

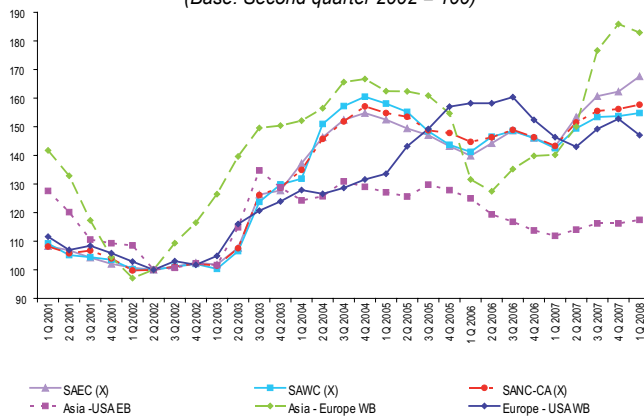
MARITIME TRANSPORT PRICES AND CAPACITIES, 2007

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1. Container freight rates

Figure 1 shows price trends for maritime container transport for selected routes from the first quarter of 2001 to the first quarter of 2008 (preliminary data).

Figure 1
CONTAINER FREIGHT INDEX, 2001 – START-2008
(Base: Second quarter 2002 = 100)



Source: Ricardo J. Sánchez, based on CI-ONLINE information obtained through Bloomberg for routes between Asia, the United States and Europe, and information collected by the authors on freight rates for container exports from Latin America. This is a Laspeyres index.

The prices used to construct the indices are for 20-foot dry containers and are divided into two groups. The first group corresponds to the three major international maritime trade routes (from Asia to the United States and to Europe, and from Europe to the United States, in the directions indicated only), and the second group corresponds to outgoing routes from Latin America, for each of the three coasts. In the first case, the data was obtained from Containerisation International and includes the main charges and surcharges (for congestion, fuel, and handling, currency adjustment factor (CAF),

bunker adjustment factor (BAF), terminal handling charge (THC), etc.) and refers to the largest shipping lines operating along each route. In the second case, the data was collected by the authors for the same period. For Latin America, the prices also include the main charges (equivalent to the total price of maritime transport) weighted according to the main export destinations. In the case of Central America and Mexico, provisional and casual measurements were taken to compare their performance with systematic follow-up for South America. The findings show patterns similar to those for prices for the north coast of South America.

In all cases, the index shows the percentage change in prices with respect to an initial period, set as the second quarter of 2002. This period was chosen because it fell at the low point in the maritime cycle for containers (see FAL Bulletin 228, August 2005).

For most of the routes that were studied, the low point occurred during the second quarter of 2002. Generally, prices then rose until the end of 2004. For Latin America, this meant an average increase of 57.5% with respect to the base period. Subsequently, prices tended to fall, albeit at different rates, with the exception of the Europe–United States route, which continued to climb. The downward trend was more pronounced for the Asia–Europe route and less pronounced for the Latin American outgoing routes and the Asia–United States route. In the case of the outgoing routes from Latin America, the trend reversed in the first quarter of 2006: the index for the west coast fell from 160.5 in the fourth quarter of 2004 to 141.2 in the first quarter of 2006; during the same period the east coast index fell from 154.8 to 139.9 and the north coast index fell from 157.1 to 144.7. In the first quarter of 2007, prices for the maritime transport of containers began to climb again. At the end of 2007, the east coast index value was 162.3, the north coast value was 156.2, and the west coast value was 153.7. The historic highs between the first quarter of 2001 and the first quarter of 2008 were: 134.7 for the Asia–United States route (third quarter of 2003); 185.9 for the Asia–Europe route (fourth quarter of 2007); 160.4 for the Europe–United States route (third quarter of 2006); 167.6 for the east coast of South America (first quarter of 2008); 160.5 for the west coast of South America (fourth quarter of 2004); and 157.7 for the north coast of South America (first quarter of 2008).

2. Changes in the supply of container shipping capacity

Supply mismatches with respect to demand for shipping services have varying consequences in the different regions of the world and are reflected in supply-side corrections.

The following tables show changes in the supply of shipping capacity, measured as the total capacity in 20-foot equivalent units (TEUs) by area and route for the major international routes and the routes corresponding to Latin America and the Caribbean.¹ The index has assigned the value of 100 to the capacity available in September 2002, as the base indicator. In each case, it is interesting to note the change relative to 2004, when the effects of the freight crisis were most pronounced.

Due to the network-based structure of the regular maritime container shipping industry, it should be noted that some variations in the figures correspond to decisions to change the configuration of the networks. The reader is therefore advised to study the following tables carefully.

In the case of the Caribbean, as a result of its growing importance as a global production and trade hub, there have been major increases in shipping capacity on routes with North America and with the Far East and Europe, as well as with South America. On many of these routes, Central America has also made gains, in association with the Caribbean.

Lastly, as was the case with the east coast, there was a steady decline in intracoastal services.

Table 1
CHANGES IN THE SUPPLY OF SHIPPING CAPACITY. PRINCIPAL SELECTED ROUTES, 2002-2007

Major international shipping routes	Capacity offered in TEUs					
	2002	2003	2004	2005	2006	2007
Europe - Far East	100.00	99.09	115.93	129.43	110.77	157.52
Europe - Mediterranean	102.76	103.06	101.41	97.83	153.10	215.74
Europe - Middle East	95.08	110.47	139.70	161.35	113.36	115.77
Europe - North America east coast	104.30	89.65	94.03	104.75	106.41	106.09
Far East - Indian subcontinent	101.49	100.15	107.46	100.06	69.66	140.70
Far East - Mediterranean	104.44	113.10	123.07	135.70	106.79	149.12
Far East - North America east coast	98.41	100.66	112.75	117.02	107.89	95.48
East Asia - Northeast Asia	99.98	137.04	135.93	143.07	403.30	478.03
East Asia - Southeast Asia	96.78	120.34	106.11	117.08	394.30	569.10
Mediterranean - North America east coast	104.81	121.04	112.86	110.45	151.38	133.29
North America east coast - North America Gulf coast	-	-	-	-	274.67	214.19

Source: Ricardo J. Sánchez and Maricel Ulloa S., ECLAC/UN.

Note: Figures calculated for end-year values.

Table 2
CHANGES IN THE SUPPLY OF SHIPPING CAPACITY. SELECTED ROUTES FROM CENTRAL AMERICA AND THE CARIBBEAN, 2002-2007

Central America and the Caribbean	Capacity offered in TEUs					
	2002	2003	2004	2005	2006	2007
Caribbean - Europe	101.43	112.68	156.30	164.15	140.27	126.82
Caribbean - Mediterranean	110.62	110.30	114.48	112.94	35.05	27.09
Central America - Europe	100.87	55.39	47.70	43.09	109.01	204.72
Central America - Mediterranean	102.41	116.97	114.99	105.49	245.63	203.73
Caribbean/Central America - Far East	97.10	103.64	106.90	110.01	160.50	177.40
Caribbean/Central America - North America east coast	104.60	90.39	93.01	93.01	182.21	183.33
Caribbean/Central America - North America Gulf coast	111.19	117.52	124.80	142.96	507.88	474.25
Caribbean/Central America - North America west coast	102.70	84.57	77.29	101.38	246.34	260.09
Caribbean/Central America - South America east coast	106.39	154.89	155.71	137.65	294.23	367.33
Caribbean/Central America - South America north coast	114.05	125.33	121.42	119.11	468.03	494.77
Caribbean/Central America - South America west coast	107.22	122.27	85.24	146.52	468.83	520.51

Source: Ricardo J. Sánchez and Maricel Ulloa S., ECLAC/UN.

Note: Figures calculated for end-year values.

Table 3
CHANGES IN THE SUPPLY OF SHIPPING CAPACITY. SELECTED ROUTES FROM THE EAST COAST OF SOUTH AMERICA, 2002-2007

East Coast of South America	Capacity offered in TEUs					
	2002	2003	2004	2005	2006	2007
Europe - South America east coast	103.06	101.51	104.27	115.87	91.85	134.09
Far East - South America east coast	94.87	117.71	125.24	228.71	213.04	199.64
Mediterranean - South America east coast	117.91	157.00	161.74	206.33	197.84	249.20
Middle East - South America east coast	99.22	124.55	79.44	89.36	-	94.38
North America east coast - South America east coast	106.41	120.44	158.40	173.39	141.87	151.57
North America Gulf coast - South America east coast	115.92	137.19	120.03	106.42	187.57	188.89
South America east coast - South America north coast	-	-	-	-	123.74	135.66
South America east coast - South America west coast	103.89	147.47	151.07	161.58	289.04	121.20
South America east coast (coastal)	121.42	155.19	139.29	136.62	73.46	72.95

Source: Ricardo J. Sánchez and Maricel Ulloa S., ECLAC/UN.

Note: Figures calculated for end-year values.

Table 4
CHANGES IN THE SUPPLY OF SHIPPING CAPACITY. SELECTED ROUTES FROM THE NORTH COAST OF SOUTH AMERICA, 2002-2007

North Coast of South America	Capacity offered in TEUs					
	2002	2003	2004	2005	2006	2007
Europe - South America north coast	97.67	103.22	90.71	84.61	392.74	528.35
Mediterranean - South America north coast	101.53	115.37	115.95	102.50	232.52	167.35
North America east coast - South America north coast	100.00	133.65	131.59	372.57	1 483.85	1 392.26
North America Gulf coast - South America north coast	-	5.99	6.88	3.91	223.35	262.92
North America west coast - South America north coast	110.64	121.13	119.05	97.02	23.42	15.57

Source: Ricardo J. Sánchez and Maricel Ulloa S., ECLAC/UN.

Note: Figures calculated for end-year values.

¹ Owing to the large quantity of information that this exercise requires, for reasons of space, a select group of routes is presented in each case.

Table 5
CHANGES IN THE SUPPLY OF SHIPPING CAPACITY. SELECTED ROUTES FROM THE WEST COAST OF SOUTH AMERICA, 2002-2007

	Capacity offered in TEUs					
	2002	2003	2004	2005	2006	2007
West Coast of South America						
Europe - South America west coast	101.77	146.28	146.38	156.11	121.29	119.99
Far East - South America west coast	98.91	120.93	128.24	183.19	126.29	144.67
Mediterranean - South America west coast	100.00	101.80	122.95	120.99	100.44	113.12
North America east coast -South America west coast	90.86	111.56	71.22	70.07	85.58	93.94
North America Gulf coast - South America west coast	63.48	101.72	89.69	68.73	22.84	32.01
North America west coast- South America west coast	98.55	116.78	128.10	228.73	168.55	210.57
South America west coast - South America north coast	100.26	111.05	81.16	81.16	505.91	668.64
South America west coast (coastal)	105.55	83.86	171.49	151.08	34.45	31.42

Source: Ricardo J. Sánchez and Maricel Ulloa S., ECLAC/UN.

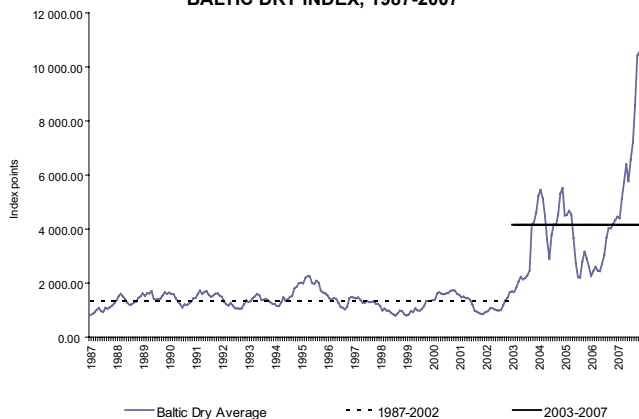
Note: Figures calculated for end-year values.

3. Bulk shipping

Unlike maritime container transport, which uses the regular services of shipping lines (and whose contract and spot prices component is high), maritime (dry and liquid) bulk shipping is conducted through leased services.

The following figure shows changes in the Baltic Dry Index (BDI), calculated by The Baltic Exchange (see www.balticexchange.com) using information from "tramp" freight contracts, based on three types of ships that carry bulk cargo (Capesize, Panamax and Handy). An index for each type of ship is constructed, as well as a general index (BDI). For further information on the types of ships and the calculation of the indices, see FAL Bulletin 246 (February 2007).

Figure 2
BALTIC DRY INDEX, 1987-2007



Source: Ricardo J. Sánchez and Maricel Ulloa S., based on information from The Baltic Exchange obtained through Bloomberg, an international economic portal (www.bloomberg.com).

Price trends for maritime bulk transport (especially of minerals and agricultural products and by-products) were fairly stable up to 2002, when a completely new era of prices began. Between 1987 and late 2002, the historical average for the index was 1,349 points. Between 2003 and 2007, this rose to 4,163 points, and during 2007 it skyrocketed, reaching a record level of 10,543 points (average for November 2007).

The following tables show the annual averages and standard deviations for each of the four indices. In general, the patterns are similar to the one just mentioned.

Table 6
INDEX OF ANNUAL AVERAGES AND STANDARD DEVIATIONS, HANDY AND PANAMAX

Year	Handy		Panamax	
	Average	Standard deviation	Average	Standard deviation
1999			1 065.4	168.8
2000	1111.7	36.2	1 540.2	90.2
2001	936.0	111.6	1 247.7	312.0
2002	895.0	121.7	1 130.4	198.2
2003	1 661.4	522.4	2 544.0	974.7
2004	3 162.6	535.8	4 382.7	888.1
2005	2 402.9	578.1	3 128.1	1 006.4
2006	2 248.5	498.1	3 020.8	784.9
2007	4 537.9	1 275.1	7 032.0	2 273.9

Source: Ricardo J. Sánchez and Maricel Ulloa S., NRID/ECLAC.

Table 7
INDEX OF ANNUAL AVERAGES AND STANDARD DEVIATIONS, CAPESIZE AND BALTIC DRY

Year	Capesize		Baltic Dry	
	Average	Standard deviation	Average	Standard deviation
1999	1 313.5	394.0	1 063.0	184.0
2000	2 186.8	233.1	1 607.1	116.4
2001	1 468.6	412.4	1 214.4	274.4
2002	1 395.4	347.4	1 138.0	218.1
2003	3 662.6	1 567.6	2 617.4	1 012.7
2004	6 011.2	1 272.6	4 510.0	842.4
2005	4 602.9	1 320.8	3 371.5	936.9
2006	4 288.8	1 074.8	3 179.7	767.6
2007	9 924.0	3 230.7	7 070.3	2 170.7

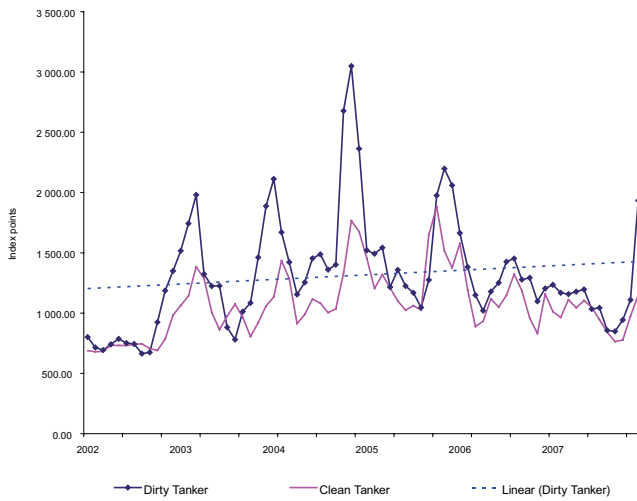
Source: Ricardo J. Sánchez and Maricel Ulloa S., NRID/ECLAC.

In addition to the sharp, sustained increases in bulk transport prices, there was also considerable volatility.

4. Transport of oil and refined petroleum products

Figure 3 shows liquid bulk freight rates for the period 2002-2007 according to the Baltic Exchange indices calculated based on transport prices for crude oil and petroleum byproducts.

Figure 3
DIRTY TANKER VERSUS CLEAN TANKER INDEX



Source: Ricardo J. Sánchez, based on information from The Baltic Exchange obtained through Bloomberg, an international economic portal (www.bloomberg.com).

As illustrated, the trend has been upward and volatility has been high. The figures for ships transporting refined petroleum products (clean tankers) have less extreme patterns than those corresponding to ships transporting unrefined petroleum products (dirty tankers). The following table shows average annual figures for both indices, as well as their standard deviations.

Table 8
INDEX OF ANNUAL AVERAGES AND STANDARD DEVIATIONS,
DIRTY TANKERS AND CLEAN TANKERS

Year	Dirty Tanker		Clean Tanker	
	Average	Standard deviation	Average	Standard deviation
2001	849.5	0.5	692.0	1.0
2002	830.7	206.3	737.6	76.6
2003	1335.3	388.3	1043.2	172.3
2004	1782.6	612.0	1228.9	276.6
2005	1497.3	373.4	1318.3	274.4
2006	1286.4	194.7	1112.0	210.3
2007	1124.3	268.5	973.6	133.0

Source: Ricardo J. Sánchez and Maricel Ulloa S., NRID/ECLAC.

In the case of dirty tankers, in addition to considerable price variation, there are high levels of price volatility. In the case of clean tankers, there is also price volatility but it is less extreme.



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