

SHIPPING STATISTICS AND MARKET REVIEW 2016

Volume 60 - No. 5/6

A solid red vertical bar is positioned to the left of the 'Analytical Focus' section header.

Analytical Focus

- World Merchant Fleet
- World Tanker Market
- World Bulk Carrier Market
- **World Container and General Cargo Shipping**
- World Merchant Fleet by Ownership Patterns
- World Passenger and Cruise Shipping/
ISL Cruise Fleet Register
- World Shipbuilding and Shipbuilders
- Major Shipping Nations
- World Seaborne Trade and World Port Traffic

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WORLD CONTAINER SHIPPING

Weak global growth and virtually no container traffic growth

The market fundamentals in 2015 were quite unfavourable for global container growth, to say the least. To begin with, global economic growth is estimated to slowed to 3.1% in 2015 according to the IMF, down from 3.4% in 2014.

Exporters of raw materials have been suffering particularly from the falling prices (see *SSMR numbers 3 and 4 of 2016*). Most notably, Russia and Brazil are in economic recession. Consequently, demand in these countries receded and also led to shrinking containerised imports (see *Table 4.3.1 on page 28*). China's economic growth continued to shrink down to 6.7 percent in the first quarter this year. At the same time, growth in the advanced economies is relatively modest. In the United States, for example, year-on-year growth reached only 0.5 % in the last quarter of 2015.

The most relevant features for the seaborne trade development are highlighted below.

- The US economic expectations remain subdued as GDP growth has been adjusted downwards to 1.7 percent for 2016
- Despite increased political risks, the EURO area shows continued modest growth in 2015/2016
- Economic growth in Asia-Pacific is unlikely to improve further
- Growth rates for China, India and Southeast Asia are unlikely to see significant improvement in 2016 compared to last year
- While growth in China is slowing down, India seems to be taking the role of East Asia's most dynamic economy. However, an improvement in India's growth performance in 2016 relative to 2015 is not expected.
- Latin America is losing contact, as ongoing declines in prices for crude oil and dry bulk commodities have negatively affected the region's economies, especially Brazil.
- The projected 2.6 % growth of Sub-Saharan Africa is the region's slowest growth performance in two decades.

As a result, global container trade grew by only 2.9 % in 2015 according to latest estimates from Clarkson Research Services (CRSL), i.e. at a lower pace than global GDP growth. For 2016, CSRL still expects an increase of 4.3%.

Fleet: Overcapacity Prevails

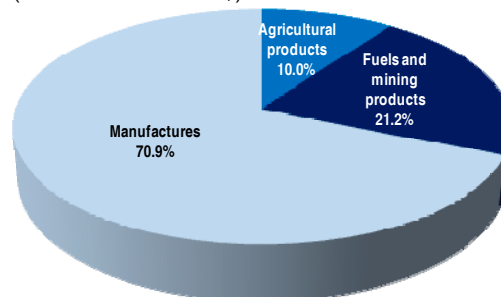
Due to the modest demand growth, the container markets continued to be characterised by overcapacity and low freight rates during 2015 and into 2016. New entries of very large vessels have been continuously reshaping the fleet structure and triggered the cascade effect. The average size of new ships has doubled since 2009 to around 8,000 TEU. The largest vessels delivered in 2015 were units of 19,224 TEU, compared to a maximum size of 9,200 TEU for vessels delivered in 2005. Deliveries hit a new record: 208 new containerhips with a combined 1.67 million TEU entered the market in 2015, up from the previous year's 1.49 million TEU. The world cellular containerhip fleet grew by 8.4 % during 2015, after 6.2 % in 2014 and 5.5 % in 2013,

Tab. 1: World merchandise trade by region and selected countries 2014/2015 (bill US\$ and %)

Region/ Country	Exports				Imports			
	Value 2015	Annual % '10-'15	% change '14 '15		Value 2015	Annual % '10-'15	% change '14 '15	
EU (28)	5387	0.4	-4.6	4.4	5316	-1.2	-5.9	0.7
Germany	1329	0.1	-4.7	3.4	1050	0.0	-7.3	2.1
Africa	388	1.3	5.4	-6.3	559	5.5	8.6	2.2
Asia	5961	5.9	2.4	2.8	5444	6.7	4.1	2.1
Japan	625	-1.8	-3.0	-10.5	648	1.8	3.6	-5.9
China	2275	9.1	7.9	7.9	1682	11.5	4.3	7.3
USA	1505	4.2	4.5	2.1	2308	1.4	3.1	-0.2
Russia	340	2.1	1.4	-1.1	194	3.4	3.6	2.6
World	16482	3.1	0.4	2.1	19024	2.6	0.6	1.4

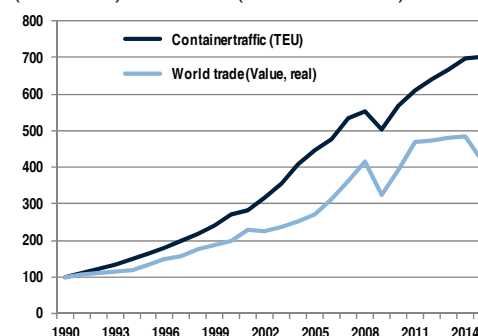
Source: WTO; World Trade Statistics 2016

Fig. 1: World total trade by commodity group 2015 (% share of value in US\$)



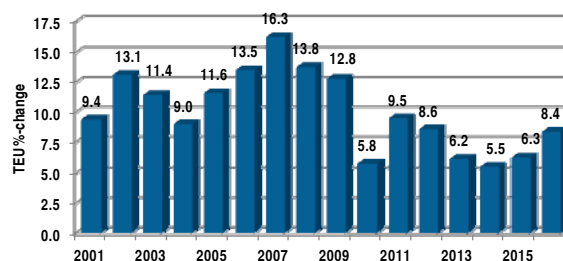
Source: WTO; World Trade Statistics 2016

Fig. 2: World trade (value related) and world container port traffic (TEU-based) 1990-2014 (Index 1990=100)



ISL Port Data Base and WTO; World Trade Statistics 2016

Fig. 3: World container fleet – annual capacity changes as of January 1st, 2001 – 2016 (TEU- %)



Source: Up to 2011 based on IHS Fairplay, since 2012 on Clarkson Research Services Limited (CRSL). Please see disclaimer on page 66

Sources:

If not otherwise mentioned, the source for tables and figures concerning the world merchant fleet, special ship type features and order book information is "ISL based on Clarkson Research Services Limited (CRSL)", please quote accordingly. In general merchant fleet data refer to ships of 300 gt and over.

Explanatory notes:

The "total container fleet" includes only fully cellular container ships.

General cargo ships – The specification of sub-types (see table 5) is based on the classification provided by CRSL.

according to CRSL figures. At the beginning of 2016, the fully cellular container fleet consisted of 5,239 units with a total nominal capacity of 19.7 million TEU.

New ordering wave in 2015

Recent contracting of containerships has come in waves (see Figure 5). Despite overcapacity in the sector, ordering activities in 2015 increased by 84 % compared with 2014 to 234 vessels with a combined capacity of 2.18 million TEU. This was the second largest volume ever after 2007. Orders in 2015 included a new wave of orders for ultra large container vessels: 88 vessels of 12,000+ TEU and the first vessels with nominal capacities exceeding 20,000 TEU have been ordered. In April 2015, Samsung Heavy Industries set a new record for the world's largest container ship with the signing of a deal to build six 21,100 TEU container ships. Overall, mega-ships of 12,000+ TEU now make up 31 % of the containership order book in numerical terms, and 64 % in TEU terms. At the start of 2016, the global container ship order book amounted to 455 ships with 3.77 million TEU, equivalent to 19.1 % of the world container fleet capacity.

Before the new wave of newbuildings enters the market, there will actually be a noticeable slowdown of fleet additions to around one million TEU in 2016.

A big part of the 2015 newbuilding contracts was driven by the new IMO Tier III requirements (vessels with keels laid before January 1st, 2016). Owners have moved their orders in to 2015, which is why contracting activity came to a complete halt in 2016. It was the first time since 2009 that three months have passed without any new orders signed.

Scrapping hardly a relief in 2015, but picking up in 2016

Containership demolition activity has been weak throughout 2015. Only 90 fully cellular container vessels with a combined capacity of 193,000 TEU have left the market, much less than the 171 units of 372,000 TEU demolished in 2014. Demolition of younger vessels has become increasingly common. 42 % of vessels scrapped were aged below 20 years, the average age of demolished ships in 2015 fell to 21.9 years.

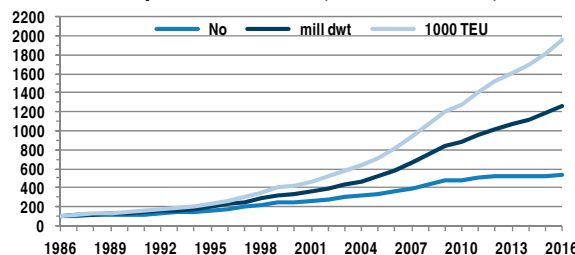
During the first quarter of 2016, scrapping activity has picked up and concerns ever-younger ships. The average age of scrapped container vessels dropped to 19 years, the youngest amongst them were only 14 years old. Despite higher scrapping volumes, however, fleet growth continues to exceed demand growth in early 2016.

Little hope for rate improvements...

Having said all this, it comes as no surprise that charter rates for container ships continue to be very low. The weighted Harper Peterson & Co. Charter Rate Index, for example, stood at a level of 635 in May 2015 and hovers around 360 points in May 2016, 43% lower than last year's peak level. Moreover, this development increasingly hits the larger size classes, too.

The following table with Containership time-charter rates illustrates the annoying conditions.

Fig. 4: World container fleet development as of January 1st, 1986 – 2016 (Index 1986 = 100)



Source: Up to 2011 based on IHS Fairplay, since 2012 on Clarkson Research Services Limited (CRSL). Please see disclaimer on page 66

Fig. 5: Container fleet deliveries and new orders 2005 - 2015

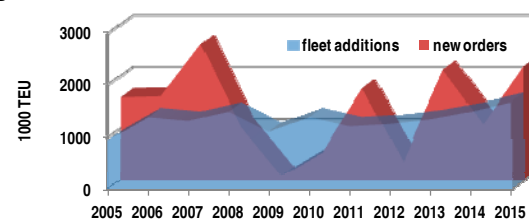
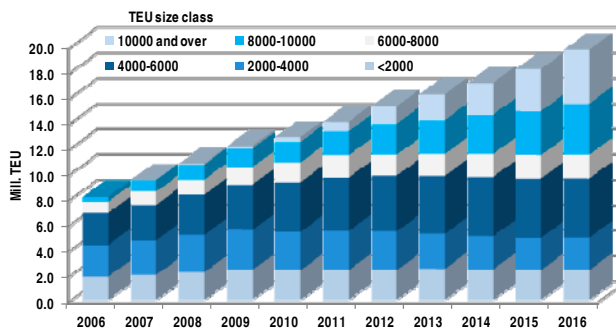


Fig. 6: World fully cellular container fleet – TEU-size structure January 1st, 2006 - 2016 (1000 TEU)

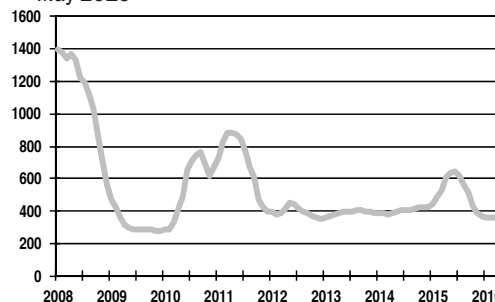


Source: Up to 2011 based on IHS Fairplay, since 2012 on Clarkson Research Services Limited (CRSL). Please see disclaimer on page 66

Tab. 2: World fully cellular container fleet and order book by TEU-size class as of January 1st, 2016

TEU Size class	Fleet			Order book		
	No	1000 TEU	%- share	No	1000 TEU	%- share
< 1000	1062	646	3.3	1	1	0.0
1000 < 2000	1233	1733	8.8	98	147	3.9
2000 < 4000	913	2554	12.9	119	323	8.6
4000 < 6000	976	4658	23.6	10	50	1.3
6000 < 8000	283	1893	9.6	1	7	0.2
8000 < 10000	456	3982	20.2	39	365	9.7
10000 < 14000	215	2633	13.3	58	662	17.5
>=14000	101	1631	8.3	129	2219	58.8
Total	5239	19730	100.0	455	3774	100.0

Fig. 7: Monthly HARPEX container charter rate index 2008 up to May 2016



ISL based on Harper Petersen & Co

Container ships Time Charter Rates (in 1000 US\$/day)

Size class	06.12	05.13	05.14	05.15	04.16	5.16
1000 teu grd 6-12 Month	5.50	6.50	6.35	8.50	6.80	6.80
2750 teu gls 6-12 Month	7.00	6.75	7.10	13.25	6.00	6.00
4400 teu gls 6-12 Month	12.50	9.15	8.50	15.35	5.20	5.20
6800 teu 3 year	33.00	29.50	25.00	26.50	13.00	13.00
9000 teu 3 year	41.00	39.50	40.00	38.50	25.50	25.50

Source: Clarkson Research Services Limited (CRSL)

... and selling ships ever less attractive

The development of second-hand prices of container vessels closely correlates with the rate development. While the prices for smaller vessels were already very low last year and temporarily recovered, the second-hand prices for bigger ships were still shrinking.

More than one million TEU unemployed

With charter rates at best covering operating costs and second-hand prices with considerable 'room for improvement', laying up vessels seems to be the option of choice.

Indeed, the number of idle containerships reached a new high beginning of March 2016 with 1.57 million TEU, the highest level ever recorded for the global containership fleet (7.9 % of the total fleet capacity). By late May, things have improved slightly with 1.03 million TEU on layup.

Still: As long as so many vessels are waiting for an employment to cover the operating expenditure, owners will have a hard time pushing through any substantial rate increases.

Teaming up for survival

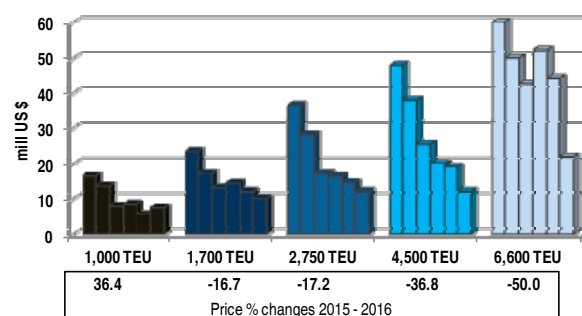
In current market conditions, reducing costs is the key to success – or to survival while waiting for better market conditions. This can be done within a company, e.g. by an upgrading of the fleet (adding more ships to an already crowded market), or by teaming up with other operators.

The latter alternative opens possibilities that single operators cannot realise on their own: by combining their client base, liner operators can use larger ships and benefit from economies of scale and at the same time widen the portfolio of ports offered and reduce transshipment costs.

There are two options: mergers and acquisitions on the one hand or alliances on the other hand. Both strategies could recently be observed among major container lines. Recent mergers include Hapag-Lloyd and CSAV, CMA-CGM and NOL, while new mergers are currently discussed (Hapag-Lloyd and UASC as well as Hyundai and Hanjin).

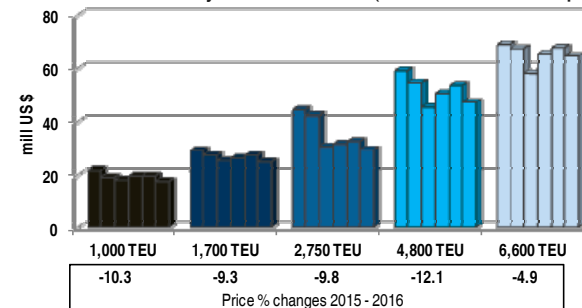
In addition, the major alliances have also evolved. At the start of 2016, all the major container shipping lines were allied in four large groups: The two largest containership operators, Maersk and MSC, have formed the 2M Alliance which started in early 2015. Maersk and MSC have a combined capacity of about 5.7 million TEU equal to a market share of about 29 %. The six carriers of the G6 Alliance have a capacity of about 3.44 million TEU (18.0 %), the five Asia-based carriers of the CHKY Alliance hold a market share of 17.5 % (3.35 million TEU) and three members of the Ocean Three Alliance have a capacity of about 3 million TEU (15.3 %). It is worth noting that the

Fig. 8: Second hand prices for 5 years old container ships 2011 - 2016 by TEU size classes (mill. US\$ at end of April)



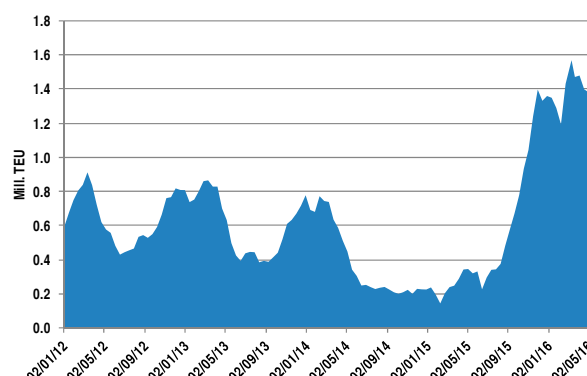
ISL based on Container Intelligence Monthly 05/2016

Fig. 9: New building contracting prices for Container ships 2011 - 2016 by TEU size classes (mill. US\$ at end of April)



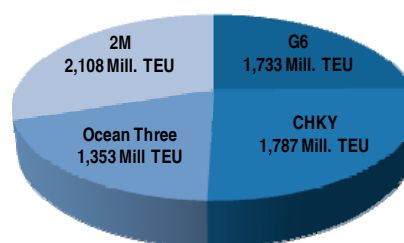
ISL based on Container Intelligence Monthly 05/2016

Fig. 10: Idle container fleet 2012 - 2016 (biweekly)



ISL 2016, based on AXS Alphaliner.

Fig. 11: Capacities of the leading containership alliances, February, 2016



Ships of 1,000 TEU and above; ISL based on MDS Transmodal

Ship dimensions –The largest container ship in service as of January 1st, 2016

MSC series: 199,272 dwt/ 19,224 TEU, L 395m/B 58.6 m/D 16.0m

average size for vessels employed in the 2M and Ocean Three alliance is 11,200 TEU and 11,000 TEU, respectively.

According to Alphaliner, next year we will see a new generation of shipping alliances. After a re-grouping there will be two new alliances, while only the **2M alliance** would remain unchanged. CMA CGM, Evergreen, Cosco and OOCL have signed a new ship sharing agreement known as "**Ocean Alliance**", which is set to begin in April 2017. The second new group ("**The Alliance**") will bring together Hapag-Lloyd (UASC), NYK, K-Line, MOL, Hanjin and Yang Ming (Hyundai still to be confirmed). All members of the two new Alliances are currently spread over three separate alliances. The two new alliances would control, based on today's capacity, 22 percent (Ocean Alliance) and 18 % (The Alliance) of the world's container capacity, against the remaining 2M's 29 percent share – a combined total 69 percent of the world's fully cellular container fleet.

Overcapacity also in ports

Clearly, the stronger concentration in the liner business also increases the operators' bargaining power vis-à-vis the ports. One issue that has recently received a lot of attention is the 'imposition' of ever-larger ship designs, forcing ports to invest heavily in infra- and superstructure if they want to stay competitive. Given the low demand, ports also struggle to utilise their handling capacity and are hence competing for each line.

Less attention has been devoted to the impact of market concentration on port traffic volumes. The marketing of common services gives operators the chance to increase the variety of service routes. Calling in some minor ports may become economically viable when two or more operators combine their cargo base. Once they do, they save transshipment and feeder costs – and a hub port loses transshipment moves. This may explain why the traditional hubs Singapore, Hong Kong and Rotterdam were all in minus in 2015 (see *Table 5*).

Data from ISL's Port Data Base indicate that container traffic grew by 0.4 % in 2015 (based on 353 ports with a total volume of 614.3 Million TEU, i.e. more than 95 % of global port traffic), the smallest growth since the global economic crisis in 2008/2009.

The most striking fact: although the transport volumes increased above average in China, the 0.9% growth rate is well below the average 4.4% growth of the past five years. (see *Table 4.3.1* on page 28). Seven of the top ten container ports are still located in China, with only Ningbo recording growth rates above average (6.1% to 20.6 million TEU). U.S. box traffic, by contrast, grew by a solid 4.6% in 2015.

Next to the aforementioned Singapore, Germany, Taiwan and Japan were dragging down the growth average. Total traffic of the EU container ports shrunk by 0.6% to 94.2 million TEU, equal to a market share of 15.3% in 2015 (see *Tab.4*).

Particularly noticeable is the shrinking number of container ports with double-digit growth rates. At the end of the last decade, more than every second port showed an increase of more than 10 %. In 2012 it was only a quarter of the top 100 ports, and only 9 ports in 2015. Moreover most of these ports are in the lower part of the list.

Tab. 3: World general cargo fleet development by ship type as of January 1st, 2012 and 2016

Ship type	2012		2016		Av. growth rate '12-'16		Average size (dwt)	
	No	dwt	No	dwt	No	dwt	2012	2016
Con. cargo ships	12753	53.0	12285	51.6	-0.9	-0.7	4156	4200
Special ships	1263	26.2	1522	36.4	4.8	8.6	20756	23933
Pure car carriers	717	11.1	785	12.4	2.3	2.8	15421	15749
Reefer ships	909	5.2	781	4.4	-3.7	-4.1	5735	5647
Ro/Ro cargo ships	1462	7.9	1519	7.5	1.0	-1.1	5380	4948
Total	17104	103.4	16892	112.3	-0.3	2.1	6043	6649

Source: ISL Fleet Data Bases; based on Clarkson Research Services Limited (CRSL). Please see disclaimer on page 66

Tab. 4: Port traffic of top five container trading economies 2001 – 2015 (mill. TEU)

Country	in mill TEU			% change over prev. year	
	2011	2014	2015	'13-14	'14-15
China, PR of	157.4	185.3	186.9	5.2	0.9
EU	86.3	94.8	94.2	4.6	-0.6
US	39.4	42.8	44.7	4.7	4.6
Korea, Rep. of	20.6	23.8	24.4	2.7	2.2
Malaysia	19.6	21.8	23.6	5.6	8.5
Rest of World	216.0	243.4	240.4	4.0	-1.2
Total	539.3	611.9	614.3	4.5	0.4

Please see also table 4.3.1 on page 28

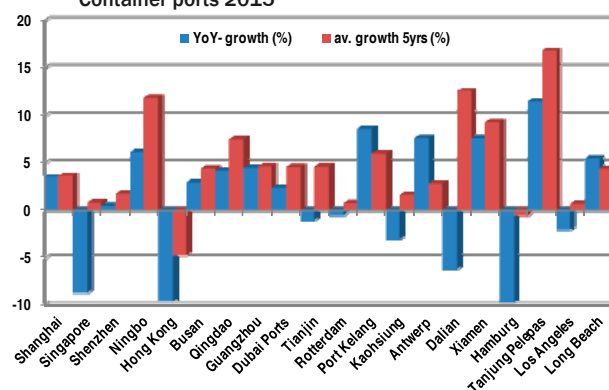
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Tab. 5: TEU-ranking of the top 20 world container ports in 2015

Ranking	2015 (2005)	Port (Country)	mill TEU			TEU % growth	
			2005	2014	2015	2014-2015	2005-2015
1	(3)	Shanghai (China, PR of)	14.0	35.3	36.5	3.5	10.0
2	(1)	Singapore (Singapore)	21.3	33.9	30.9	-8.7	3.8
3	(4)	Shenzhen (China, PR of)	13.7	24.0	24.1	0.5	5.9
4	(15)	Ningbo (China, PR of)	4.0	19.5	20.6	6.1	17.8
5	(2)	Hong Kong (China, PR of)	22.0	22.2	20.1	-9.7	-0.9
6	(5)	Busan (Korea, Rep. of)	11.4	18.7	19.2	2.9	5.3
7	(13)	Qingdao (China, PR of)	5.1	16.6	17.3	4.2	12.9
8	(18)	Guangzhou (China, PR of)	3.3	16.4	17.1	4.5	17.9
9	(9)	Dubai Ports (UAE)	6.4	14.8	15.1	2.3	8.9
10	(16)	Tianjin (China, PR of)	3.8	14.1	13.9	-1.2	13.8
11	(7)	Rotterdam (Netherlands)	8.3	12.3	12.2	-0.5	4.0
12	(14)	Port Kelang (Malaysia)	5.2	10.9	11.9	8.6	8.5
13	(6)	Kaohsiung (Taiwan)	9.7	10.6	10.3	-3.1	0.6
14	(12)	Antwerp (Belgium)	6.1	9.0	9.7	7.5	4.8
15	(33)	Dalian (China, PR of)	2.2	10.2	9.6	-6.3	15.8
16	(23)	Xiamen (China, PR of)	2.9	8.6	9.2	7.5	12.4
17	(8)	Hamburg (Germany)	7.0	9.8	8.8	-9.8	2.3
18	(19)	Tanjung Pelepas (Malaysia)	3.8	7.9	8.8	11.4	8.7
19	(10)	Los Angeles (US)	7.3	8.3	8.2	-2.2	1.2
20	(11)	Long Beach (US)	5.8	6.8	7.2	5.4	2.2

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Fig. 12: Average growth and year on year growth of the top twenty Container ports 2015



© ISL Port Data Base 2016

The only North American ports whose growth rate is under average are the ports of Los Angeles (-2.2%) and the Port of Oakland (-4.5%). *Figure 5* shows the difference between five-year average growth and the change growth in 2015. Only a few ports had growth rates in 2015 above the five-year average – but this was mostly at the expense of neighbouring ports having lost market shares.

Latest figures for April 2016 show declining port handling volumes predominantly in some Asian ports as well as in the Baltic Sea. The preliminary estimate for the Container Throughput Index of the Rheinisch-Westfälische Institut für Wirtschaftsforschung (RWI) and the Institute of Shipping Economics and Logistics (ISL) for April stands at 117.7, slightly lower than the figure of March (117.8). After improving slightly at the end of 2015/the start of 2016, world trade thus fell back to levels which have been the norm in the second half of 2015.

WORLD GENERAL CARGO SHIPPING

Fleet: slow but steady growth

At the start of 2016, the total general cargo fleet (multi-purpose vessels, small coastal general cargo vessels, special cargo vessels (project carriers, open hatch carriers), vehicle carriers, reefer vessels and ro-ro cargo ships) consisted of 16,892 ships with a combined 112 million dwt. While the dwt-share of the world general cargo fleet stood at only 6.5 %, roughly every third ship is a general cargo vessel.

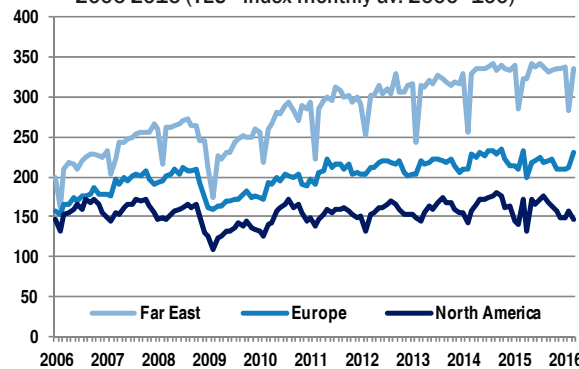
In 2015, the capacity of the general cargo fleet grew by 2.9 %, while the number of ships shrunk by 0.1 %. About 1.7 million dwt of demolitions were reported, while 3.9 million dwt of new ships were delivered in 2015.

At the turn of the year, the order book amounted to 378 vessels with a combined 7.2 million dwt, equivalent to 6.7 % of the fleet. The yearly growth rate for conventional general cargo ships in the period 2012-2016 stood at 2.1 %. In the same period, the fleet of specialized cargo ships (incl. heavy-lift and open hatch carriers) and pure car carriers increased by 8.6 % and 2.8 %, respectively.

Charter rates resist weakness of economic growth

Breakbulk freight transportation still has a major role to play in the international trade industry as countries expand infrastructure and require large parcels for the development of wind farms, power plants, highways etc. Consequently, rate developments are comparatively stable, except during the economic crisis at the end of the last decade, when rates for a 17,000dwt MPP-vessel were cut by half. Still, charter rates are also under pressure in the general cargo shipping sector, with the daily charter of the aforementioned ship being around 8000 US\$/day on average, 11% less than mid of last year.

Fig. 13: Monthly container traffic of selected ports by region 2006-2016 (TEU - Index monthly av. 2000=100)



© ISL Monthly Container Port Monitor 2016

The "ISL Monthly Container Port Monitor"

is continuously highlighting the container traffic (TEU) of the world's major container ports. The MCPM is a short-term market indicator on world container traffic and a benchmarking tool for the port industry. Information is presented in form of monthly indices and quarterly TEU-traffic aggregates. Indices have been provided since January 2000 for the top American, Asian, and European/Oceanian ports. The monitor is distributed quarterly as online service.

For more information please see www.isl.org/infoline

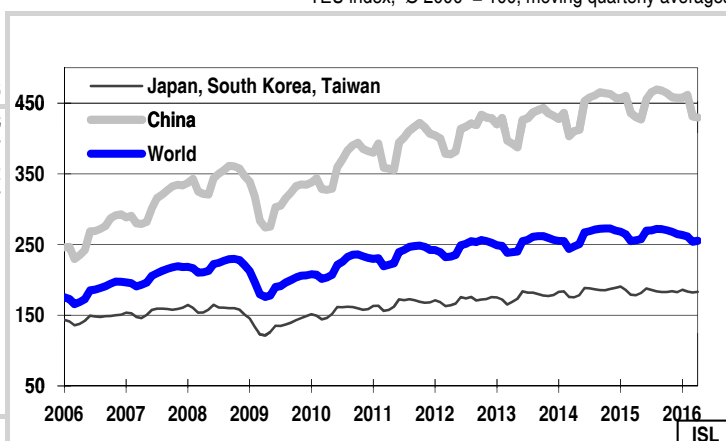
Statistical details "Container and general cargo ships on order"

- Order book and new orders by type p. 33/37
- Ships on order by type and delivery schedule p. 34/35
- Additions to the order book by ship type and major countries of domicile p. 36/37

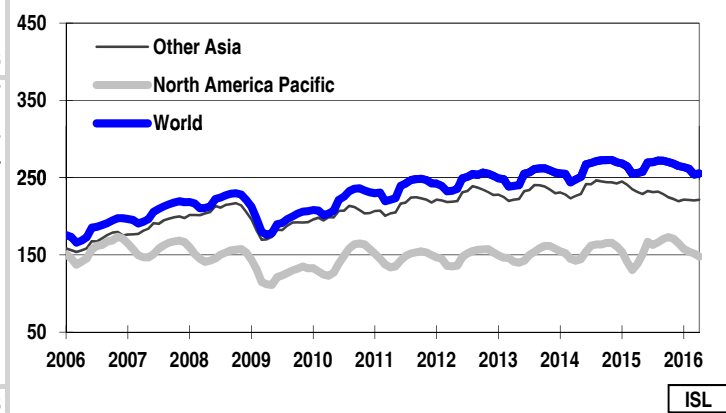
6.3 ISL Monthly Container Port Traffic Indices 2014 - 2016

TEU index; Ø 2000 = 100; moving quarterly averages

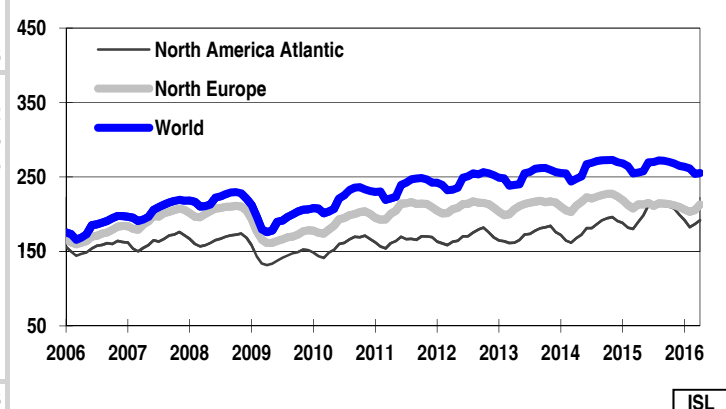
Month	Japan, South Korea, Taiwan			China		
	2014	2015	2016	2014	2015	2016
Jan.	183.2	190.5	186.0	427.5	456.3	457.8
Feb.	183.8	185.8	183.6	436.2	460.4	461.7
March	175.8	179.1	182.2	403.2	435.9	431.2
April	175.5	178.3	183.1	410.4	430.2	429.7
May	178.4	181.4		412.1	427.0	
June	188.6	187.8		452.9	455.4	
July	188.0	185.7		458.2	465.5	
Aug.	186.8	183.9		460.9	469.1	
Sep.	185.6	183.0		465.5	468.0	
Oct.	185.3	182.9		464.1	464.2	
Nov.	187.1	184.1		462.9	458.5	
Dec.	188.7	182.8		457.6	457.7	
Average	183.9	183.8	183.7	442.6	454.0	445.1



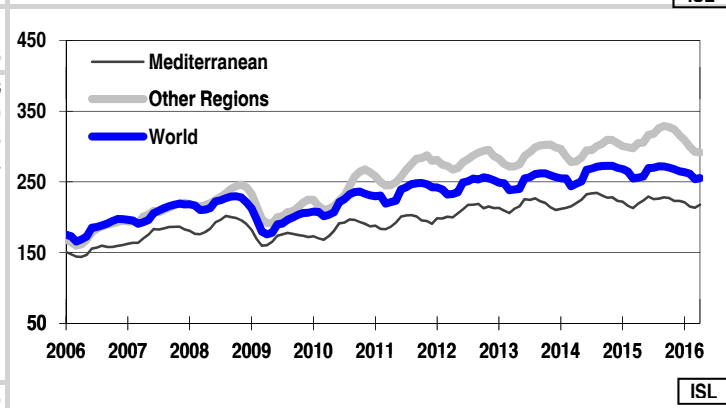
Month	Other Asia			North America Pacific		
	2014	2015	2016	2014	2015	2016
Jan.	226.9	244.9	221.5	155.0	154.0	157.7
Feb.	224.0	240.8	221.1	152.7	140.9	154.1
March	219.0	235.0	220.4	145.4	130.4	151.7
April	222.0	231.5	221.4	142.9	138.2	147.7
May	224.8	229.0		144.9	150.5	
June	237.7	233.1		154.8	166.9	
July	237.4	231.5		162.7	162.9	
Aug.	242.0	232.2		164.2	166.1	
Sep.	240.7	228.7		164.1	170.4	
Oct.	239.6	224.1		166.0	173.0	
Nov.	239.6	221.6		166.2	171.0	
Dec.	238.2	219.0		161.4	164.9	
Average	232.7	231.0	221.1	156.7	157.4	152.8



Month	North America Atlantic			North Europe		
	2014	2015	2016	2014	2015	2016
Jan.	172.0	188.2	191.8	210.0	219.1	206.1
Feb.	164.5	181.9	182.5	205.1	212.1	203.2
March	161.8	180.1	186.5	202.9	207.8	205.3
April	167.8	189.5	191.8	211.4	213.0	212.8
May	172.5	198.2		216.5	213.1	
June	181.3	212.1		222.9	215.1	
July	181.2	212.1		220.9	211.1	
Aug.	186.6	214.5		223.7	214.5	
Sep.	191.7	211.6		225.7	214.1	
Oct.	194.6	210.3		227.5	213.6	
Nov.	196.1	207.4		227.5	211.9	
Dec.	190.6	199.1		223.9	209.6	
Average	180.1	200.4	188.1	218.2	212.9	206.8



Month	Mediterranean			Other Regions		
	2014	2015	2016	2014	2015	2016
Jan.	227.5	222.0	221.2	258.5	300.4	309.3
Feb.	228.7	216.2	215.1	249.5	295.5	299.9
March	231.0	213.0	213.4	241.4	290.7	292.6
April	236.2	219.3	217.6	242.0	294.1	291.4
May	240.7	223.6		246.9	294.9	
June	249.3	229.2		257.0	305.9	
July	245.8	225.6		258.2	307.2	
Aug.	248.7	226.2		262.4	315.0	
Sep.	245.1	228.2		264.2	318.1	
Oct.	246.8	227.3		269.6	316.6	
Nov.	246.3	223.2		270.0	313.7	
Dec.	242.5	223.2		265.6	305.5	
Average	240.7	223.1	216.8	257.1	304.8	298.3



Note: For further information, e.g. definition of port regions, please see Definitions.

(Source: ISL Monthly Container Port Monitor 2016)

ISL Monthly Container Port Traffic Indices 2014 - 2016

ISL's Monthly Container Port Traffic Index is based on monthly container traffic of the world's top container ports. In total, the ports reflected in the index handled approx. 420 mill TEU in 2015, equalling 70 per cent of world container traffic. The monthly TEU volumes per port are available since 2000. The different regions are represented by the following ports:

Japan, S. Korea,	Busan, Gwangyang, Incheon, Kaohsiung, Keelung, Kobe, Nagoya, Osaka, Taichung, Tokyo, Yokohama
China:	Guangzhou, Hong Kong, Ningbo, Qingdao, Shanghai, Shenzhen, Tianjin, Xiamen
Other Asia:	Aden, Bandar Abbas, Bangkok, Chennai, Colombo, Dammam, Jeddah, Laem Chabang, Nhava Sheva, Singapore
North-America Pacific:	Long Beach, Los Angeles, Oakland, Seattle, Tacoma, Vancouver
North-America Atlantic:	Charleston, Houston, Montreal, New York/ New Jersey, Port of Virginia, Savannah
North Europe:	Antwerp, Bremen / Bremerhaven, Dublin, Gdansk, Hamburg, Helsinki, Klaipeda, Kotka, Le Havre, Lissabon, Rotterdam, St Petersburg, Tallinn, Zeebrugge
Mediterranean:	Alexandria, Ambarli, Ashdod, Algeciras-La Linea, Barcelona, Beirut, Casablanca, Genoa, Haifa, Marseilles, Mersin, Port Said, Valencia
Other Regions:	Balboa Panama, Brisbane, Buenaventura S.A., Buenos Aires, Callao, Cape Town, Cartagena, Durban, Guayaquil, Itajai, Kingston, Lazardo Cardena, Manzanillo Mx, MIT Panama, Melbourne, Montevideo, Ngqura, Paranagua, Puerto Limon, San Antonio, Santos, Sydney, Valparaiso, Veracruz Mx

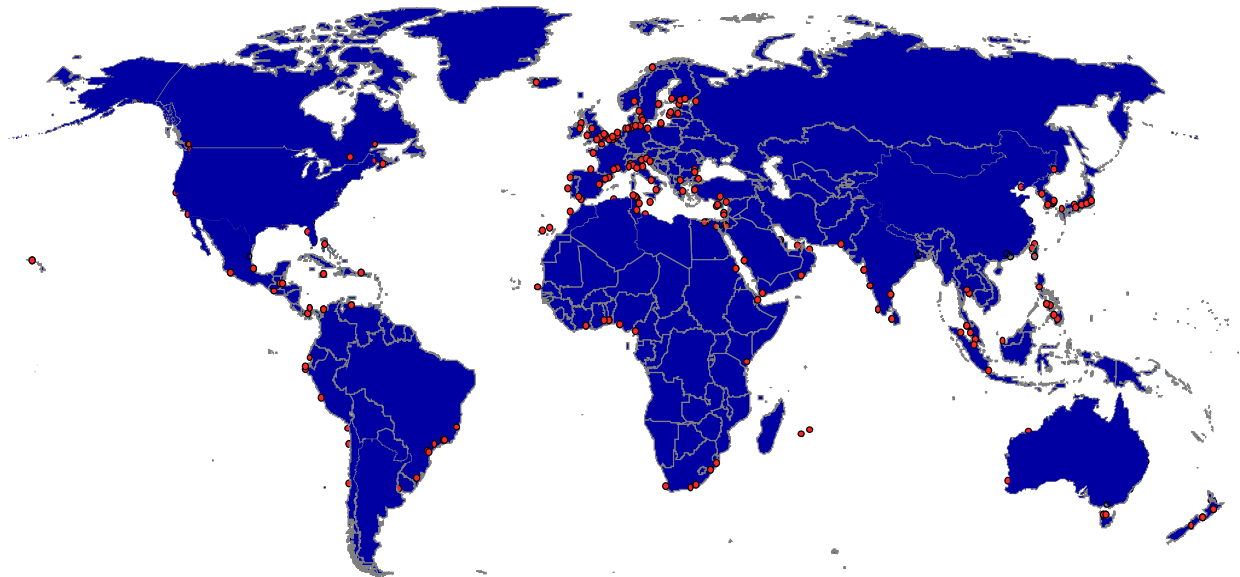
(Source: ISL Port Data Base 2016)

The ISL Port Data Base

the most comprehensive data base in port traffic

The ISL Port Data Base contains structured, comparable data on shipping, cargo and container traffic for more than 400 leading world ports since 1980. The data is constantly updated and completed, including today about 200 items per port and per year.

This unique data base is made possible by our network partners throughout the world providing the broad information for our yearly ISL Port Data Base Survey.



Basis of calculation:

Our basis for customised extracts from the Port Data Base is as follows: € 60 - basic fee, plus € 0.60 per item.

The basic fee includes the setting up of a suited layout the addition of the necessary explanatory remarks and footnotes as well as the transmission of the data by E-Mail or by fax. By subscribing to a specified analysis on a yearly basis, you will save the basic fee and get an additional 20 per cent off the other costs starting the second year. Apart from customised database extracts, we provide standardised port profiles and rankings. Please contact us for contractual information.

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eMail portbase@isl.org

Web <http://www.isl.org/infoline/>

Fleet and New Construction Data

Country of registration and country of control

Country of registration indicates the country of the port of registry of a country (flag). The country of control is defined as the "Real Nationality", i.e. the home country of the interests behind the primary reference company. None of the information regarding ownership is intended to confirm or otherwise the legal status of the companies or the ships associated with them

Denmark includes Faeroes, Greenland.

France includes New Caledonia, French Polynesia, Réunion, Wallis and Futuna Islands.

Netherlands includes Netherlands Antilles, Curacao.

Portugal includes Madeira.

Spain includes Canary Islands.

UK includes Isle of Man and Falkland Island.

US includes Puerto Rico.

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Broken-up Tonnage

includes ships sold for breaking. Figures on broken-up tonnage are not revised if vessels reported for breaking are trading again.

Merchant Ship Type Structures

Based on „An International Classification of Ships by Type" (ICST (1994)

Definition of terms used in merchant ship structures type classification.

Tanker: Single-deck vessel constructed and arranged for the carriage of liquid cargoes in tanks integral to the hull and include crude oil or non-hazardous (IMO code) refined products.

Chemical tanker: Vessel constructed and arranged for carrying hazardous (IMO code) cargoes in special tanks.

Liquid gas tanker: Vessel constructed and arranged for the carriage of liquefied gases either in integral tanks or independent tanks under pressure or refrigerated.

Dry Bulk: Dry cargo vessel. One deck, machinery aft with topside tanks capable of carrying a variety of self-trimming cargoes.

Ore Carrier (Bulk Carrier): Dry cargo vessel, one deck, strengthening for ore cargoes.

Ore/Bulk/Oil Carrier (OBO): Bulk carrier arranged for the carriage of either bulk dry cargoes or liquid cargoes in the same cargo spaces but not simultaneously.

General Cargo: Single or multi-deck general dry cargo vessel with facilities for loading/ discharging cargo.

Specialised Carrier (Special Ship): Dry cargo vessel specially designed for the carriage of particular cargoes, incl. car-carriers.

Reefer: Specialised dry cargo vessel with 80 % or more insulated cargo space.

RoRo Cargo/RoRo Passenger: Vessel arranged for Roll-on Roll-off loading / discharging of vehicles (road and/or rail) as cargo and / or passenger conveyances.

Container Ship (Fully Cellular Container Ships): Vessel fitted throughout with fixed or portable cell guides for the carriage of containers above and below the weather deck.

Passenger: Vessel which carries more than 12 fare paying passengers whether berthed or unberthed (ferries).

Basic Ship Type Structure and ISL Ship Type Aggregates

MERCHANT SHIP		STRUCTURES	ISL SHIP TYPES	
			Special Fleet Report	Broken-up tonnage etc.
LIQUID	Oil tankers	- Crude oil tankers - Crude/products tankers - Products tankers	Oil tankers "	Tankers "
	Oil / Chemical tankers	- Oil chemical tankers - Chemical tankers - Other tankers	Oil / Chemical tankers " "	Tankers "
	Liquid gas tankers	- LNG carriers - LPG carriers - Other liquid gas carriers	Liquid gas tankers " "	Tankers "
DRY BULK	Bulk carriers	- bulk carriers - other bulk carriers incl. ore carriers - Ore/bulk/oil carriers - Ore/oil carriers - Bulk/oil carriers	Bulk carriers "	Bulk carriers " " " "
OHTER DRY CARGO	General cargo ships	of which - Conventional Cargo ships - Special ships - Pure car carriers - Reefer ships - RoRo cargo ships	General cargo ships, of which Conventional Cargo ships Special ships Pure car carriers Reefer ships RoRo cargo ships	General cargo ships, of which Conventional Cargo ships (a) (a) (a)
	Container ships	- Fully cellular container ships	Fully cellular container ships	Fully cellular container ships
	Passenger and passenger cargo ships (b)	of which - Passenger ships - Cargo/RoRo passenger ships	Passenger and cargo passenger ships, of which Passenger ships Cargo/RoRo passenger ships	Passenger ships " "

(a) Included in General Cargo Ships.

(b) Including ships (berthed and unberthed) for passenger transport and passenger carrying vessels like general cargo passenger ships, ro-ro passenger ships (ferries).

► For further explanation (e.g. Trade and Traffic Statistics) please visit: www.isl.org/infoline

■ ISL Institute of Shipping Economics and Logistics

Founded as an independent and private non-profit foundation in 1954 in Bremen / Germany, the Institute of Shipping Economics and Logistics (ISL) has become one of Europe's leading research and consulting organisations in the maritime sector during the past 60 years. Qualified employees, equipped with state of the art technology and compatible instruments, work in inter-disciplinary teams on applied research and development projects in the departments Logistic Systems, Maritime Economics and Transport as well as Information Logistics. Due to its professional capability, superb reputation and exhaustive connections to politics and industry, ISL will continuously contribute to the advancement of added value as well as to the maritime and logistics industry as to science in future.

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The ISL InfoLine is your resource of up-to-date market information and completes ISL's service spectrum with numerous proprietary publications, which are available in the online portal. The key publications are the ISL Shipping Statistics and Market Review (SSMR), the ISL Shipping Statistics Yearbook (SSYB) and the ISL Monthly Container Port Monitor (MCPM).

Furthermore, the portal of the ISL InfoLine offers various databases used for market analyses, statistical publications, information services and customers' enquiries. The focus here is on the ISL Port Database.

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The ISL Library, which exists since 1954, is one of the biggest libraries in the area of maritime economics and logistics with a total stock of about 130,000 books (as of 2014), of which are 32,000 monographs and 31,500 annual publications. Furthermore 230 professional journals are kept regularly. In addition, digital publications within the creation of an eLibrary play an increasingly important role. The ISL Library is open to the public and the use is free of charge.

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