	5.1	10.1	6.0	19.7	59.1	18.8	
	Container ship	0.0	0.0	0.0	0.0	0.0	0.0	
	Others	0.7	0.0	7.9	7.6	83.7	21.9	
Belize	ALL	2.8	0.7	9.6	11.3	75.7	21.0	
	Tanker	1.2	0.5	8.0	5.6	84.7	21.9	
	Dry bulk carrier	5.0	0.0	0.4	4.2	90.3	22.1	
	General cargo	3.0	1.0	13.3	12.0	70.6	20.4	
	Container ship	0.0	0.0	10.5	0.0	89.5	22.3	
	Others	0.4	0.4	6.3	19.9	73.1	21.3	
Bolivia	ALL	0.0	0.4	0.0	0.0	99.6	23.4	
	Tanker	0.0	0.0	0.0	0.0	100.0	23.5	
	Dry bulk carrier	0.0	0.0	0.0	0.0	100.0	23.5	
	General cargo	0.0	0.0	0.0	0.0	100.0	23.5	
	Container ship	0.0	0.0	0.0	0.0	100.0	23.5	
	Others	0.0	7.9	0.0	0.0	92.1	22.2	
Brazil	ALL	1.7	9.8	19.3	23.4	45.8	17.8	
	Tanker	0.4	12.5	23.8	20.1	43.2	17.3	
	Dry bulk carrier	0.0	6.3	6.5	36.8	50.4	19.3	
	General cargo	0.0	9.5	54.3	3.7	32.5	15.5	
	Container ship	0.0	9.5	35.8	0.0	54.7	17.8	
	Others	20.2	9.1	1.2	19.8	49.7	16.2	
British Virgin Islands	ALL	1.3	0.0	0.0	3.3	95.4	23.0	
	Tanker	0.0	0.0	0.0	0.0	0.0	0.0	
	Dry bulk carrier	0.0	0.0	0.0	0.0	0.0	0.0	
	General cargo	0.0	0.0	0.0	0.0	100.0	23.5	
	Container ship	0.0	0.0	0.0	0.0	0.0	0.0	
	Others	28.6	0.0	0.0	71.4	0.0	12.7	
Cayman Islands	ALL	18.8	21.2	11.9	12.1	36.0	13.8	
	Tanker	28.8	38.1	9.4	10.3	13.3	9.3	
	Dry bulk carrier	17.0	6.3	14.2	17.9	44.6	16.0	
	General cargo	0.0	0.0	3.3	7.7	89.0	22.6	
	Container ship							
	Others	6.2	48.2	40.4	0.0	5.2	9.6	
Chile	ALL	6.8	5.1	18.6	14.2	55.4	18.1	
	Tanker	15.2	0.0	36.7	20.5	27.6	14.7	
	Dry bulk carrier	0.0	0.0	0.0	0.0	100.0	23.5	
	General cargo	3.5	0.0	0.1	18.2	78.3	21.6	
	Container ship	0.0	100.0	0.0	0.0	0.0	7.0	
	Others	1.7	15.5	18.1	20.4	44.3	17.2	

Country grouping	Types of vessel	0-4 years	5-9 years	10-14 years	15-19 years	20 years and over	Age end 2004	Age end 2001
Colombia	ALL	2.3	0.8	0.6	1.0	95.3	22.7	
	Tanker	0.0	0.0	0.0	0.0	100.0	23.5	
	Dry bulk carrier	0.0	0.0	0.0	0.0	100.0	23.5	
	General cargo	0.0	0.0	0.0	0.8	99.2	23.4	
	Container ship	0.0	0.0	0.0	0.0	0.0	0.0	
	Others	5.8	1.9	1.5	1.6	89.2	21.7	
Costa Rica	ALL	0.0	0.0	11.9	0.0	88.1	22.1	
	Tanker	0.0	0.0	0.0	0.0	0.0	0.0	
	Dry bulk carrier	0.0	0.0	0.0	0.0	0.0	0.0	
	General cargo	0.0	0.0	0.0	0.0	0.0	0.0	
	Container ship	0.0	0.0	0.0	0.0	0.0	0.0	
	Others	0.0	0.0	11.9	0.0	88.1	22.1	
Cuba	ALL	0.2	0.0	0.0	0.1	99.7	23.4	
	Tanker	0.0	0.0	0.0	0.0	100.0	23.5	
	Dry bulk carrier	0.0	0.0	0.0	0.0	100.0	23.5	
	General cargo	0.0	0.0	0.0	0.0	100.0	23.5	
	Container ship	0.0	0.0	0.0	0.0	0.0	0.0	
	Others	0.6	0.0	0.0	0.3	99.1	23.3	
Dominica	ALL	0.0	0.9	3.3	33.2	62.6	20.8	
	Tanker	0.0	0.0	0.0	55.6	44.4	19.9	
	Dry bulk carrier	0.0	0.0	0.0	0.0	100.0	23.5	
	General cargo	0.0	3.2	0.0	0.0	96.8	23.0	
	Container ship	0.0	0.0	0.0	0.0	100.0	23.5	
	Others	0.0	0.0	67.2	6.1	26.8	15.4	
Dominican Republic	ALL	4.4	0.0	0.0	0.0	95.6	22.5	
	Tanker	0.0	0.0	0.0	0.0	0.0	0.0	
	Dry bulk carrier	0.0	0.0	0.0	0.0	0.0	0.0	
	General cargo	0.0	0.0	0.0	0.0	100.0	23.5	
	Container ship	0.0	0.0	0.0	0.0	0.0	0.0	
	Others	31.8	0.0	0.0	0.0	68.2	16.7	
Ecuador	ALL	0.1	63.9	0.8	2.7	32.5	12.7	
	Tanker	0.0	77.3	0.0	0.7	22.0	10.7	
	Dry bulk carrier	0.0	0.0	0.0	0.0	0.0	0.0	
	General cargo	0.0	0.0	0.0	0.0	100.0	23.5	
	Container ship	0.0	0.0	0.0	0.0	0.0	0.0	
	Others	0.7	0.0	4.8	12.7	81.8	22.0	
El Salvador	ALL	0.0	0.0	100.0	0.0	0.0	12.0	
	Tanker	0.0	0.0	0.0	0.0	0.0	0.0	
	Dry bulk carrier	0.0	0.0	0.0	0.0	0.0	0.0	
	General cargo	0.0	0.0	0.0	0.0	0.0	0.0	
	Container ship	0.0	0.0	0.0	0.0	0.0	0.0	
	Others	0.0	0.0	100.0	0.0	0.0	12.0	

Country grouping	Types of vessel	0-4 years	5-9 years	10-14 years	15-19 years	20 years and over	Age end 2004	Age end 2001
Falkland Islands^b	ALL	0.0	0.0	17.1	62.1	20.8	17.5	
	Tanker	0.0	0.0	0.0	0.0	0.0	0.0	
	Dry bulk carrier	0.0	0.0	0.0	0.0	0.0	0.0	
	General cargo	0.0	0.0	0.0	0.0	100.0	23.5	
	Container ship	0.0	0.0	0.0	0.0	0.0	0.0	
	Others	0.0	0.0	17.3	63.0	19.7	17.4	
Grenada	ALL	0.0	4.5	0.0	0.0	95.5	22.8	
	Tanker	0.0	0.0	0.0	0.0	0.0	0.0	
	Dry bulk carrier	0.0	0.0	0.0	0.0	0.0	0.0	
	General cargo	0.0	0.0	0.0	0.0	100.0	23.5	
	Container ship	0.0	0.0	0.0	0.0	0.0	0.0	
	Others	0.0	100.0	0.0	0.0	0.0	7.0	
Guatemala	ALL	0.0	0.0	78.9	0.0	21.1	14.4	
	Tanker	0.0	0.0	0.0	0.0	100.0	23.5	
	Dry bulk carrier	0.0	0.0	0.0	0.0	0.0	0.0	
	General cargo	0.0	0.0	0.0	0.0	0.0	0.0	
	Container ship	0.0	0.0	0.0	0.0	0.0	0.0	
	Others	0.0	0.0	100.0	0.0	0.0	12.0	
Guyana	ALL	0.0	1.6	0.0	7.2	91.2	22.8	
	Tanker	0.0	0.0	0.0	0.0	100.0	23.5	
	Dry bulk carrier	0.0	0.0	0.0	0.0	0.0	0.0	
	General cargo	0.0	0.0	0.0	8.4	91.6	23.0	
	Container ship	0.0	0.0	0.0	0.0	0.0	0.0	
	Others	0.0	6.7	0.0	5.7	87.6	22.0	
Haiti	ALL	0.0	0.0	0.0	0.0	100.0	23.5	
	Tanker	0.0	0.0	0.0	0.0	0.0	0.0	
	Dry bulk carrier	0.0	0.0	0.0	0.0	0.0	0.0	
	General cargo	0.0	0.0	0.0	0.0	100.0	23.5	
	Container ship	0.0	0.0	0.0	0.0	0.0	0.0	
	Others	0.0	0.0	0.0	0.0	100.0	23.5	
Honduras	ALL	0.1	0.3	0.2	0.5	98.9	23.4	
	Tanker	0.0	0.0	0.0	0.0	100.0	23.5	
	Dry bulk carrier	0.0	0.0	0.0	0.0	100.0	23.5	
	General cargo	0.1	0.2	0.1	0.4	99.1	23.4	
	Container ship	0.0	0.0	0.0	0.0	100.0	23.5	
	Others	0.1	1.3	0.9	2.1	95.7	23.0	
Jamaica	ALL	0.0	0.0	8.5	14.4	77.1	21.6	
	Tanker	0.0	0.0	0.0	0.0	100.0	23.5	
	Dry bulk carrier	0.0	0.0	9.1	15.5	75.4	21.4	
	General cargo	0.0	0.0	0.0	0.0	100.0	23.5	
	Container ship	0.0	0.0	0.0	0.0	0.0	0.0	
	Others	0.0	0.0	100.0	0.0	0.0	12.0	

Country grouping	Types of vessel	0-4 years	5-9 years	10-14 years	15-19 years	20 years and over	Age end 2004	Age end 2001
Saint Vincent and the Grenadines	ALL	2.0	2.0	3.8	12.4	79.8	21.5	
	Tanker	0.5	5.9	1.8	0.0	91.9	22.2	
	Dry bulk carrier	3.1	0.6	3.7	19.1	73.4	21.1	
	General cargo	0.7	2.2	4.2	5.2	87.7	22.2	
	Container ship	0.0	15.5	8.1	15.1	61.3	19.0	
	Others	1.5	4.9	4.1	9.4	80.1	21.3	
Suriname	ALL	0.0	3.7	0.0	44.6	51.7	20.0	
	Tanker	0.0	0.0	0.0	89.4	10.6	17.7	
	Dry bulk carrier	0.0	0.0	0.0	0.0	0.0	0.0	
	General cargo	0.0	0.0	0.0	0.0	100.0	23.5	
	Container ship	0.0	0.0	0.0	0.0	0.0	0.0	
	Others	0.0	100.0	0.0	0.0	0.0	7.0	
Trinidad and Tobago	ALL	8.9	5.0	0.0	12.7	73.3	19.9	
	Tanker	0.0	0.0	0.0	0.0	0.0	0.0	
	Dry bulk carrier	0.0	0.0	0.0	0.0	0.0	0.0	
	General cargo	0.0	0.0	0.0	0.0	100.0	23.5	
	Container ship	0.0	0.0	0.0	0.0	0.0	0.0	
	Others	9.3	5.3	0.0	13.2	72.2	19.8	
Turks and Caicos Islands	ALL	0.0	0.0	0.0	0.0	100.0	23.5	
	Tanker	0.0	0.0	0.0	0.0	0.0	0.0	
	Dry bulk carrier	0.0	0.0	0.0	0.0	0.0	0.0	
	General cargo	0.0	0.0	0.0	0.0	100.0	23.5	
	Container ship	0.0	0.0	0.0	0.0	0.0	0.0	
	Others	0.0	0.0	0.0	0.0	0.0	0.0	
Uruguay	ALL	1.7	0.4	0.7	2.7	94.5	22.8	
	Tanker	0.0	0.0	0.0	0.0	100.0	23.5	
	Dry bulk carrier	0.0	0.0	0.0	0.0	0.0	0.0	
	General cargo	0.0	0.0	0.0	4.6	95.4	23.2	
	Container ship	0.0	0.0	0.0	0.0	0.0	0.0	
	Others	2.4	0.5	1.0	3.0	93.1	22.6	
Venezuela	ALL	2.6	20.8	5.8	7.3	63.4	18.4	
	Tanker	4.2	32.2	7.5	10.9	45.2	15.7	
	Dry bulk carrier	0.0	0.0	0.0	0.0	100.0	23.5	
	General cargo	0.0	0.0	6.5	0.0	93.5	22.7	
	Container ship	0.0	0.0	0.0	0.0	100.0	23.5	
	Others	0.6	7.8	5.4	4.1	82.1	21.2	

Source: Lloyd's Register – Fairplay.

^a In calculating the average age, it has been assumed that the ages of vessels are distributed evenly between the lower and upper limits of each age group. For the 20-years-and-over age group, the midpoint is assumed to be 23.5 years.

^b A dispute exists between the Government of Argentina and the United Kingdom of Great Britain and Northern Ireland concerning sovereignty over the Falkland Islands (Malvinas).

Table 52
Estimated international traffic per type of shipping service
(millions of tons)

	Goods loaded			Total	Goods unloaded			Total
	Tanker	Dry bulk	Liner	Loaded	Tanker	Dry bulk	Liner	Unloaded
Caribbean	25.7	9.5	3.2	38.4	40.6		17.9	58.5
Mexico & Central America	116.3	4.1	45.1	165.5	27.4	26.6	38.7	92.7
South America – North Coast	139.8		3.5	143.3	15.9		7.6	23.5
South America – East Coast	44.7	308.7	63.6	417.0	40.4	46.7	28.2	115.3
South America – West Coast	27.0	77.5	29.2	133.7	20.7	59.5	4.2	84.4
	353.5	399.8	144.6	897.8	144.9	132.8	96.5	374.3

Source: Compiled by the UNCTAD secretariat.

(LOOP) terminal off the US coast in the Gulf of Mexico, other terminals along the US east coast, and refineries on some Caribbean islands. Between 2002 and 2004, rates increased in line with the evolution of the tanker market worldwide. During 2002, average rates from Mexico to the US east coast were WS127 in April and WS185 in November. During the following year, rates rose from WS146 in January to WS278 in December, and during 2004 there was a less pronounced increase from WS314 at the beginning of the year to WS349 in December (a time charter equivalent of \$67,600 per day). Actual fixtures reflected the volatility of tanker markets during these years. In April 2003, Royal Dutch Shell chartered the *Genmar Boss* to take 70,000 tons of crude oil from Mexico's east coast to the US coast in the Gulf of Mexico at WS200, while May 2004 it secured the *Regent* for the same route and cargo at WS170. Tonnage for destinations in the Caribbean islands fetched freight commensurate with vessel size. In the same month, Valero chartered the *Tito Tapias* to take 130,000 tons to Aruba at \$495,000, while Petro-Jamaica secured the *Andros* to take 50,000 to Kingston at \$260,000. Larger tankers were used for distant destinations: Reliance chartered the *Utah* to take 275,000 tons to India at \$2.55 million. Rates remained below WS 200 for routes across the Caribbean in September 2004 — Exxon chartered the *Genmar Constantine* to take 70,000 tons from Coveñas to Baton Rouge at WS155. Smaller tankers are used to ship crude oil from other South American exporters: in September 2004, Citgo secured the *Maya* to take 50,000 tons from Ecuador to the west coast of North America.

Imports of crude oil are made from West Africa and the Persian Gulf, notably to Brazil. Oil companies engage tonnage at or above the Suezmax level for this trade and benefited from rate volatility. In April 2003, the Brazilian oil company Petrobras chartered two tankers, the *Kimolo* and the *Front Emperor*, with a three-day difference to take 130,000-ton parcels from West Africa to Brazil and paid WS150 and WS 107 respectively. In May 2004, it chartered another two vessels, the *Tropic Brilliance* and the *Genmar Ariston*, for similar trips and cargo and found that the rates were WS115 and WS112.

Trade of clean oil products, notably from refineries to US ports, important in the Caribbean. Smaller tankers in the range of 25,000–35,000 dwt are engaged for this transport. Typical spot rates on the Curaçao–Houston route rose from \$9.80 per ton in December 2002 to \$14.30 per ton in December 2003 and then further to \$20.50 a year later. The time-charter equivalent for a 30,000-dwt tanker was \$34,100 per day in December 2004, more than two and a half times the level of December 2002 (\$13,900 per day). Elsewhere, crude oil imports together with coastal domestic trade in crude oil, oil products and petrochemicals constitute a significant traffic. For instance, Brazilian imports of crude oil together with domestic traffic of petroleum products are handled in Petrobras terminals, such as those of Aratu, Angra dos Reis and São Sebastião, which respectively handled 19.2, 14.1 and 51.6 million tons of liquid bulks in 2003.

Elsewhere, there were plans to export LNG from Camisea fields in Peru to Mexico and Chile, notably since the latter suffered gas shortages in 2004.

Dry bulk shipping services

Dry bulk trade is focused on South America, with minor bulks shipped from the Caribbean (notably bauxite and alumina from Jamaica). From the east coast, iron ore and grain are exported from Brazil and grain from Argentina; smaller volumes of iron ore are exported from the west coast; and coal is exported from Colombia and Venezuela on the north coast.

The largest ports are those operated by Companhia Vale do Rio Doce (CVRD) in Tubarão and Ponta da Madeira in central and northern Brazil, which in 2003 reached throughput of 74.4 and 59.3 million tons, consisting largely of iron ore exports. In the same year, another large operator loaded 44.3 million tons of iron ore from the port of Sepetiba. Discharges of dry bulks, among them imports of coal for steel manufacturing, come through the ports of Praia Mole and Sepetiba, which handled 11.9 and 5.2 million tons respectively. Praia Mole handles significant coastal trade in iron ore, which led to 7.3 million tons of steel products being exported through it. Similarly, coastal trade in bauxite and alumina led to exports of aluminium products through private terminals located near the port of Itaquí.

Vessels over 100,000 dwt are engaged in trade of iron ore from Brazil. Since 2002, freight rates have increased substantially. Between December 2002 and December 2003, rates from Brazil to northern Europe increased from \$8.05 per ton to \$19.20 per ton. During 2004, rates rose to \$24.25 per ton by the end of the year. These rate increases were mirrored on the Brazil–China route: between December 2002 and December 2003, rates increased from \$12.85 per ton to \$33.20 per ton, and during 2004 they increased 27 per cent more to reach \$42.45 per ton in December 2004. These increases in freight rates should be viewed in conjunction with the substantial price increases reported in chapter 1 under the heading “Iron Ore Shipments”.

Along South America’s west coast, iron ore exports travel through the ports of Huasco and Guayacan (Chile) and San Nicolas (Peru). In 2003, the Chilean ports, owned by a subsidiary of CAP S.A., the largest steel manufacturer in Chile, loaded 6.7 million tons of iron ores, of which fourth fifths went to Asian countries (2.1 million tons to China and 1.5 million tons to Japan, with Malaysia,

the Republic of Korea and Indonesia accounting for the balance). In the same year, the Peruvian port, part of a mining joint venture with Chinese investors, exported 5 million tons, half of it to steel makers of that country; this share rose to 60 per cent the following year. The port of Ventanas, operating in central Chile, serves several dry bulk traffics and reported total throughput of 2.8 million tons, almost evenly split between loaded and unloaded cargo.

Coal exports from Colombia are the largest dry bulk exports from the north coast of South America. Thermal coal is mined from El Cerrejon Basin by the joint venture Intercor-Carbocol and railed about 150 kilometres to Puerto Bolivar, from where 22.2 million tons were shipped to the US and European markets in 2003. Another exporter uses rail, barges and a floating facility offshore from Cienaga and shipped 16.4 million tons of thermal coal in 2003. Other minor exporters using smaller terminals loaded about 4 million tons. Venezuelan thermal coal comes from Guasare Basin, is trucked about 85 kilometres and then uses barges to reach a floating facility close to the navigation channel of Maracaibo Lake.

Cape-size tonnage is engaged for coal exports. Representative single-voyage rates from Puerto Bolivar to northern Europe indicate a steady increase in freight rates. In December 2002, rates were \$8.20 per ton after doubling during the year; one year later, freight rates had increased to \$19.65 per ton. The pace of increases slowed during 2004, and in December freight rates averaged \$24.55 per ton.

Dry bulk vessels in the range of 15,000 to 75,000 dwt are used in the region’s grain trade. Leading exporters are the port of Paranagua in southern Brazil, which in 2003 exported 14.5 million tons of grain out of 32.5 million tons of total throughput, and a number of Argentinean ports along the Parana River, including topping-off facilities in the River Plate. Imports are spread out among many general cargo ports of the region. Sometimes the same port handles exports and imports. In 2003, the port of Santos (Brazil) exported 9.5 million tons of soya and imported 1 million tons of wheat.

Representative fixtures for grain shipments suggest the prevalence of trip rather than voyage charters. In April 2003, Bunge chartered the 41,093-dwt *Nikos N* to carry grain from Paranagua to the Mediterranean at \$10,800 per day. In June 2004, Transgrain secured the 64,916-dwt *Popi S* for taking grain from the River Plate

to Spain at \$22,000 per day. Two months later, Martini chartered the *Avdeevka* to take a 25,000-ton grain parcel from the River Plate to Italy at \$45.50 per ton.

Other dry bulk shipping services are related to exports of bauxite and alumina from Jamaica and sugar from southern Brazil. Although most of the 9 million tons exported by Jamaica goes to the US and European markets, some is exported to other regions. In August 2004, the 48,263-dwt *Probo Bear* was chartered for a trip to China at \$14,200 per day. Sugar is usually shipped from Santos to transatlantic destinations in parcels of up to 40,000 tons. In April 2003, two vessels were chartered to take two 40,000-ton parcels to the Baltic and Black Seas at \$26.75 per ton. Bagged sugar is taken to Africa in small vessels; in the same month Tate & Lyle chartered unnamed vessels to take 10,000 tons to West Africa at \$34.50 per ton. By August 2004, rates seemed higher. A 30,000-ton parcel from Santos to the Black Sea fetched \$42.50 per ton, while 14,000 tons of bagged sugar fetched \$65 per ton.

Liner and other shipping services

Liner services in Latin America and the Caribbean are made up of a mix of container shipping services, back-up general cargo services and reefer shipping services, notably for the carriage of bananas. Container shipping services in the region make up one of the south-south world container routes in which gear and gearless cellular tonnage, in the 1,500-to-3,000-TEU range, is deployed together with smaller

geared vessels. The efficient operation of these services takes into consideration proximity to the main east-west world container routes, the availability of modern port facilities, and the type, stability and volume of cargo flows. Most of the world's major container ship operators are active in the region independently or through slot agreements or joint operations with others. With the exception of CSVA from Chile, which briefly featured among the world's top 20 container ship operators in 2002, regional liner operators are of modest size and engaged in feeder services.

Containerized services are concentrated in those ports of Latin America and the Caribbean having specialized facilities. The majority of them adopted security and protection measures mandated by the ISPS Code and were compliant with it by the 1 July 2004 deadline.

During 2003, container traffic in ports of the region increased by 8.6 per cent to 19.8 million TEUs, about 6.8 per cent of the world total (see table 53). The largest share (28.4 per cent) of the regional total is accounted for by Caribbean ports and reflects the considerable trans-shipment activity that takes place in them. South America's east coast accounts for 25.9 per cent of the regional total and comprises the most industrialized area of the southern hemisphere. Container traffic on this coast increased 27.6 per cent in 2003 to 5.13 million TEUs. Central America, which includes Panama, accounts for 17 per cent of regional container traffic owing to the extensive trans-shipment activity undertaken by this country.

Table 53

Container throughput in ports of the region

(millions of TEUs)

Country/Subregion/Coast	2002	2003
Mexico	1.56	1.68
Central America	3.5	3.38
Caribbean	5.28	5.62
South America – North Coast	1.38	1.22
South America – East Coast	4.02	5.13
South America – West Coast	2.47	2.75
Total	18.21	19.78

Source: ECLAC, *Puertos y transporte marítimo en América Latina y el Caribe: un análisis de sus desempeño reciente* (2004). Publication LC/L.2227-P.

Table 54
Top 20 container ports in Latin America and the Caribbean
(in millions of TEUs)

Position	Port (Country)	Million TEUs in 2003
1	San Juan (Puerto Rico – USA)	1.67
2	Santos (Brazil)	1.56
3	Colon (Panama)	1.51
4	Kingston (Jamaica)	1.14
5	Freeport (Bahamas)	1.06
6	Buenos Aires (Argentina)	0.9
7	Manzanillo (Mexico)	0.71
8	Callao (Peru)	0.63
9	Limon-Moin (Costa Rica)	0.61
10	Veracruz (Mexico)	0.57
11	Rio Grande do Sul (Brazil)	0.54
12	San Antonio (Chile)	0.52
13	Cartagena (Colombia)	0.51
14	Guayaquil (Ecuador)	0.47
15	Itajai (Brazil)	0.46
16	Balboa (Panama)	0.46
17	Puerto Cortes (Honduras)	0.4
18	Rio Haina (Dominican Republic)	0.39
19	Puerto Cabello (Venezuela)	0.38
20	Montevideo (Uruguay)	0.33
Total		14.83

Source: ECLAC, *Puertos y transporte marítimo en América Latina y el Caribe: un análisis de sus desempeño reciente* (2004). Publication LC/L.2227-P.

Container traffic is concentrated in a few ports. In 2003, the top 10 ports (see table 54), which make up 12 per cent of 83 surveyed ports, accounted for 52 per cent of regional container traffic. For the top 20 ports (24 per cent of container ports in the region), the share increases to almost three quarters of regional throughput.

Direct shipping services to the main US, European and Asian markets are more often found in Mexico, Central America and the Caribbean than on the east and west coasts of South America, particularly the latter, which relies heavily on trans-shipment via ports in the Caribbean or along North America's east and west coasts. Direct shipping services from South

America's east coast to the Far East include calls in South Africa, and some carriers such as Evergreen have been expanding them.

While container ships with capacity of more than 4,000 TEUs are rarely found on routes to South America owing to severe port constraints, the trend towards large vessels is clear: Hamburg Sud deployed 3,800-TEU-capacity ships in 2002 along the east coast of South America and has announced the deployment of 5,500-TEU-capacity ships from the middle of 2005. Sea carriers rely on short-term chartered tonnage to quickly adapt their shipping services to the changing conditions that prevail in much of the region.

Traffic imbalance is a major feature that sea carriers must contend with in South America, and one exacerbated by expanding trade flows. In 2003, the percentage of empties reached 43.6 per cent of the total container traffic along the east coast of South America and 32.2 per cent of that of the west coast. Temporary and permanent reasons explain the imbalance. Along the east coast, sudden and significant currency devaluation in Argentina and a phased and mild one in Brazil have contracted imports and boosted exports since 2002. On both coasts, a large share of exports is reefer cargo requiring reefer vessels or containers. Accordingly, sea carriers devise complex patterns to deploy owned and chartered tonnage of different sizes along these coasts in order to adjust their slot capacity to demand.

The remarkable growth of exports and the progressive recovery of imports resulted in record cargo throughput in many ports, which highlighted the need for investments. In Santos, the largest port in the region, port capacity was stretched to the limit, and labour and administrative stoppages led to congestion and highlighted the urgent need for further investment. Investment in the port's several container facilities has succeeded in bringing down container-handling expenses to less than \$200 per box, about half the level prevailing in the late 1990s. The acute lack of investment in Callao (Peru) resulted in overly costly container-handling operations. In Buenos Aires, deepening the sea channel access was critical for bringing back the large container ships deployed on some direct services to world markets, but channel tolls, which constitute about half the cost of a ship call, were increased.

Under-investment was not limited to single ports and required appropriate legislation. Many Brazilian ports were approaching saturation in the wake of strong export volumes, and competitiveness was being affected; port costs for exporting steel were said to be two to four times higher in Brazilian ports than in other ports with similar traffic. Still, the investment capacity of port authorities was weak: eight Brazilian port authorities reported a total deficit of about \$100 million for 2002, and shippers estimated that port delays cost them \$1.2 billion in 2004. In early 2005, the protracted passage of the private-public partnership bill was finally completed and paved the way for modernization of the country's transport infrastructure, including ports and their intermodal connections to domestic highways. Also, the Government allocated \$100 million for dredging in Santos, Rio de Janeiro, Sepetiba, Vitoria, Rio Grande do Sul, São Francisco do Sul and Itajai. A number of

private-sector schemes were under consideration, notably the 100-hectare Embraport project for Santos, sponsored by Coimex, a large Brazilian trader, to serve container and bulk traffic. Similarly, in Peru the enactment of a port bill in 2003 paved the way for establishing a national port authority and opening the concession process to attract badly needed investment.

Investments were more likely to be found in the proximity of the major east-west routes and close to the US market, with trans-shipment activities fuelling them. February 2004 saw the start of the fourth expansion of Kingston (Jamaica) to increase capacity by 25 per cent to 1.5 million TEUs; two months later, the \$290 million Caucedo port was commissioned by CSX World Terminals in the Dominican Republic; and in November began the dredging of the access channel for the new 1.4 million-TEU Americas Port near Ponce (Puerto Rico – United States). The industrial port of Lazaro Cardenas entered the container traffic business in 2004 by attracting Maersk, CP Ships and APL to complement Manzanillo for serving central Mexico, and both ports saw potential for serving US destinations too. In Central America, dredging started in the new La Union port in El Salvador. On Panama's Pacific coast, HPH completed its \$600 million investment in Balboa, where there are now two container berths linked by a railway across the Isthmus, with facilities at Cristobal on the Caribbean coast (where further investment is planned). Nearby Cartagena (Colombia) invested \$20 million in equipment and in dredging to 14 metres to expand capacity to 1.2 million TEUs in 2004. Further south, the \$110 million deep-water port of Mejillones (Chile) was inaugurated in November 2003 to serve a hinterland encompassing northern Chile, southern Bolivia and northeastern Argentina.

Reefer export traffic from the east coast of South America expanded when Patagonian fruit and frozen seafood began to be transported by Maersk and Hamburg Sud to Montevideo (Uruguay) for onward carriage to northern Europe, where demand has increased, notably in Eastern European countries and Russia. Freight rates for reefer exports from Buenos Aires to Europe were said to be about \$3,000 per box, but southbound they were only \$500, plus a \$58 channel toll and other charges. Other established reefer export flows from Brazil faced severe constraints because Itajai, one of the main exporting outlets, was hampered by shallow drafts and limited quay length. Representative freight rates from this port to northern Europe during 2004 were \$3,200 per FEU for apples and \$2,900 for oranges. In Mercosur countries,

feeder services complemented direct calls: Lineas Feeder connected ports and terminals across the River Plate, while Mercosur Shuttle provided sea and river services up to Paraguay with shallow draft barges.

On South America's west coast, reefer tonnage was the mainstay for sea carriers, which faced rate increases on account of the almost full employment of the reefer fleet worldwide. Rates for feeder tonnage rose from \$0.42 per cubic foot in January 2002 to \$0.46 in January 2004 and \$1.03 in 2005.

Banana traffic from Colombia, Ecuador and Central America was affected even though most of it moves in trader-owned fleets. But high charter rates for reefer vessels increased the use of reefer containers for fruit exports from Chile to distant destinations such as the Far East. In 2004, Dole and Del Monte decided to ship fruit to Europe in containers using the TA3 Maersk direct service from San Antonio (Chile). By mid-2004, representative freight rates for reefer containers from Chile to northern Europe were \$4,100 to \$6,800 per FEU, including the general rate increase but excluding THC and BAF. For the same route and direction, standard containers were charged \$1,500 to \$2,050 per TEU, and those heading southbound fetched about \$1,225 per TEU. The level of freight rates worried Chilean exporters, who estimated a 90 per cent increase in freight rates over the 12 months leading to December 2004, but the local shipowner community, the largest in the region, explained that the large tonnage on order would result in oversupply and lead to future rate reductions.

Along the west coast, the new toll structure proposed by the Panama Canal Authority in October 2002 was cause for concern. The new structure replaced the flat rate for all ships in force since 1912 with new rates based on ship size and type, plus separate locomotive usage rates. For container vessels, this means that the Universal Measurement System (PCUMS) is being replaced by an equivalent TEU charge to be applied according to vessel capacity, with the changes to be phased in from May 2005 until 2007. Shipping companies and cargo interests, notably from the west coast of South America, made representations concerning the full impact of the proposed change, which could increase costs for transiting container ships by 68 per cent. The Authority explained that, with the traditional system, only 8.78 per cent of the total on-deck TEU capacity of container ships transiting the Canal was being charged, and that 100 per cent of that capacity would now be charged. Currently about a third of transits involve container ships, and the

Authority is engaged in deepening access, smoothing curve alignments and ensuring water supplies to allow more Panamax vessels to transit the Canal. The first step, a new toll of \$42 per TEU, entered into force in May 2005.

Development of inland transport in South America

During the period under review, the development of the inland transport network in South America along the lines defined by the IIRSA (Integration of South America Regional Infrastructure) initiative became a priority for regional financial development institutions. Two priority axes were defined, one linking Mercosur countries with Chile and therefore connecting the east and west coasts, and the other linking the Andean countries, so that the north and west coasts were connected. Other complementary axes made use of South America's extensive river network to develop inland waterways, as with the axis using the Amazon River to reach the Pacific coast in northern Peru.

By June 2003, Corporacion Andina de Fomento (CAF) was funding 15 transport projects amounting to \$875 million and had, jointly with BNDES (Banco Nacional de Desenvolvimento do Brasil), identified 22 additional projects for joint funding. About half of these were for new roads and highways, the rest for railways, ports and inland waterways. National initiatives were also contributing to the expansion of the road network. An example is the 1,765-kilometre Brazilian highway linking Cuiba (in Matto Grosso) to Santarem, a port on the Amazon River, from which soya beans are increasingly being exported.

In the meantime, transport companies are developing railway networks and providing logistics services to the trading community and sea carriers. CVRD Logistics, a subsidiary of the mining company, operates along three Brazilian rail networks, Vitoria-Minas, Carajas and Centro Atlantica, with a total length of 9,306 kilometres. Building up on the extensive transport of bulk minerals for exports, the Express Train Service links the major production centre (São Paulo) and consumption centres in the north (Salvador) and centre (Uberlandia) of the country. Three trains run daily, and door-to-door service, including tracking of containers, is available to domestic and international customers.

America Latina Logistica (ALL) operates about 16,000 kilometres of rail network split almost equally between southern Brazil (Curitiba) and Argentina.

ALL operates an intermodal logistics park near Buenos Aires and is connected to the western (Mendoza) and northeastern regions (EntreRios, Corrientes) of the country. More than 60,000 TEUs a year are moved via the network, including 500 TEUs of bottled wine carried monthly from Mendoza to Buenos Aires for export. Overall, containerized traffic makes up about 20 per cent of ALL business, with minerals and grains accounting for the balance. NCA, another transport company, operates about 5,000 kilometres of rail network in Argentina from Buenos Aires to the northwest (Cordoba and Tucuman), over which about 60,000 TEUs were railed during 2004, mostly lemon juice, milk powder and peanuts for export. Although still road transport prevails in Argentina, the share of rail transport increased from 8 per cent to 15 per cent during the last five years.

In Chile, container rail traffic has developed between the ports of San Antonio and Valparaíso and the Concepción region about 400 kilometres to the south. Three rail operators compete amongst themselves and with road transporters for this traffic with rail rates of \$350 per TEU — about \$100 less than those asked by truck companies. Container rail traffic also flows between these ports and Santiago, the country's capital, and Curico, an agricultural producing region. In 2003, Sitrans, one of the main rail operators, moved 8,000 boxes to Concepción, 3,500 boxes to Santiago and 4,000 boxes to Curico.

Estimates of freight costs in Latin American countries

Cost factor for import trades

In 2003, developing countries in America accounted for 19.7 per cent of the total value of imports and 21.3 per cent of the total value of the freight of all developing countries. In that year (see table 55), the proportion of total freight costs for American developing countries relative to import value was 9.8 per cent, which is slightly above the average of 9.1 per cent for developing countries.

The regional average masks wide differences among trading areas. The cost factor for import trade to countries on South America's west coast is the highest (13.3 per cent), followed by the cost factor for countries on South America's north coast and the Caribbean (12.3 and 11.6 per cent respectively). The cost factor for the east coast of South America was 9.3 per cent, while that for Central America and Mexico was the lowest one at 8.8 per cent. The regional average is heavily influenced by the cost factors recorded by the largest economies of the region, Mexico and Brazil, which recorded 8 and 8.4 per cent respectively. Grenada has the highest percentage, 20.1 per cent.

Table 55

Freight ratios for Latin American and Caribbean countries

	Imports	Freight	Ratio
Bahamas	5 748.6	628.6	10.9
Barbados	1 202.1	232.1	19.3
Cuba	3 394.0	324.0	9.5
Dominica	205.2	15.2	7.4
Dominican Republic	8 802.1	852.1	9.7
Grenada	250.3	50.3	20.1
Haiti	1 315.7	215.7	16.4
Jamaica	4 063.1	603.1	14.8
Saint Kitts and Nevis	248.7	28.7	11.5
Saint Lucia	367.0	40.0	10.9
Saint Vincent and the Grenadines	489.8	39.8	8.1
Trinidad and Tobago	3 693.5	433.5	11.7
Subtotal Caribbean countries	29 780.1	3 463.1	11.6
Costa Rica	7 662.5	722.5	9.4
Salvador	5 762.7	1 022.7	17.7
Guatemala	7 339.0	819.0	11.2
Honduras	4 893.7	623.7	12.7
Mexico	165 046.0	13 166.0	8.0
Nicaragua	1 886.9	176.9	9.4
Panama	17 877.5	1 967.5	11.0
Subtotal Mexico & Central America	210 468.3	18 498.3	8.8
Guyana	1 021.3	191.3	18.7
Suriname	674.4	74.4	11.0
Venezuela	16 841.0	2 021.0	12.0
Subtotal South America – North Coast	18 536.7	2 286.7	12.3
Argentina	13 833.0	1 743.0	12.6
Bolivia	1 660.7	320.7	19.3
Brazil	70 105.0	5 855.0	8.4
Paraguay	2 615.3	255.3	9.8
Uruguay	3 106.0	336.0	10.8
Subtotal South America – East Coast	91 320.0	8 510.0	9.3
Chile	19 413.0	2 313.0	11.9
Colombia	13 880.0	1 950.0	14.0
Ecuador	6 673.2	743.2	11.1
Peru	8 224.3	1 384.3	16.8
Subtotal South America – West Coast	48 190.5	6 390.5	13.3
Total Latin America and Caribbean	398 295.6	39 148.6	9.8