to India, thus benefiting from cabotage restrictions which continue to limit the attractiveness of Indian ports for trans-shipment operations to the different ports of this large country.

Malaysia, in South-East Asia, has seen its LSCI grow much faster than its neighbours Indonesia and Thailand, almost reaching the LSCI of Singapore. Comparing the developments in Singapore and Malaysia, it is interesting to note that the two countries' LSCI moves largely in parallel, as the same companies and ships provide the same services passing through the Strait of Malacca. The data for 2007 and 2008, however, also illustrate a certain competition, when one country's ability to attract additional liner companies may be to the detriment of the other's LSCI.

In East Asia, the Republic of Korea and Japan started out with the same LSCI in 2004. Since then, Japan has remained relatively stagnant, its rank slipping from ninth in 2004 to fifteenth in 2013. During the same period, the Republic of Korea has attracted more and bigger ships, partly to cater for its own trade, but also to provide trans-shipment services for cargo to and from ports of neighbouring countries. For the last 10 years China has the highest LSCI not only in its region but also among all countries covered by LSCI.

D. REGISTRATION OF SHIPS

1. Flags of registration

The five largest fleets by flag of registration in January 2013, and in terms of dwt, were Panama (21.5 per cent of the world total dwt), Liberia (12.2 per cent), the Marshall Islands (8.6 per cent), Hong Kong, China (8 per cent) and Singapore (5.5 per cent) (see table 2.6 for details of the 35 flags of registration with the largest registered fleets). The latter two were also those with the highest year-on-year growth, increasing their tonnage by more than 16 per cent. As regards vessel types, Liberia caters largely for oil tankers, while Panama flags a high number of dry-bulk carriers. The Bahamas has many "other" vessels, including a large number of cruise ships.

The traditional distinction between "national" flagged fleets and "open registers" is becoming increasingly blurred. Among the top 35 fleets, there are 11 that could be considered purely open as less than 2 per cent of the ships flying their flags belong to owners from the same country. At the other end of the spectrum, there are 8 flags that are used almost

Figure 2.6.   Trends in the LSCI (Index =100 for the maximum value in 2004)
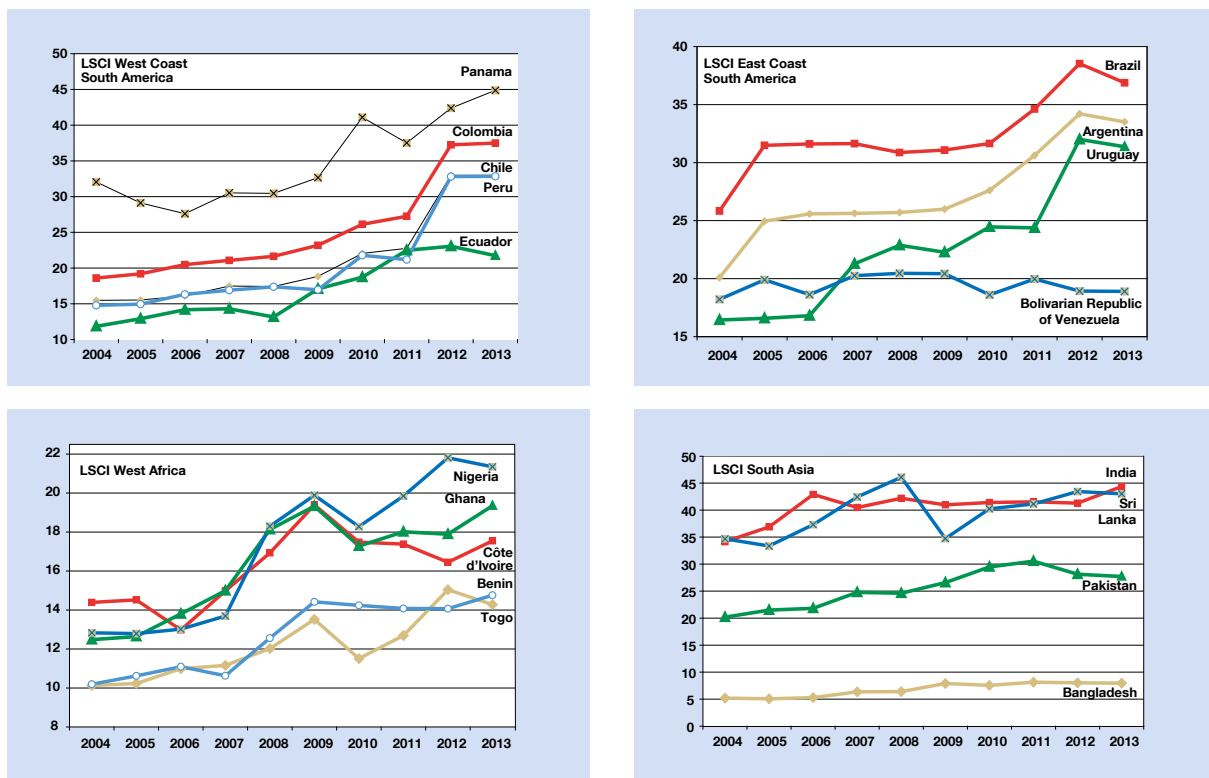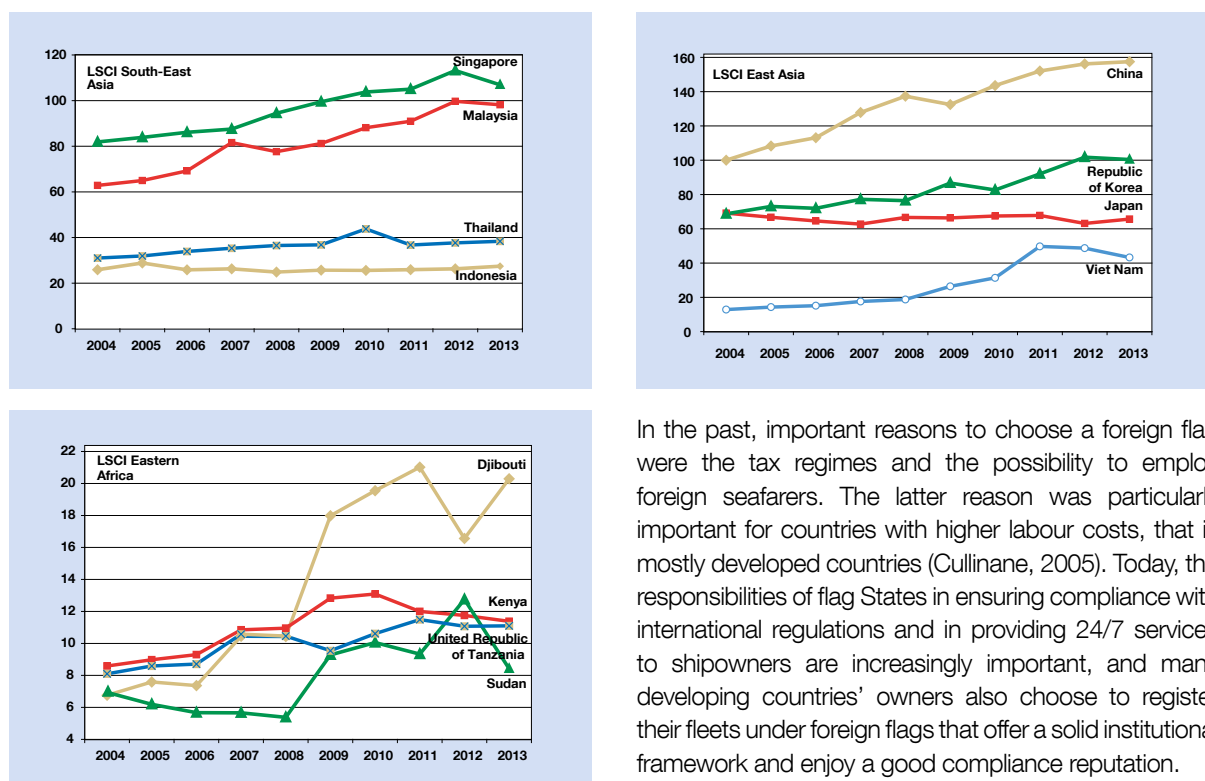
Figure 2.6.   Trends in the LSCI (Index =100 for the maximum value in 2004) *(continued)*

Source: UNCTAD. The LSCI is generated from data provided by Lloyds List Intelligence. The LSCI for 159 countries is available on-line under (http://stats.unctad.org/lsci).

exclusively (more than 95 per cent of the total) by owners from the country; these could be called purely national flags. In between, 16 of the top 35 flags are used by both national and foreign owners. The flag of the Philippines, for example, is used three times more by foreigners than Philippine nationals. For Singapore, the proportion of foreign to national ownership is about 2:1, and for the United Kingdom it is about 50:50 (not including here the flag of the Isle of Man).

In January 2013, a new historical record share of 73 per cent of the world fleet was "flagged out", that is, the nationality of the vessel's owner was different from the flag under which the vessel was registered (figure 2.7). In other words, for almost three out of every four dwt, shipowners chose a flag different from their own nationality. The remaining 27 per cent are kept under the national flag because either the owner considered the national flag competitive in terms of costs and services provided, or he may not have had a choice, as is often the case for government cargo and cabotage traffic.

In the past, important reasons to choose a foreign flag were the tax regimes and the possibility to employ foreign seafarers. The latter reason was particularly important for countries with higher labour costs, that is mostly developed countries (Cullinane, 2005). Today, the responsibilities of flag States in ensuring compliance with international regulations and in providing 24/7 services to shipowners are increasingly important, and many developing countries' owners also choose to register their fleets under foreign flags that offer a solid institutional framework and enjoy a good compliance reputation.

The regional shares by vessel type and flag of registration are provided in table 2.7 (see Annex II for the national shares). In total, developing countries register more than three quarters of the world fleet, including the world's major open registers (Panama, Liberia, and the Marshall Islands), but also important national fleets employed in coastal and inter-island cabotage trades (for example, China, India and Indonesia), as well as mixed registers with national and foreign owners (for example, Hong Kong (China), Singapore and the Philippines). The fleets registered in developed countries/overseas territories also include major open registers (for example, Malta, the Isle of Man and Bermuda), flags used by both nationals and foreigners (for example, Cyprus, the United Kingdom and France), and flags that are almost exclusively used by national owners (for example, Germany and Japan). The Danish (DIS) and Norwegian (NIS) international ship registers are these countries' second registers; they provide better conditions to shipowners than the same countries' first registers in terms of taxes and possibilities to employ foreign seafarers. DIS and NIS are still today mostly used by Danish and Norwegian nationals respectively (see Annex III).

Among the developing regions, Africa's share is determined largely by the register of Liberia, which

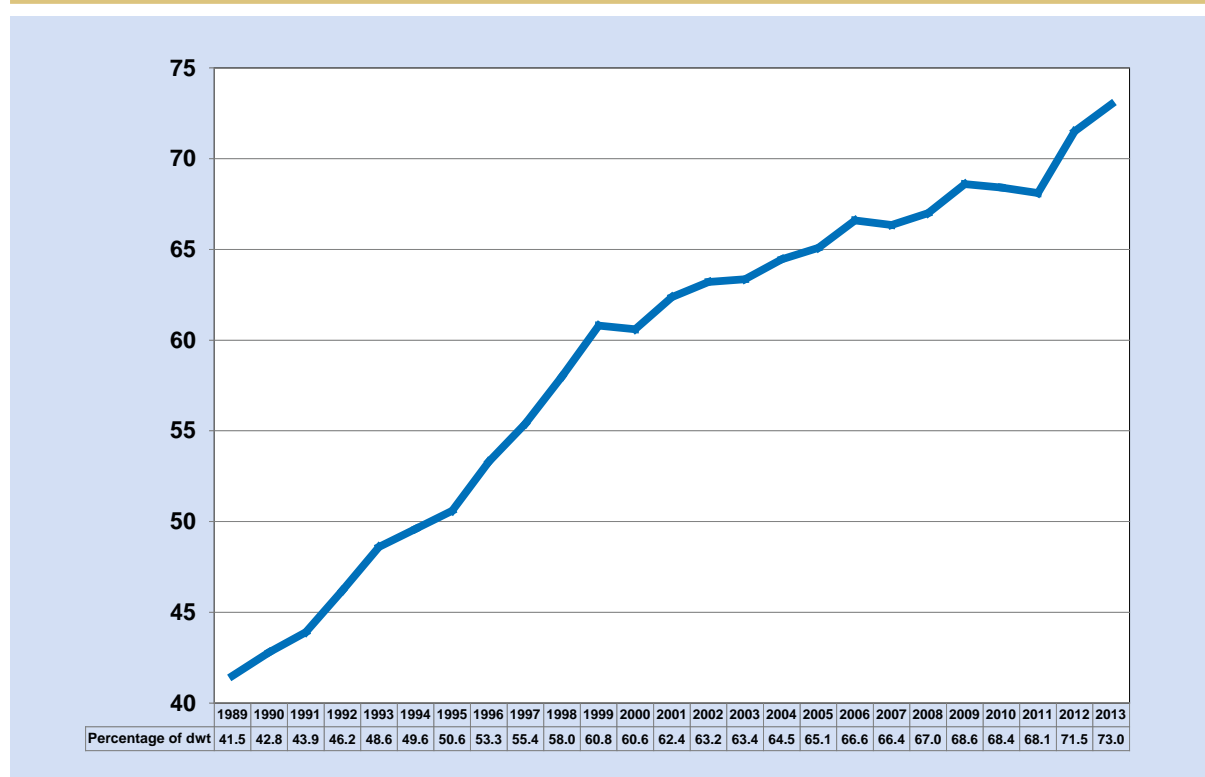| Table 2.6. | The 35 flags of registration with the largest registered fleets, as of 1 January 2013 (Dwt) |

Flag of registration	Number of vessels	Share of world total, vessels	Deadweight tonnage (thousands dwt)	Share of world total (percentage dwt)	Cumulated share (percentage dwt)	National ownership (percentage) a	Dwt Growth 2013/2012 (percentage)
Panama	8 580	9.87	350 506	21.52	21.52	0.14	5.03
Liberia	3 144	3.62	198 032	12.16	33.68	0.01	5.83
Marshall Islands	2 064	2.37	140 016	8.60	42.27	0.11	11.08
Hong Kong (China)	2 221	2.55	129 806	7.97	50.24	12.15	16.87
Singapore	3 339	3.84	89 697	5.51	55.75	36.60	16.62
Greece	1 551	1.78	75 424	4.63	60.38	92.60	5.13
Bahamas	1 446	1.66	73 702	4.52	64.91	1.18	1.44
Malta	1 794	2.06	68 831	4.23	69.13	0.35	8.18
China	3 727	4.29	68 642	4.21	73.35	98.18	9.83
Cyprus	1 030	1.18	31 706	1.95	75.29	19.51	7.61
Isle of Man	422	0.49	22 629	1.39	76.68	0.00	9.32
United Kingdom	1 343	1.54	21 095	1.30	77.98	49.88	6.99
Italy	1 506	1.73	20 612	1.27	79.24	93.46	2.44
Japan	5 379	6.19	20 409	1.25	80.50	99.32	11.04
Norway (NIS)	536	0.62	18 093	1.11	81.61	82.33	5.37
Republic of Korea	1 894	2.18	17 720	1.09	82.69	96.47	-10.74
Germany	781	0.90	17 128	1.05	83.75	97.59	2.30
India	1 385	1.59	15 876	0.97	84.72	96.16	-3.45
Indonesia	6 293	7.24	14 267	0.88	85.60	90.28	0.17
Antigua and Barbuda	1 302	1.50	14 142	0.87	86.47	0.00	4.27
Denmark (DIS)	482	0.55	13 739	0.84	87.31	92.53	1.24
Bermuda	168	0.19	12 378	0.76	88.07	1.69	0.45
United States	3 452	3.97	12 321	0.76	88.83	73.93	-1.18
Malaysia	1 539	1.77	10 508	0.65	89.47	92.82	-3.15
Turkey	1 365	1.57	10 215	0.63	90.10	96.94	3.30
United Republic of Tanzania	198	0.23	8 815	0.54	90.64	0.30	10.45
Netherlands	1 250	1.44	8 712	0.53	91.17	70.90	6.73
France	543	0.62	7 431	0.46	91.63	52.40	-0.22
Viet Nam	1 772	2.04	7 284	0.45	92.08	97.55	1.52
Belgium	216	0.25	6 913	0.42	92.50	58.35	0.46
Russian Federation	2 324	2.67	6 784	0.42	92.92	84.57	-2.14
Philippines	1 383	1.59	6 417	0.39	93.31	26.36	-2.41
St. Vincent and the Grenadines	1 046	1.20	4 919	0.30	93.61	0.08	-18.09
Thailand	755	0.87	4 811	0.30	93.91	97.95	-6.63
Cayman Islands	174	0.20	4 310	0.26	94.17	0.00	2.12
Top 35 total	66 404	76.38	1 533 889	94.17	94.17	24.30	6.71
World total	86 942	100.00	1 628 783	100.00	100.00	23.00	5.98

Source: Compiled by the UNCTAD secretariat, on the basis of data supplied by Clarkson Research Services.

Note: Propelled seagoing merchant vessels of 100 GT and above; ranked by deadweight tonnage.

a   The estimate of national ownership is based on available information of commercial seagoing vessels of 1,000 GT and above.

Figure 2.7.   Global share of foreign-flagged fleet (Beginning-of-year figures, percentage of world total dwt, 1989–2013)

	1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Percentage of dwt	41.5	42.8	43.9	46.2	48.6	49.6	50.6	53.3	55.4	58.0	60.8	60.6	62.4	63.2	63.4	64.5	65.1	66.6	66.4	67.0	68.6	68.4	68.1	71.5	73.0

Source: UNCTAD, Review of Maritime Transport, various issues.
Note: Estimate based on available information of seagoing merchant vessels of 1,000 GT and above.

caters above all for container ships and oil tankers. For the Latin American and Caribbean fleets, the flag of Panama explains the region's high share among bulk carriers. Almost one quarter of the world fleet is registered in developing countries in Asia, with a particularly high share among the general-cargo ships (almost 33 per cent of the world total). The share of Oceania reflects to a large extent the register of the Marshall Islands, with its specialization in oil tankers and dry-bulk carriers.

Table 2.7.   Distribution of dwt capacity of vessel types, by country group of registration, 2013 (Beginning-of-year figures, percentage of dwt)

	Total	Oil tankers	Bulk carriers	General cargo ships	Container ships	Other types
Developing economies	75.49	72.23	81.13	65.07	72.26	70.92
… of Africa	13.55	16.87	10.07	5.37	23.11	10.17
… of America	28.57	21.08	34.95	24.74	23.24	32.86
… of Asia	24.42	21.94	27.46	32.80	21.64	18.61
… of Oceania	8.95	12.35	8.66	2.15	4.27	9.28
Developed economies	23.36	26.80	18.55	28.64	27.68	25.13
Transition economies	0.72	0.77	0.26	5.21	0.04	1.17
Unknown and other flags	0.42	0.19	0.06	1.08	0.01	2.78
World total	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**

Source: Compiled by the UNCTAD secretariat, on the basis of data supplied Clarkson Research Services.
Note: Propelled seagoing merchant vessels of 100 GT and above.

2.   Nationality of controlling interests

Vessel registers often specialize in different ship types and countries of ownership. Annex III provides a detailed overview of the countries of ownership that register their ships under the main flags of registration. The flag of Antigua and Barbuda is mostly used by owners from Germany; the Bahamas registers, above all, ships from Canada, Greece and Norway; Greek and German owners are the main clients for the registers of Cyprus and of Liberia; and 47 per cent of the Panamanian deadweight tonnage is Japanese owned.

E.   SHIPBUILDING, DEMOLITION AND NEW ORDERS

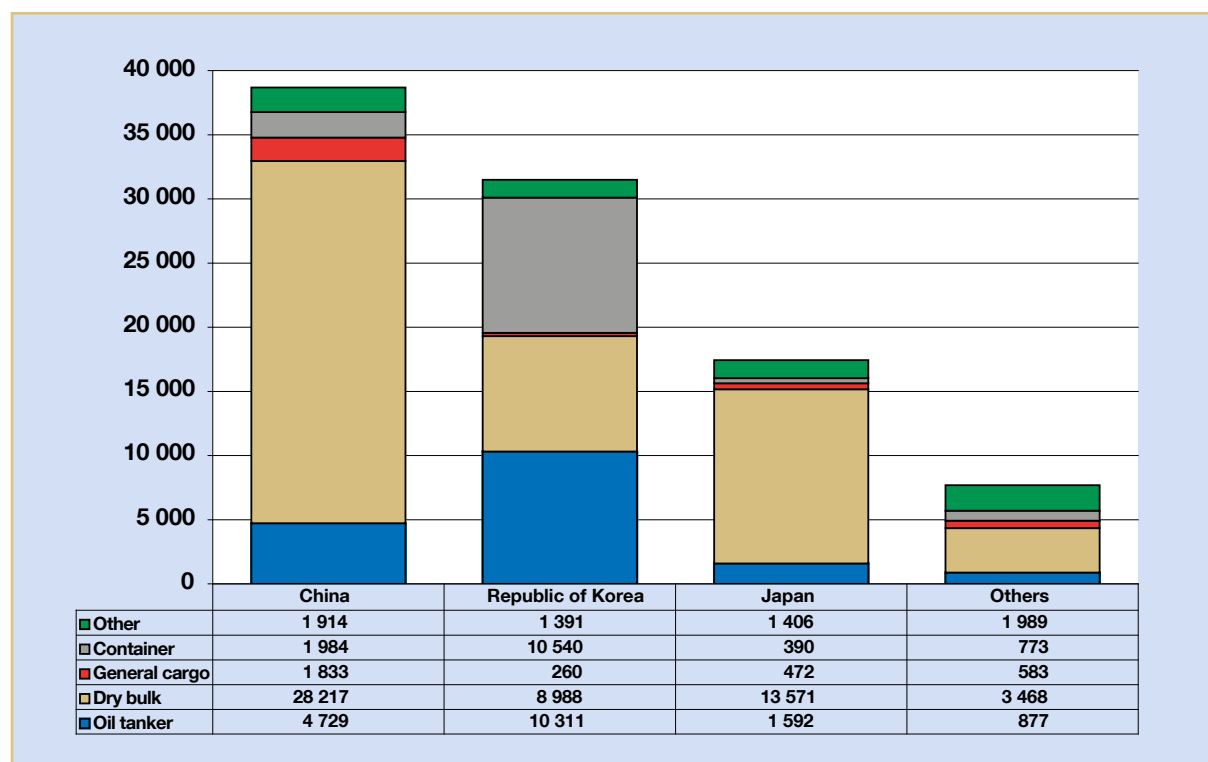## 1.   Deliveries of newbuildings

Three countries (China, the Republic of Korea and Japan) together built 92 per cent of the world's new tonnage (GT) in 2012, with China alone accounting for more than 40 per cent. Almost 57 per cent of the tonnage delivered in 2012 was on dry-bulk ships,

followed by oil tankers (18.4 per cent) and container ships (14.4 per cent) (figure 2.8 and table 2.8). This is a significantly different picture from just six years ago. In 2006, the Republic of Korea was the largest shipbuilder, followed by Japan. China and Europe each had a market share of about 15 per cent.

Shipbuilders also specialize in different vessel types. While China and Japan have mostly built dry-bulk carriers, the Republic of Korea had a far higher share in container ships and oil tankers, and European and other regions' yards had a somewhat higher share among the offshore and passenger vessels. In addition to bulk carriers, Japan is also focusing on other specialized ships, including gas and car carriers. The four largest individual shipbuilding groups are from the Republic of Korea; shipbuilding in China is spread among a larger number of individual shipbuilders.

Even more so than ships, sea containers are almost exclusively built in China. Low production costs and the need for empty boxes to transport Chinese exports made China the natural location for setting up factories for the construction of containers. Interestingly, at the end of 2013, a new factory for reefer containers is scheduled to open in San Antonio, Chile. Maersk

Figure 2.8.   Deliveries of newbuildings, major vessel types and countries where built, 2012 (Thousands of GT)

	China	Republic of Korea	Japan	Others
■ Other	1 914	1 391	1 406	1 989
▣ Container	1 984	10 540	390	773
■ General cargo	1 833	260	472	583
▢ Dry bulk	28 217	8 988	13 571	3 468
■ Oil tanker	4 729	10 311	1 592	877

Source: UNCTAD secretariat, on the basis of data supplied by Clarkson Research Services.
Note: Propelled seagoing merchant vessels of 100 GT and above.