

# **Outlook for European Ports**

**ESPO Annual Conference  
Athens 2015**

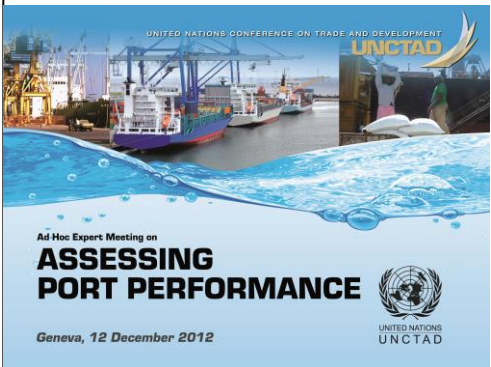




An global organisation focused upon helping developing countries integrate into world trade

## UNCTAD

### Consensus building



### Technical assistance and capacity building

ASYCUDA Newsletter

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July 2010



### Research & analysis



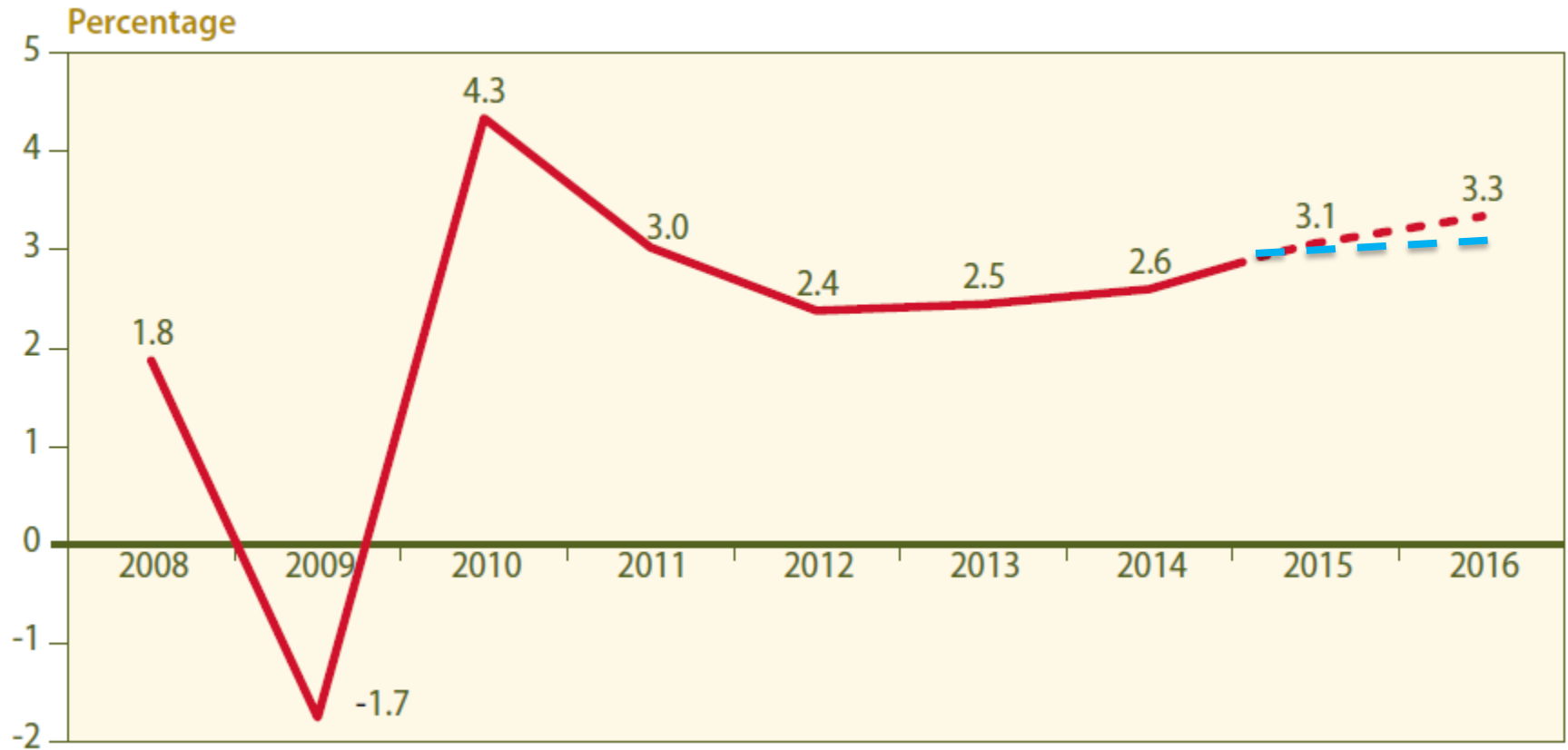
# Contents

- **1 - Global shipping market overview**
  - A) Demand
  - B) Supply
  - C) Freight costs
- **2 - Implications for ports**
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# **1 - Global shipping market Overview**

- A) Demand**
- B) Supply**
- C) Freight costs**

# GDP Growth 2008-2016



Source: UNDESA, WESP January 2015

# GDP forecast 2015-2016

## (Mid-year Update)

	Growth of world output, 2013 – 2016, annual percentage change				Change from January 2015 forecast	
	2013	2014 <sup>a</sup>	2015 <sup>b</sup>	2016 <sup>b</sup>	2015	2016
<b>World</b>	2.5	2.6	2.8	3.1	-0.3	-0.2
<b>Developed economies</b>	1.2	1.6	2.2	2.2	0.1	-0.1
<b>United States of America</b>	2.2	2.4	2.8	2.7	0	-0.4
<b>Japan</b>	1.6	0	1.2	1	0	-0.1
<b>European Union</b>	0	1.3	1.9	2.1	0.2	0.1
<b>EU15</b>	-0.1	1.2	1.8	2	0.3	0.1
<b>New EU Members</b>	1.3	2.7	2.8	3.2	-0.1	-0.1
<b>Euro area</b>	-0.4	0.9	1.6	1.9	0.3	0.2
<b>Other European</b>	1.4	2.1	0.5	1.3	-1.7	-1
<b>Other developed countries</b>	2	2.6	2.4	2.8	-0.2	0.2

<sup>a</sup> Partly estimated; <sup>b</sup> Forecast, based in part on Project LINK;

Source: UNDESA, WESP 2015

# Industry Output

## Industrial production, YoY in %

	2014	2015F	2016F
USA	4.3	3.1	3.1
Euro area	0.8	1.6	2.4
Japan	2.1	2.3	3.0
China	8.3	7.6	7.5
Other Asia	2.1	3.7	4.6

## Steel production in mill tons

	2014-03m	2015-03m	YoY in %
USA	21.6	20.0	-7.6
Japan	27.6	26.7	-3.0
EU27	44.0	46.7	6.2
China	203.5	200.1	-1.7
Other Asia	44.1	45.2	2.5
<b>Total world</b>	<b>407.4</b>	<b>400.0</b>	<b>-1.8</b>

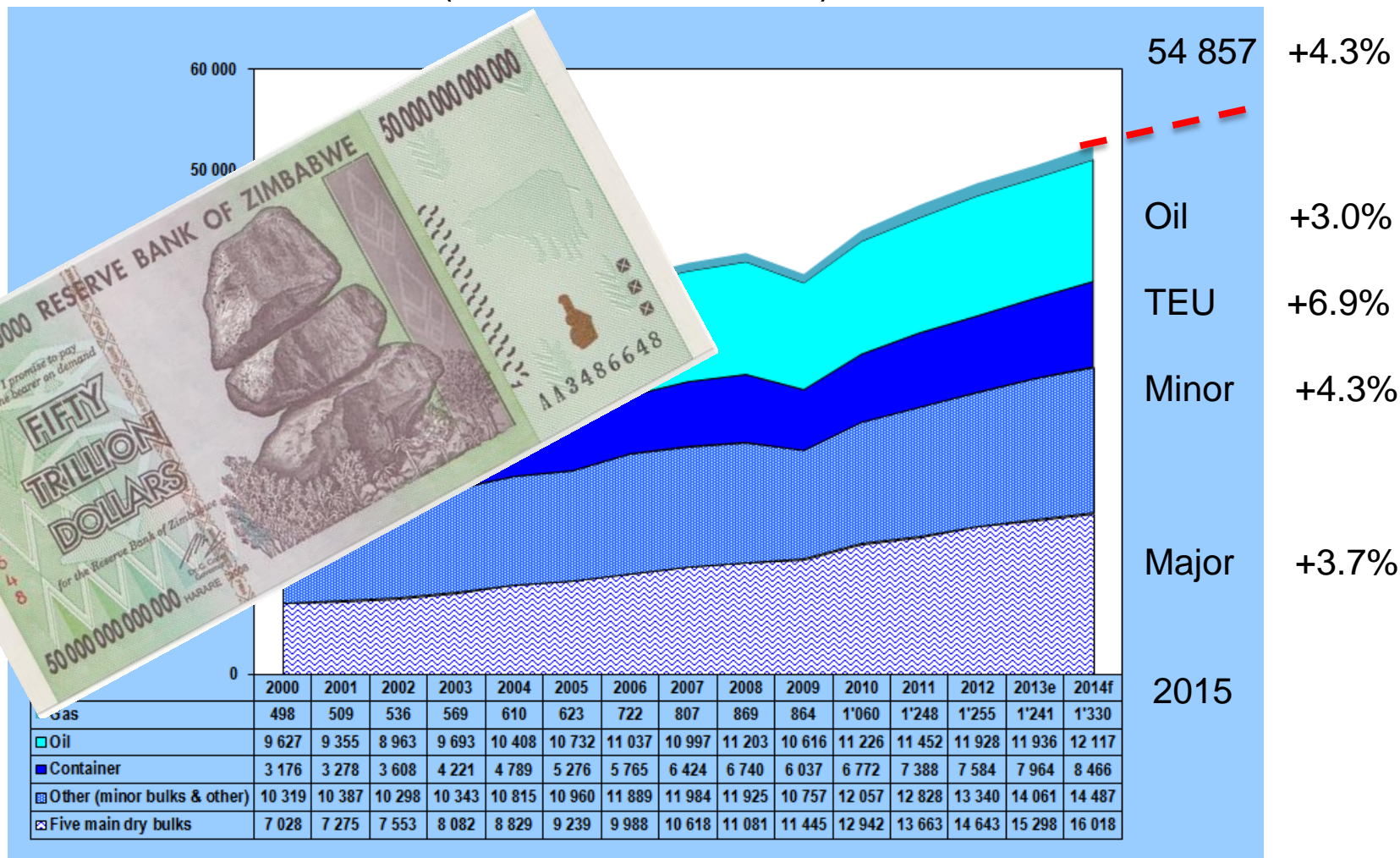
## Market indicators - YoY change in %

Seaborne trade*		3Q/2014	4Q/2014	2015-02m
Oil		-2.2	1.5	1.2
Dry bulk		2.9	-3.7	-4.2
Oil		Feb 2015	Mar 2015	2015-03m
Oil consumption	World	1.1	1.4	1.2
	US	2.1	3.0	2.3
	China	11.9	9.2	6.8
Crude imports	US	-15.1	-10.9	-14.3
	China	10.6	14.0	7.5
Dry bulk		Feb 2015	Mar 2015	2015-03m
China imports	Total	-8.7	-0.2	-12.3
	Iron ore	7.4	8.5	0.1
Steel production	China	3.4	-1.2	-1.7
	US	-7.9	-12.7	-7.6
Container		Feb 2015	Mar 2015	2015-03m
US imports		5.7	3.8	4.7



# World seaborne trade in cargo ton-miles by cargo type, 1999-2015

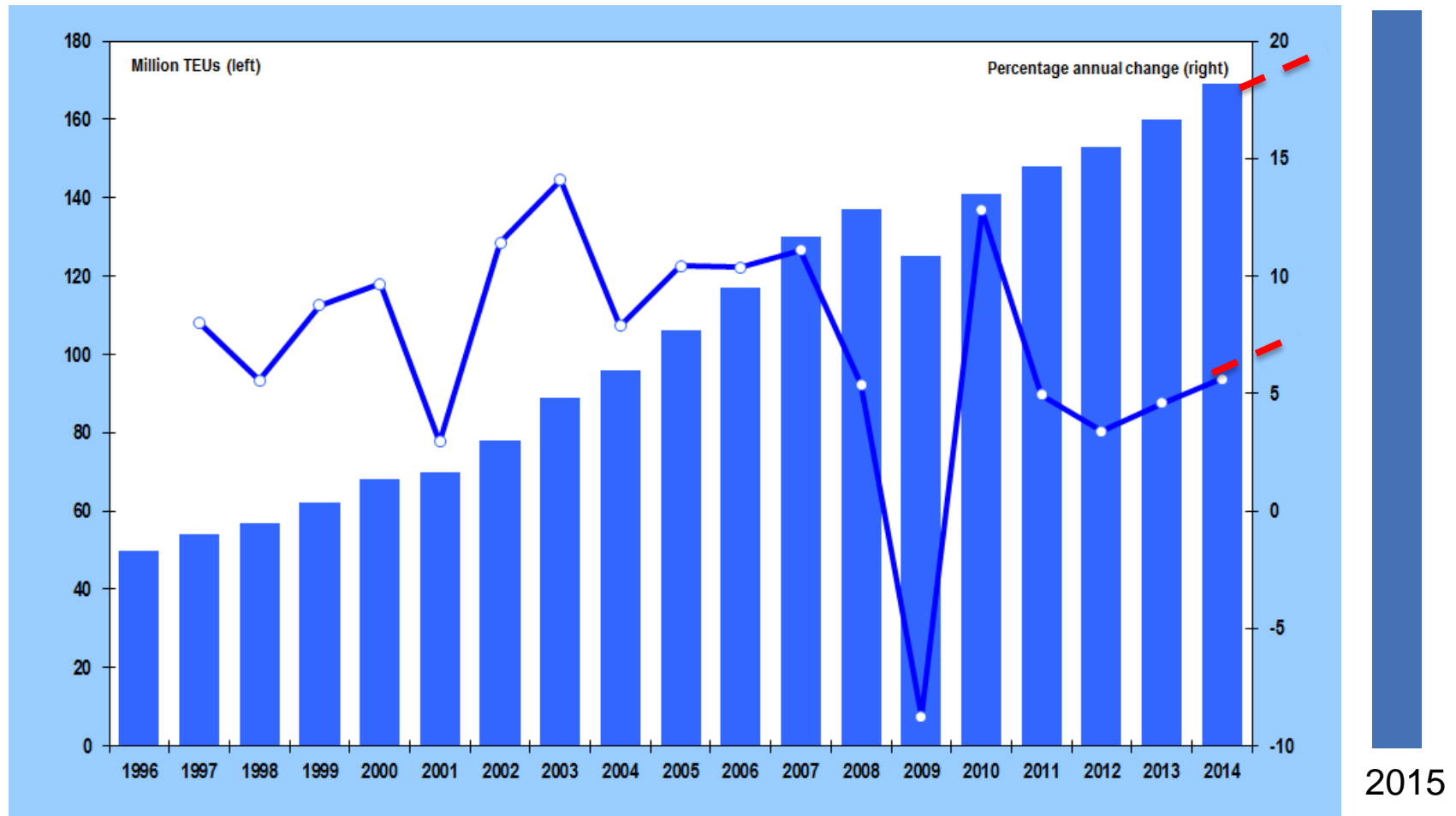
(Billion of ton-miles)



# Global containerized trade, 1996-2015

(Million TEUs and percentage annual change)

+6.7% 182.4m



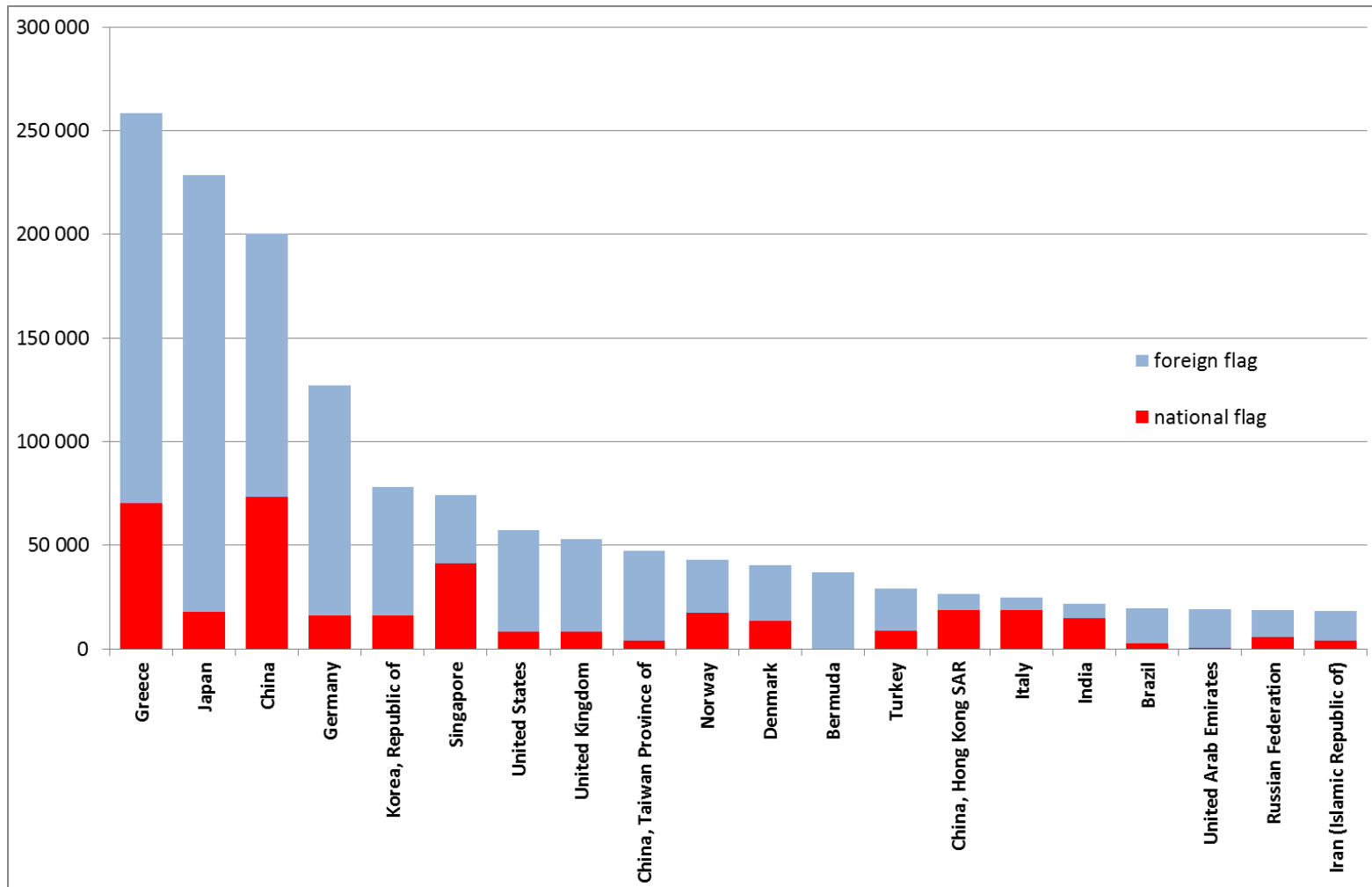
Source: Based on Drewry Shipping Consultants, Container Market Review and Forecast 2008/2009, and Clarkson Research Services, Container Intelligence Monthly, various issues.

# 1 - Global shipping market Overview

- A) Demand
- **B) Supply**
- C) Freight costs

# Top 20 ship owning nations, beneficial ownership

(1,000 dwt, by country of ownership, 1 January 2014)

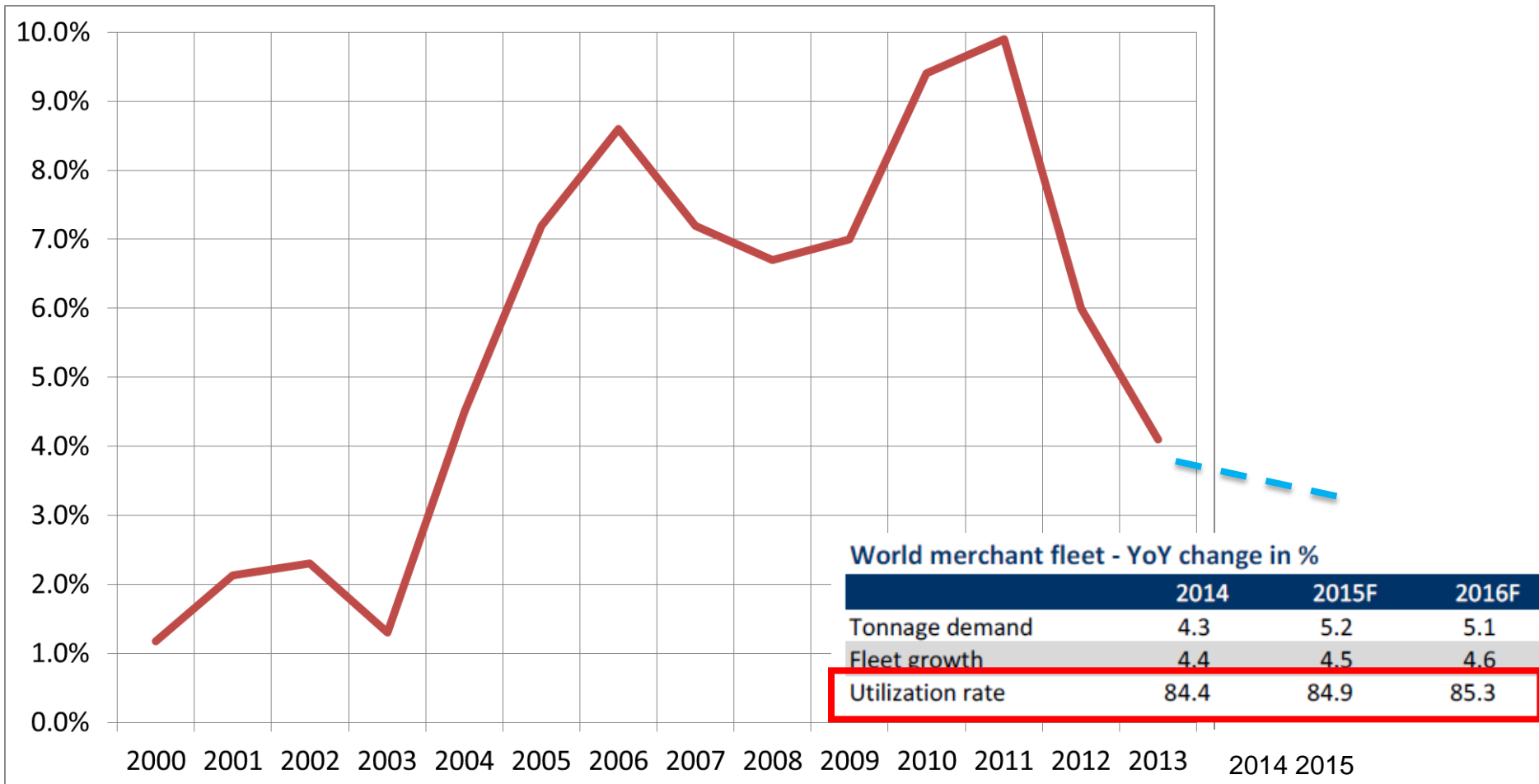


Source: UNCTAD secretariat, based on data provided by Clarkson Research Services.

Note: Propelled sea-going merchant vessels of 1,000 GT and above.

# Annual growth of the world fleet, 2000-2015

(Per cent of dwt)

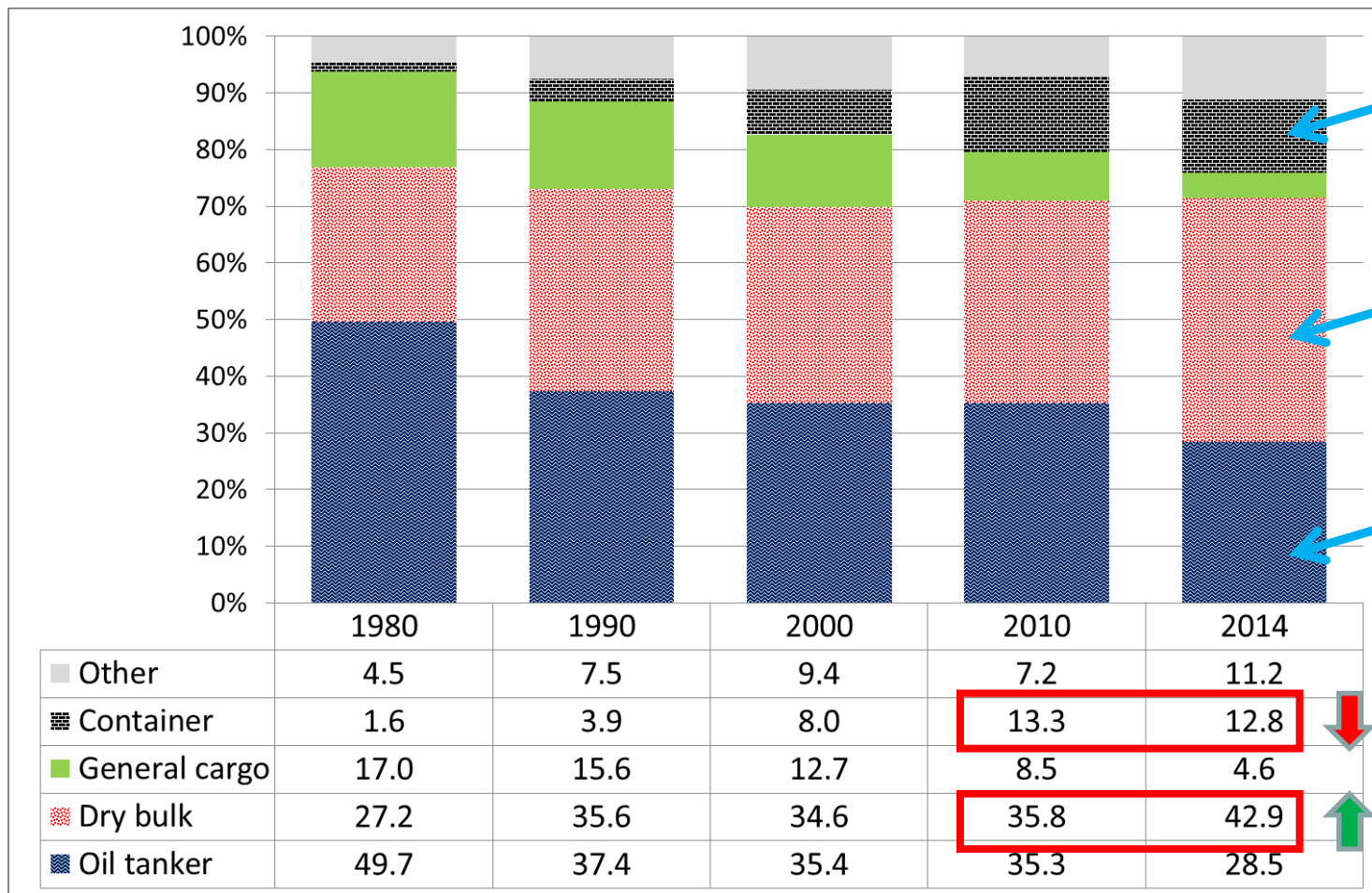


Source: UNCTAD *Review of Maritime Transport*, various issues.

Clarkson Research Services, *Shipping Review & Outlook*, Spring 2015  
 RS Platou Monthly, April 2015 F - Forecast

# World fleet by principal vessel types, 1980 - 2014 a

(Beginning-of-year figures, percentage share of dwt)

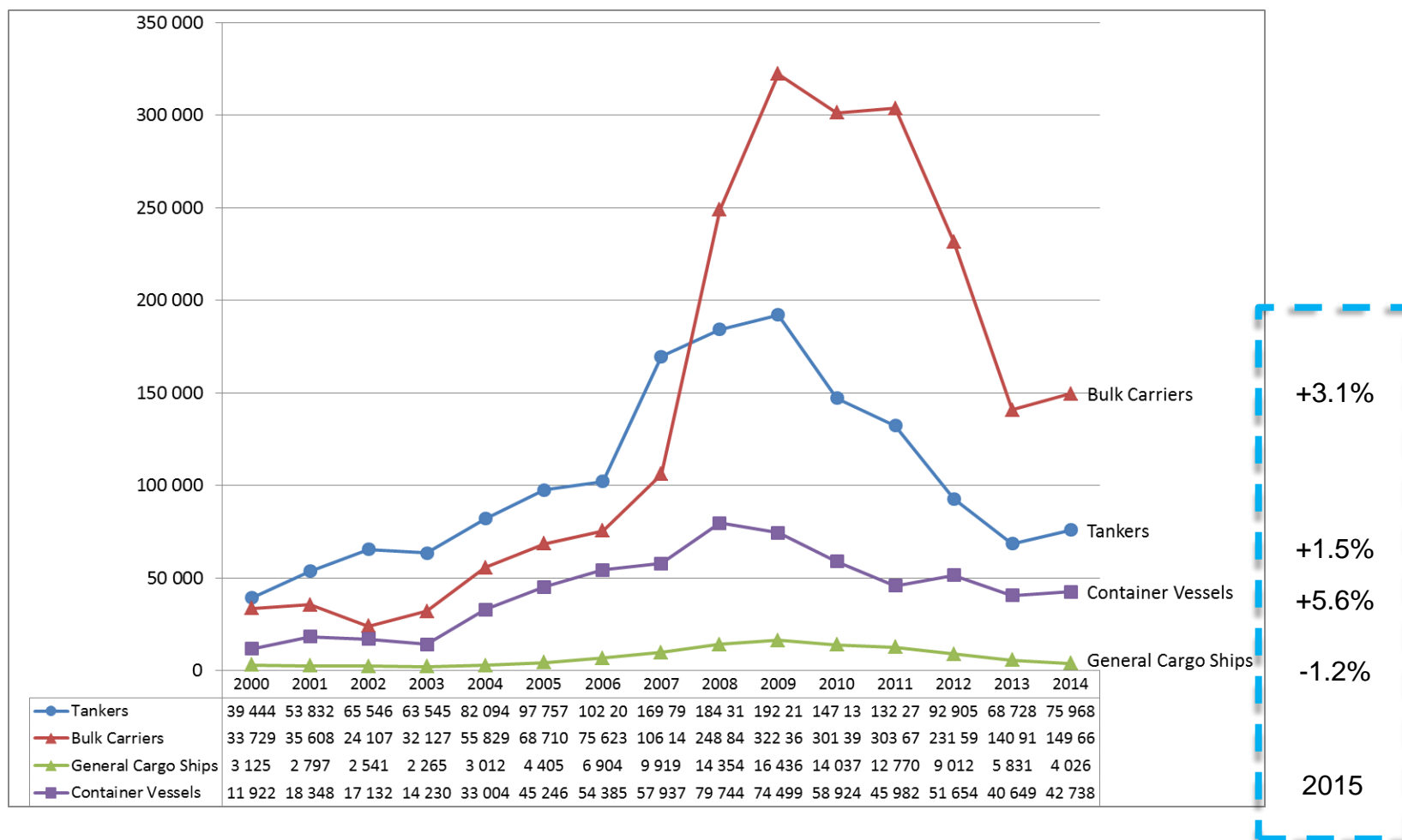


Source: Compiled by the UNCTAD secretariat, on the basis of data supplied by Clarkson Research Services and previous issues of the *Review of Maritime Transport*.

a All propelled sea-going merchant vessels of 100 GT and above, excluding Inland Waterway Vessels, Fishing Vessels, Military Vessels, Yachts, and Offshore Fixed and Mobile Platforms and Barges (with the exception of FPSOs and Drillships)

# World tonnage on order, 2000–2014 <sup>a</sup>

(Thousands of dwt)



Source: Compiled by the UNCTAD secretariat, on the basis of data supplied by Clarkson Research Services.  
<sup>a</sup> Propelled sea-going merchant vessels of 100 GT and above. Beginning of year figures.  
 Clarkson Research Services, Shipping Review & Outlook, Spring 2015

# The 10 leading liner companies, May 2015

(Number of ships and total shipboard capacity deployed, in TEUs, ranked by TEU)

Rnk	Operator	Teu	Share	Existing fleet	Orderbook
1	APM-Maersk	2,926,185	15.1%		
2	Mediterranean Shg Co	2,540,324	13.1%		
3	CMA CGM Group	1,731,227	8.9%		
4	Evergreen Line	979,996	5.1%		
5	Hapag-Lloyd	966,437	5.0%		
6	COSCO Container L.	826,479	4.3%		
7	CSCL	704,871	3.6%		
8	Hanjin Shipping	633,495	3.3%		
9	MOL	613,965	3.2%		
10	Hamburg Süd Group	601,756	3.1%		

Rnk	Operator	Total		Owned		Chartered			Orderbook		
		TEU	Ships	TEU	Ships	TEU	Ships	% Chart	TEU	Ships	% existing
1	APM-Maersk	2,926,185	599	1,647,954	254	1,278,231	345	43.7%	138,600	15	4.7%
2	Mediterranean Shg Co	2,540,324	491	1,094,191	193	1,446,133	298	56.9%	730,896	58	28.8%
3	CMA CGM Group	1,731,227	463	562,076	83	1,169,151	380	67.5%	370,796	36	21.4%
4	Evergreen Line	979,996	205	534,211	106	445,785	99	45.5%	355,016	23	36.2%
5	Hapag-Lloyd	966,437	184	520,863	75	445,574	109	46.1%	71,148	7	7.4%
6	COSCO Container L.	826,479	164	464,986	86	361,493	78	43.7%	119,500	10	14.5%
7	CSCL	704,871	138	484,208	68	220,663	70	31.3%			
8	Hanjin Shipping	633,495	104	278,102	38	355,393	66	56.1%	36,120	4	5.7%
9	MOL	613,965	113	189,030	29	424,935	84	69.2%	160,940	10	26.2%
10	Hamburg Süd Group	601,756	126	254,872	41	346,884	85	57.6%	49,560	5	8.2%

Source:

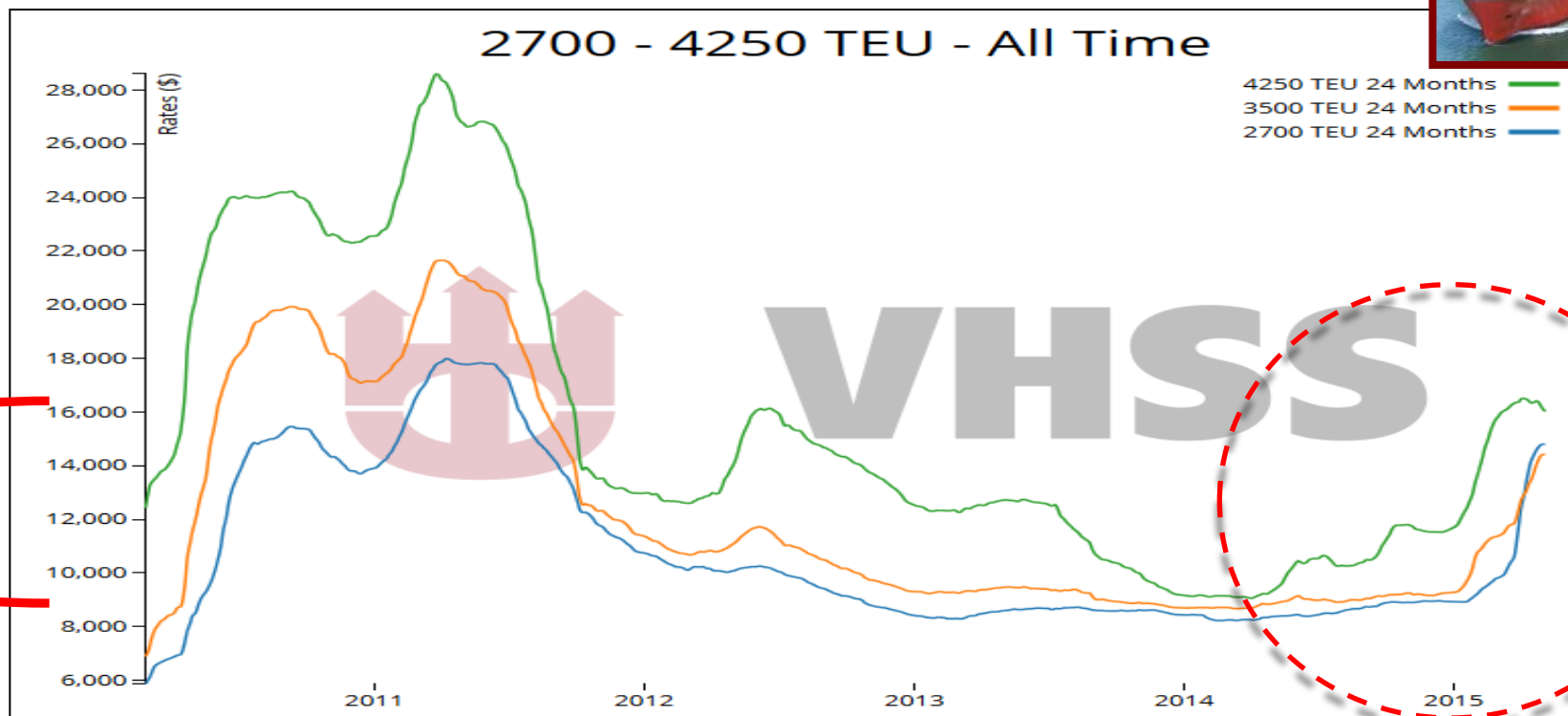
<http://www.alphaliner.com/top100/>



# 1 - Global shipping market Overview

- A) Demand
- B) Supply
- **C) Freight**

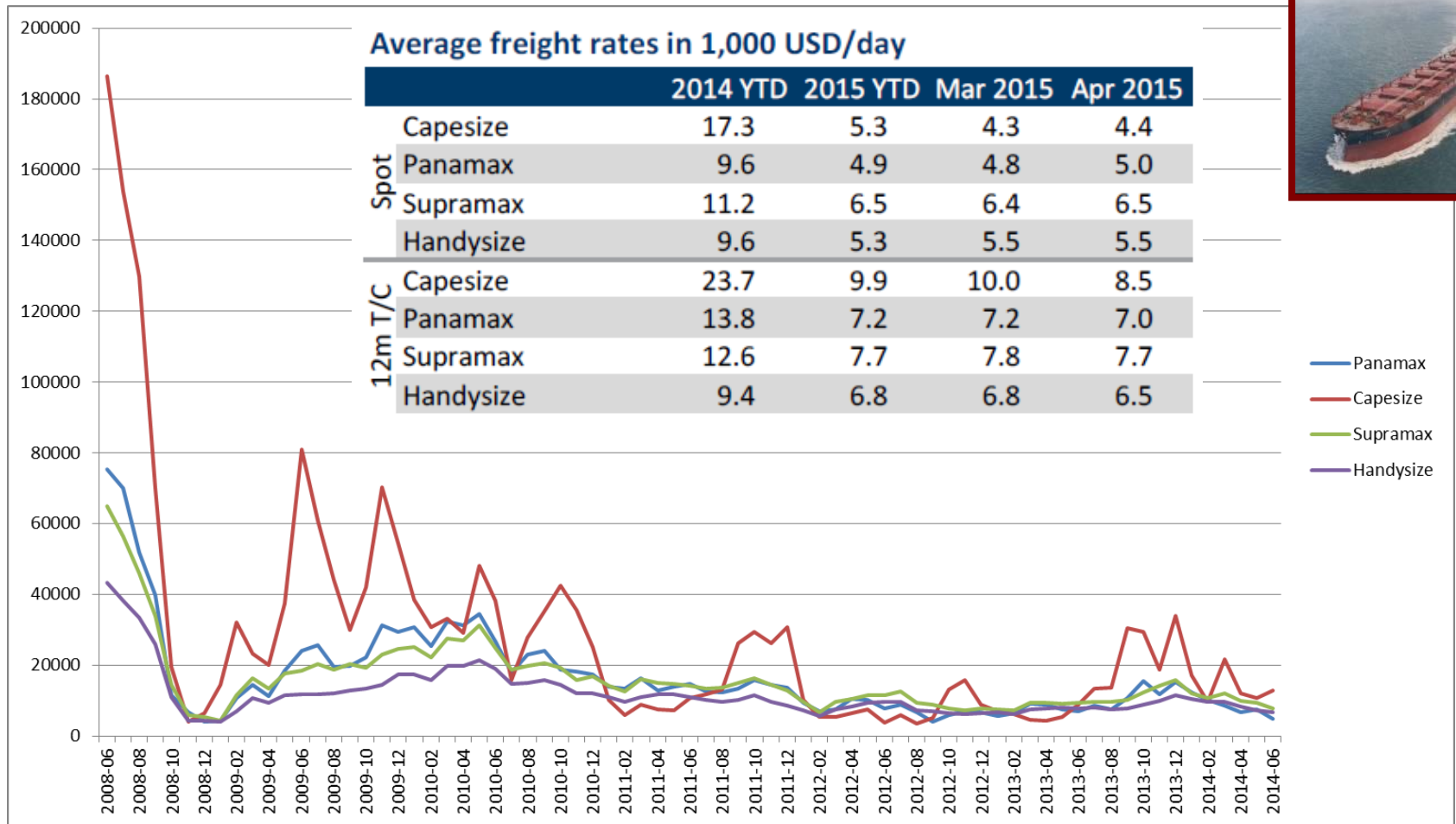
# Container Daily Charter rates (2011-2015)



Source: the Hamburg Shipbrokers' Association. See <http://www.vhss.de>.

# Daily earnings of bulk carrier vessels, 2008–2014

## (Dollars per day)



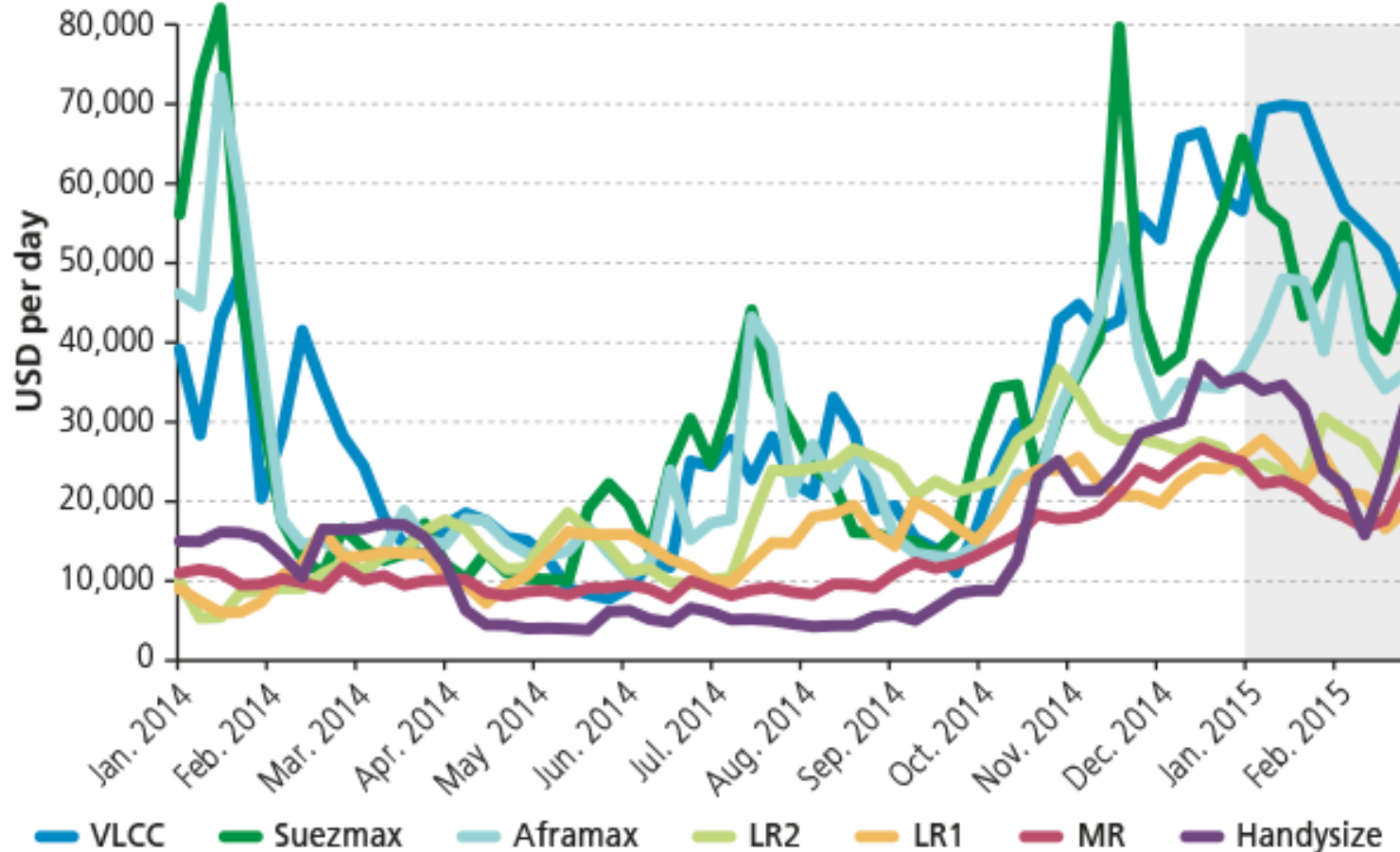
- Panamax
- Capesize
- Supramax
- Handysize

Source: UNCTAD, based on data from *Clarkson Shipping Intelligence Network*, figures published by the London Baltic Exchange.  
 Note: Supramax – average of the six time charter routes; Handysize – average of the six time charter routes; Panamax – average of the four time charter routes; Capesize – average of the four time charter routes.

# Tanker Market



## Tanker Earnings 2014-2015



Source: BIMCO, Clarksons

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# Every port is different

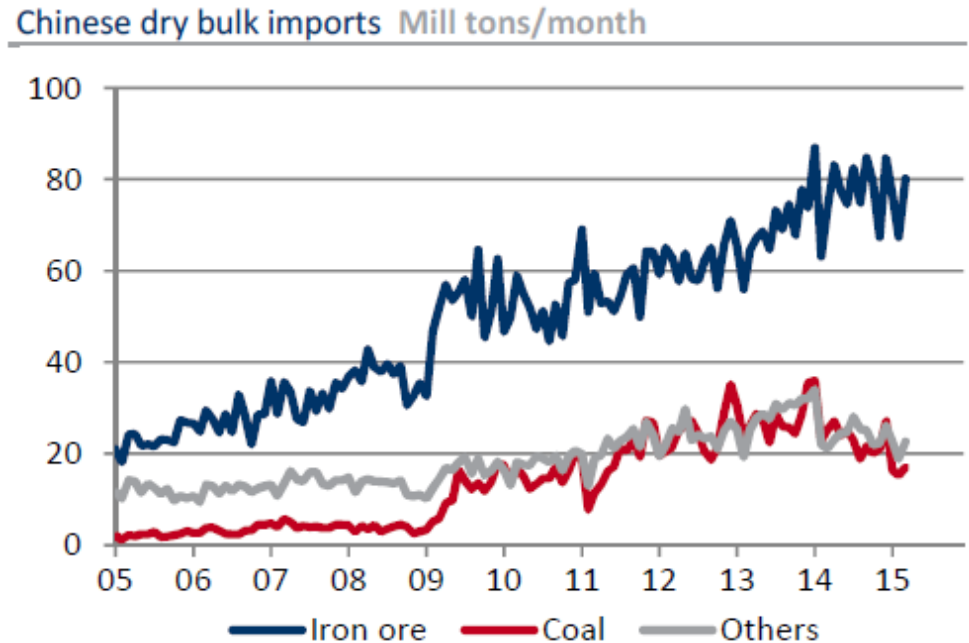


# Container sector

- While global growth is positive the dynamics of the industry are changing
  - larger vessels
  - Greater intra-Asian trade
  - A slow down in manufacturing in China
  - Increased terminal capacity in North West Europe
- These will put pressure on European ports to compete for business

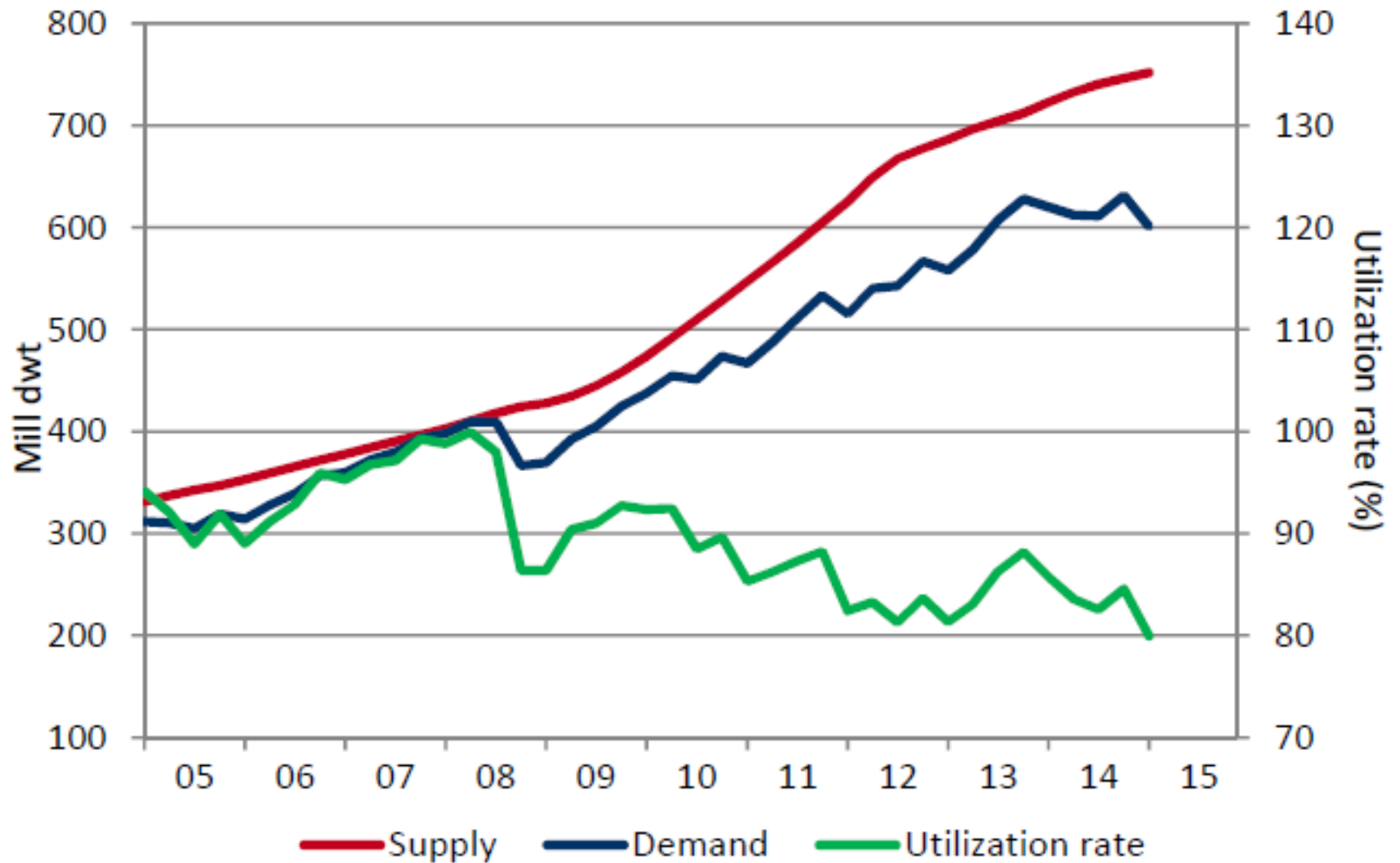
# Bulk sector

- While the oversupply of bulk vessels is pushing down freight rates, for ports this isn't necessarily a problem as there is a reasonable growth (around 4%) in the demand for bulk cargo to be transported.

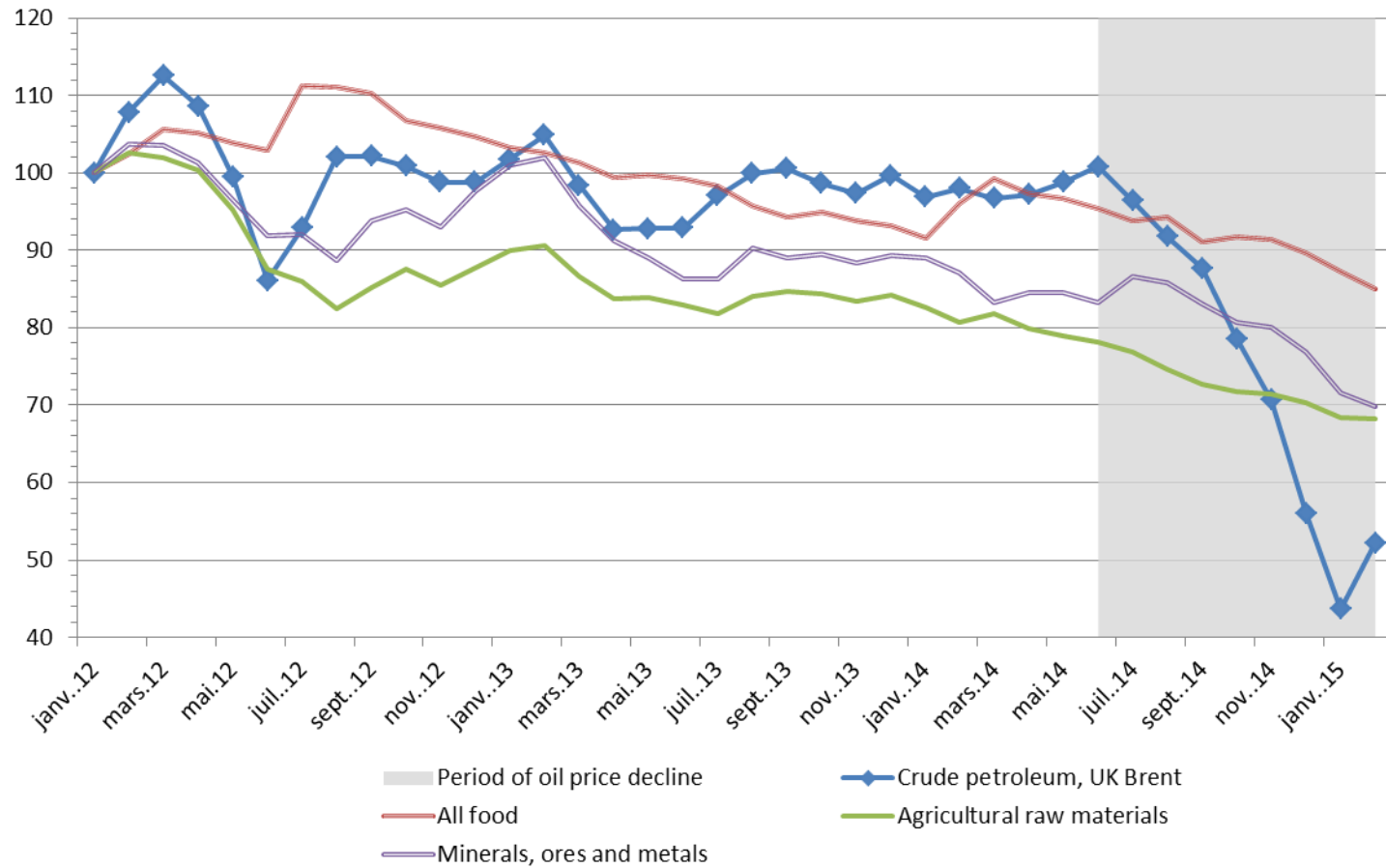




## Supply, demand and utilization rate, dry bulk fleet (10,000 dwt +)



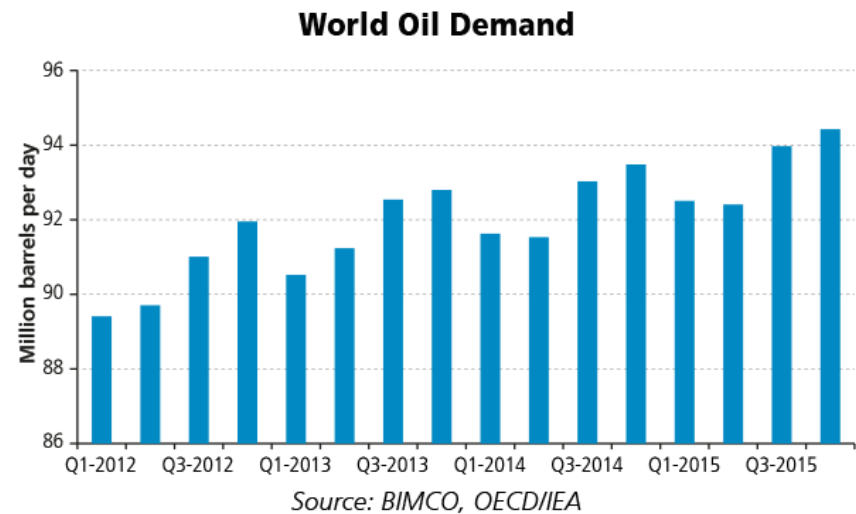
# Price indices of selected groups of commodities, January 2012 - February 2015 (Index: January 2012=100)



Source: UNCTADStat

# Tanker sector

- The demand for crude oil is still strong and a continuation in supply by the leading producers is helping to keep prices low.
- The geography of trade may affect how future supplies meet demand as some facilities are taken off-line.



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# A). Increasing volumes



# Top 20 container terminals and their throughput for 2012 - 2014

(Twenty-foot equivalent units and percentage change)

Port Name	2012	2013	2014	Percentage change 2013-2012	Percentage change 2014 -2013
Shanghai	32,529,000	36,617,000	35,290,000	12.57	-3.62
Singapore	31,649,400	32,600,000	33,869,000	3.00	3.89
Shenzhen	22,940,130	23,279,000	24,040,000	1.48	3.27
Hong Kong	23,117,000	22,352,000	22,200,000	-3.31	-0.68
Ningbo	15,670,000	17,351,000	19,450,000	10.73	12.10
Busan	17,046,177	17,686,000	18,678,000	3.75	5.61
Guangzhou	14,743,600	15,309,000	16,610,000	3.83	8.50
Qingdao	14,503,000	15,520,000	16,580,000	7.01	6.83
Dubai	13,270,000	13,641,000	15,200,000	2.80	11.43
Tianjin	12,300,000	13,000,000	14,060,000	5.69	8.15
Rotterdam	11,865,916	11,621,000	12,298,000	-2.06	5.83
Port Klang	10,001,495	10,350,000	10,946,000	3.48	5.76
Kaohsiung	9,781,221	9,938,000	10,593,000	1.60	6.59
Dalian	8,064,000	10,015,000	10,130,000	24.19	1.15
Hamburg	8,863,896	9,258,000	9,729,000	4.45	5.09
Antwerp	8,635,169	8,578,000	8,978,000	-0.66	4.66
Xiamen	7,201,700	8,008,000	8,572,000	11.20	7.04
Tanjung Pelepas	7,700,000	7,628,000	8,500,000	-0.94	11.43
Los Angeles	8,077,714	7,869,000	8,340,000	-2.58	5.99
Jakarta	6,100,000	6,171,000	6,053,000	1.16	-1.91
<b>Total top 20</b>	<b>284 059 418</b>	<b>296 791 000</b>	<b>310 116 000</b>	<b>4.48</b>	<b>4.49</b>

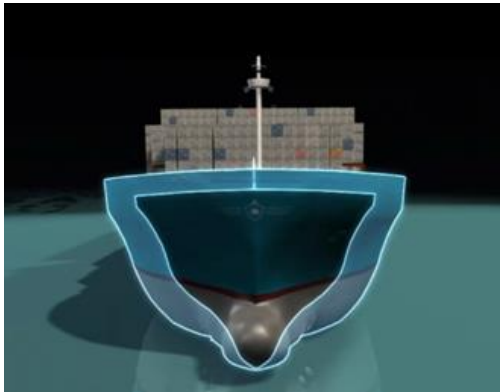
Source: UNCTAD secretariat and <http://www.portofrotterdam.com/en/Port/port-statistics/Pages/other-ports-statistics.aspx>, May 2015

Note: In this list Singapore does not include the port of Jurong.

# Volume Challenges

## Seaside

- More vessels
- Bigger vessels
- Less time (pressure to reduce ship turnaround times)
- Lack of financial resources to invest (deeper approach channels/berths, wider turning basins).



## Land side

- More cargo
- High frequency.
- Less time (pressure to improve cargo handling time).
- Lack of financial resources to invest in more cargo handling equipment, bigger storage facilities).



# B). Assessment

## PORT PRODUCTIVITY RANKINGS REGIONAL LEADERS

TOTAL BERTH MOVES PER HOUR	2011	2012	TOTAL BERTH MOVES PER HOUR
67	NORTH ASIA	NORTH ASIA	71
58	MIDDLE EAST	MIDDLE EAST	62
49	NORTH AMERICA	SOUTHEAST ASIA	55
Tied for 4th	SOUTHEAST ASIA	NORTH AMERICA	47
Tied for 4th	CENTRAL AMERICA	INDIAN SUBCONTINENT	47
38	MEDITERRANEAN	NORTH EUROPE	42
37	NORTH EUROPE	CENTRAL AMERICA	39
37	INDIAN SUBCONTINENT	MEDITERRANEAN	Tied for 8th
27	W.C. SOUTH AMERICA	W.C. SOUTH AMERICA	38
Tied for 10th	E.C. SOUTH AMERICA	OCEANIA	34
25	OCEANIA	E.C. SOUTH AMERICA	31
23	CARIBBEAN	CARIBBEAN	21
21	AFRICA	AFRICA	19

Source: JOC Port Productivity Database; Ocean Shipping Consults



Standing Committee  
for Economic and Commercial Cooperation  
of the Organization of Islamic Cooperation (COMCEC)

Evaluating the Ownership, Governance Structures and  
Performances of Ports in the OIC Member Countries



COMCEC COORDINATION OFFICE  
January 2015



# World's leading ports by productivity (2014)

	Port Name	Country	Berth Productivity
1	Jebel Ali	United Arab Emirates	138
2	Tianjin	China	125
3	Qingdao	China	125
4	Nansha	China	119
5	Yantian	China	117
6	Khor al Fakkan	United Arab Emirates	108
7	Ningbo	China	107
8	Yokohama	Japan	105
9	Busan	Republic of Korea	102
10	Shanghai	China	101
11	Salalah	Oman	99
12	Balboa	Panama	97
13	Bremerhaven	Germany	92
14	Xiamen	China	90
15	Taipei	Taiwan, Province of China	89
16	Rotterdam	Netherlands	88
17	Mawan	China	88
18	Gwangyang	Republic of Korea	87
19	Chiwan	China	86
20	Colombo	Sri Lanka	85
21	Jeddah	Saudi Arabia	84
22	Nhava Sheva (Jawaharlal Nehru)	India	84
23	Kaohsiung	Taiwan, Province of China	83
24	Dalian	China	81
25	Los Angeles	United States of America	80

Source: Journal of Commerce Port Productivity Database (data H1 2014) May 2015

# World's leading ports by productivity 2012-14

(Container moves per ship, per hour on all vessel sizes and percentage increase)

Port	Country	2012 Berth Productivity	2013 Berth Productivity	2014 Berth Productivity	Percentage increase 2013/2012	Percentage increase 2014/2013
Jebel Ali	United Arab Emirates	81	119	138	47%	16%
Tianjin	China	86	130	125	51%	-4%
Qingdao	China	96	126	125	31%	-1%
Nansha	China	73	104	119	42%	14%
Yantian	China	78	106	117	36%	10%
Khor al Fakkan	United Arab Emirates	74	119	108	61%	-9%
Ningbo	China	88	120	107	36%	-11%
Yokohama	Japan	85	108	105	27%	-3%
Busan	South Korea	80	105	102	31%	-3%
Xiamen	China	76	106	90	39%	-15%

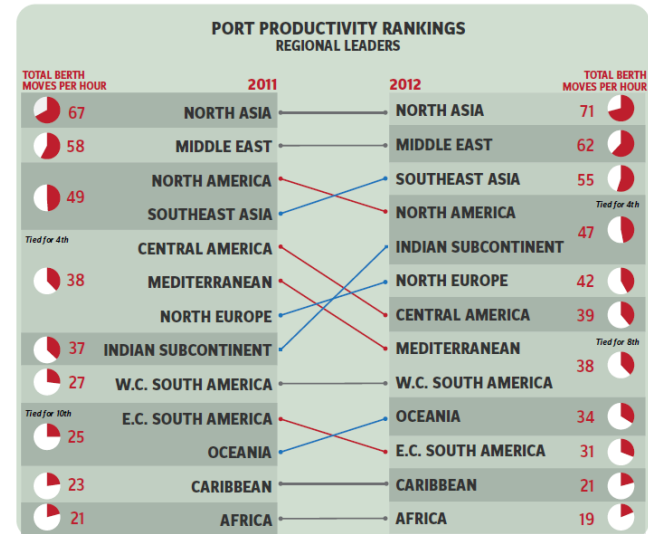
- Shippers are benchmarking carriers



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- Carriers are benchmarking ports



Source: JOC Port Productivity Database; Ocean Shipping Consults

Who are ports benchmarking?

# C). Enviromental Challenges

- Various operational emissions:
  - E.g. from cars, trucks, trains, ships, cranes, offices etc.
  - In the form of SO<sub>x</sub>, NO<sub>x</sub>, CO<sub>2</sub>, Particle matter, noise, dust, light etc.
- Plus accidents
  - E.g. spills (oil, cargo sewage, ballast, wash off)
- Increased awareness reflected in more regulations/policy
  - E.g. Reg. 14 - Annex VI - MARPOL
  - SDG



# Sustainable Development Goals (SDG)

- In September 2015, the United Nations is expected to build upon the MDG and finalize SDG for adoption at its General Assembly in New York.
- The new goals will build upon the Rio+20 outcome document “*The Future we want*” by addressing a multitude of issues on sustainable development, not least, how to achieve development with the least impact upon the environment.

1. End **poverty** in all its forms everywhere
2. End hunger, achieve **food** security and improved nutrition, and promote sustainable agriculture
3. Ensure **healthy** lives and promote well-being for all at all ages
4. Ensure inclusive and equitable quality **education** and promote life-long learning opportunities for all
5. Achieve **gender equality** and empower all women and girls
6. Ensure availability and sustainable management of **water** and sanitation for all
7. Ensure access to affordable, reliable, sustainable, and modern **energy** for all
8. Promote sustained, inclusive and sustainable economic growth, full and productive **employment** and decent work for all
9. Build resilient infrastructure, promote inclusive and sustainable **industrialization** and foster innovation
10. Reduce **inequality** within and among countries
11. Make **cities** and human settlements inclusive, safe, resilient and sustainable
12. Ensure **sustainable** consumption and production patterns
13. Take urgent action to combat **climate change** and its impacts\*
14. Conserve and sustainably use the **oceans, seas and marine resources** for sustainable development
15. Protect, restore and promote sustainable use of terrestrial **ecosystems**, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss
16. Promote **peaceful** and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels
17. Strengthen the means of implementation and revitalize the global **partnership** for sustainable development

# Goal 9

- 9.1 develop quality, reliable, sustainable and resilient infrastructure, including regional and trans-border infrastructure, to support economic development and human well-being, with a focus on afford
- 9.4 by 2030 upgrade infrastructure and retrofit industries to make them sustainable, with increased resource use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, all countries taking action in accordance with their respective capabilities able and equitable access for all

# Goal 11

- 11.2 by 2030, provide [access to safe, affordable, accessible and sustainable transport systems](#) for all, improving road safety, notably by expanding public transport, with special attention to the needs of those in vulnerable situations, women, children, persons with disabilities and older persons
- 11.6 by 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention [to air quality, municipal and other waste management](#)
- 11.a support positive economic, social and environmental [links between urban, peri-urban and rural areas](#) by strengthening national and regional development planning



# THANK YOU

## REVIEW OF MARITIME TRANSPORT -

[WWW.UNCTAD.ORG/RMT](http://www.unctad.org/rmt)

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