Shipping Markets: Status & Perspectives

30th May 2018



Key facts on Sale & Purchase and Demolition

The S&P Market

SECONDHAND SALES:

- 2018 573 Sales (233 Bulkers, 132 Tankers) \$6.9bil usd
- 2017 1561 Sales (680 Bulkers, 355 Tankers) \$21bil usd
- Greek buyers 20% (1 out of 5 ships)
 Greek buyers both 25% (in both DWT & Capital spent)
- 2016 1240 Sales (650 Bulkers, 330 Tankers) \$15bil usd
- 2015 1383 Sales (439 Bulkers, 471 Tankers) \$28bil usd
- 2014 1501 Sales (468 Bulkers, 525 Tankers) \$27bil usd
- 2013 1340 Sales (509 Bulkers, 430 Tankers) \$18bil usd

Demolition - Scrapping

SHIPS SOLD FOR DEMOLITION:

- 2018 390 Ships 16mil tons DWT (1.9mil BC 12mil WET)
- 2017 1121 Ships 38mil tons DWT (15mil BC 11.6mil WET)
- 2016 1270 Ships 46mil tons DWT (29mil BC 3.4mil WET)
- 2015 1240 Ships 40mil tons DWT (30mil BC 3.3mil WET)
- 2014 1408 Ships 35mil tons DWT (16mil BC 10mil WET)
- 2013 1685 Ships 50mil dwt DWT (23mil BC 15mil WET)

Every year we record about 7.5 - 9million tons LDT @ an average \$400 per ton = \$7bil - \$9bil USD is spent for demo deals every year. The global economic and trade background

There is synchronized momentum but also risks

Synchronized Momentum

- +3.2% in 2016 global GDP growth
- +3.7% in 2017
- +3.7% in 2018 (e)
- +3.9% in 2019 (e)
- 120 countries experiencing stronger growth – synchronized global growth!

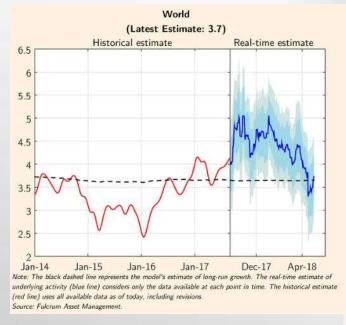
Source: IMF

Risks

- Geopolitics (Korea, neo Cold War, Turkey, Middle East, etc)
- Financial fragility
- Environmental risks
- Trade wars
- Terrorism, cybersecurity

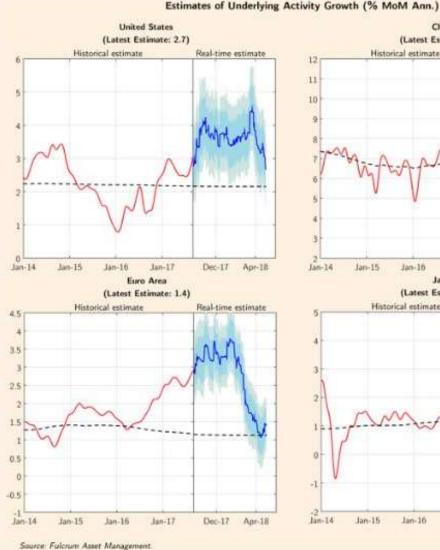
Multilateral cooperation is essential!

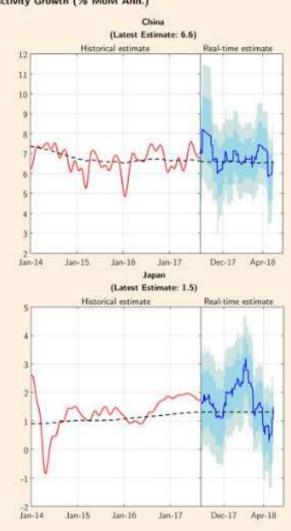
Real-time estimate of Global Economy



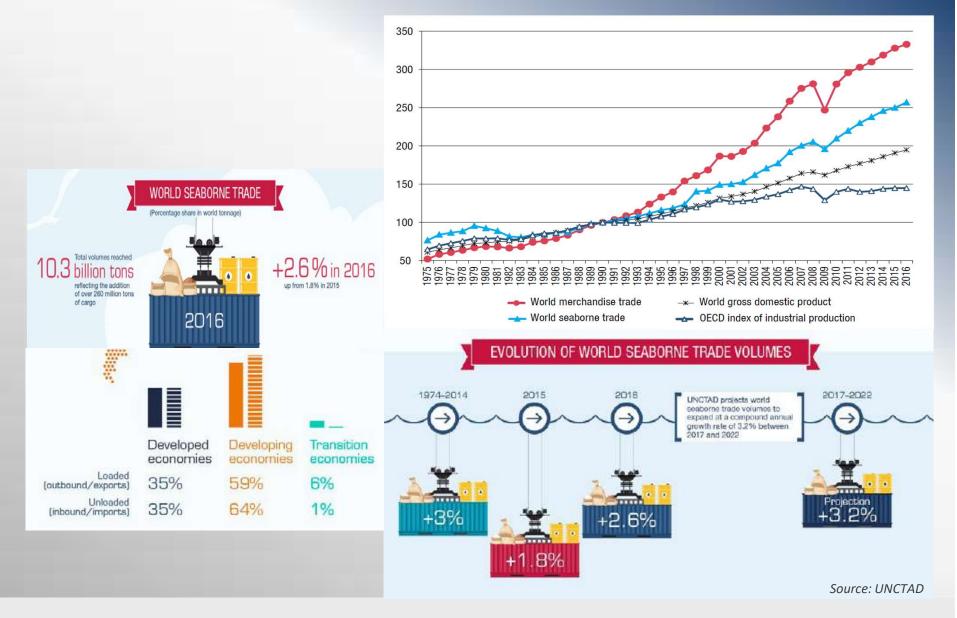
Annualized growth rate in global industrial production:

- peaked 5.5% 2017q4, -
- currently region 3-4%
- **Global GDP growth is expected** -3.9% (2018)
- some further decline seems _ likely in coming months as excess inventories are run down.





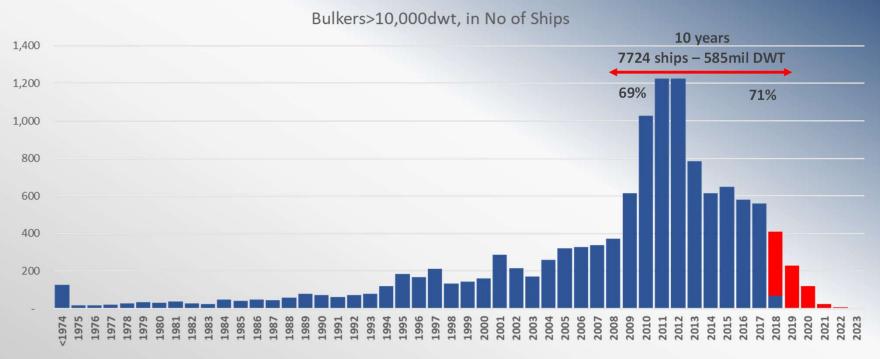
World Seaborne Trade



The status of shipping markets Dry, Wet, Container

Fleet/Age Profile

BULKERS

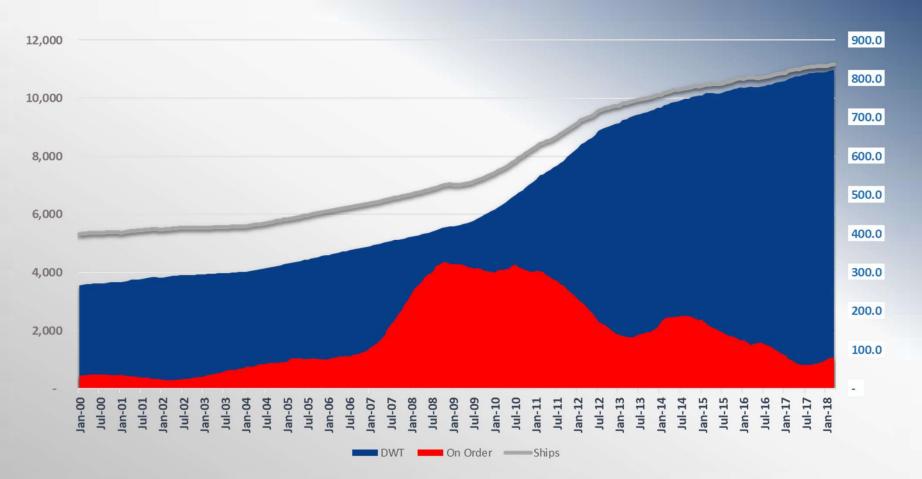


Active Fleet On Order

- In Service 11,220 Ships 827mil DWT
- On Order 721 Ships 78.9mil DWT
- Orderbook to Fleet Ratio is 6.4% in terms of Ships and 9.5% in terms of total DWT
- Over 20years old, 1646 Ships 58.4mil DWT (14% 7%)
- 15-20years old, 1112 Ships 67.8mil DWT (10% 8%)

Fleet/Orders Growth Profile

BULKERS

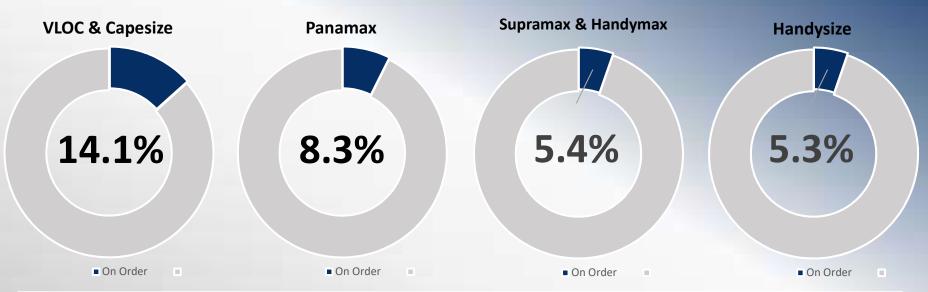


Since Jan 2000

- From 5,327 Ships to 11,220 Ships (111% increase)
- From 267mil DWT to 827mil DWT (210% increase)

Orderbook / Fleet Ratio (DWT)

BULKERS



Ship Size Segment	Active ships	On Order ships	Ratio	Active mil DWT	On Order mil DWT	Ratio
VLOC & CAPESIZE	1,711	180	10.5%	326	46.1	14.1%
PANAMAX	2,530	209	8.3%	204	16.9	8.3%
SUPRAMAX & HANDYMAX	3,584	175	4.9%	199	10.7	5.4%
HANDYSIZE	3,395	157	4.6%	98	5.2	5.3%
Totals	11,220	721	6.4%	827	78.9	9.0%

5Y Secondhand Prices

BULKERS



DRY BULK 5Y SECONDHAND PRICES

- Spring 2016 Historically we saw the lowest recorded S/H prices
- May 2018 Prices have firmed since the lowest point of 2016
- Capes up by 57% Panamax up by 76%
 - Supramax up by 51% Handy up by 59%

5y old	Саре	Pmax	Supra	Handy
2016	23.2	13.6	12.2	9.4
2017	30	18.1	16	12
2018	36.5	24	18.5	15

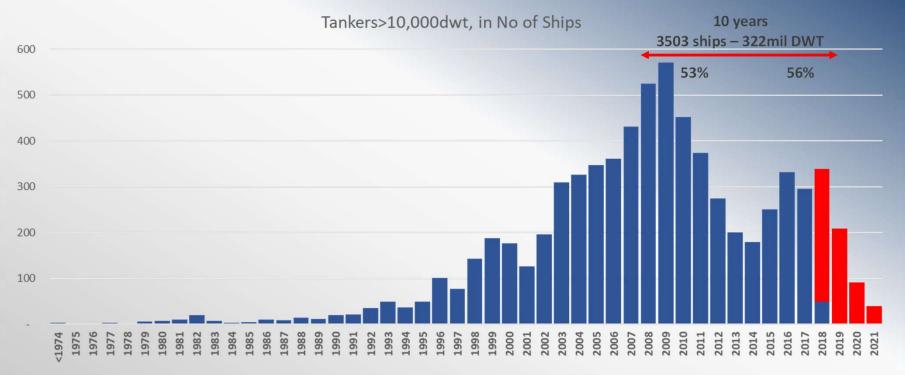
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From 2016 lows

Fleet/Age Profile

TANKERS

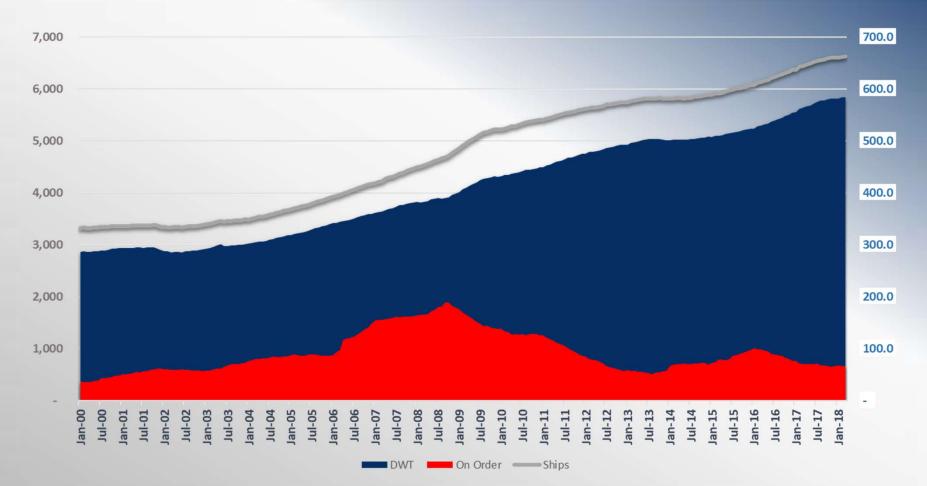




- In Service 6623 Ships 583mil DWT
- On Order 634 Ships 67.3mil DWT
- Orderbook to Fleet Ratio is 9.5% in terms of Ships and 11.5% in terms of total DWT
- Over 20years old, 503 Ships 28.5mil DWT (8% 5%)
- 15-20years old, 1141 Ships 114mil DWT (17% 20%)

Fleet/Orders Growth Profile

TANKERS

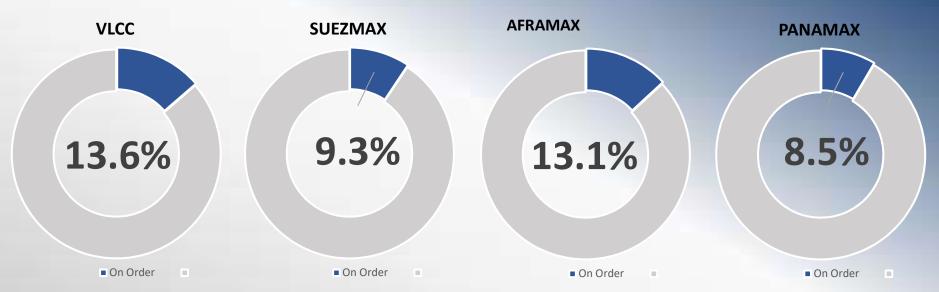


Since Jan 2000

- From 3,319 Ships to 6,623 Ships (100% increase)
- From 286mil DWT to 583mil DWT (103% increase)

Orderbook / Fleet Ratio (DWT)

TANKERS



Ship Size Segment	Active ships	On Order ships	Ratio	Active mil DWT	On Order mil DWT	Ratio
VLCC	733	100	13.6%	224	30.5	13.6%
SUEZMAX	565	53	9.4%	91	8.5	9.3%
AFRAMAX	999	127	12.7%	109	14.3	13.1%
PANAMAX	452	40	8.9%	33	2.8	8.5%
50K — 10K	3873	312	8.0%	126	11.1	8.8%
Totals	6624	632	9.5%	583	67.2	11.5%

5Y Secondhand Prices

TANKERS



TANKER 5Y SECONDHAND PRICES

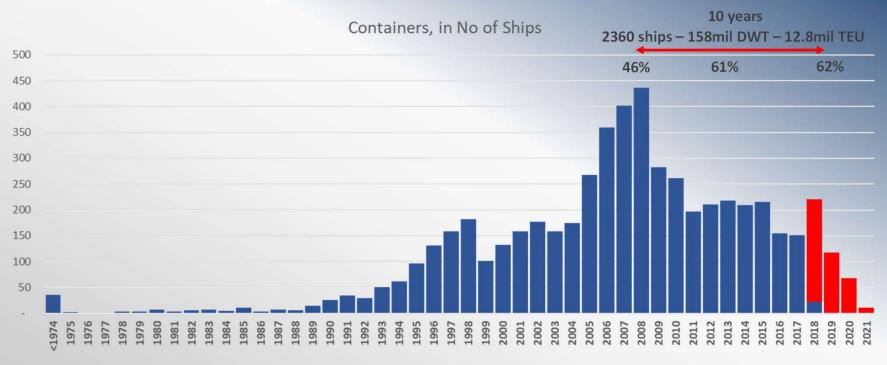
 August 2017 – approached low levels of 2012/2013 and of 2002

- April 2018 Prices have firmed slightly
- VLCC up by 3.5% Suezmax up by 2.3%
- From 2017
- Aframax up by 5% MR up by 8%

5y old	VLCC	Suez	Afra	LR1/Pan	MR
2002	54.5	37	27.3	22	20.5
2012/3	55	38	27	24	22
2017	62	42	29	27	24
2018	64	43	30.5	28	26

Fleet/Age Profile

CONTAINERS

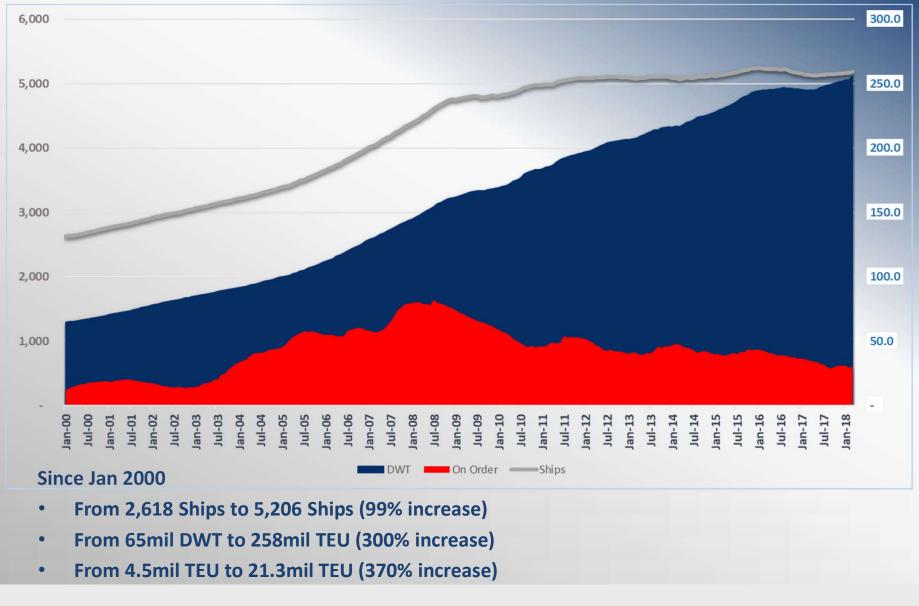


Active Fleet On Order

- In Service 5206 Ships 258mil DWT 21.3mil TEU
- On Order 369 Ships 29mil DWT 2.6mil TEU
- Orderbook/Fleet Ratio 7% in Ships & 11% in terms of DWT & 12% in TEU
- Over 20years old, 708 Ships 13.8mil DWT 0.9mil TEU (14% 5% 4%)
- 15-20years old, 909 Ships 32.7mil DWT 2.5mil TEU (18% 13% 12%)

Fleet/Orders Growth Profile

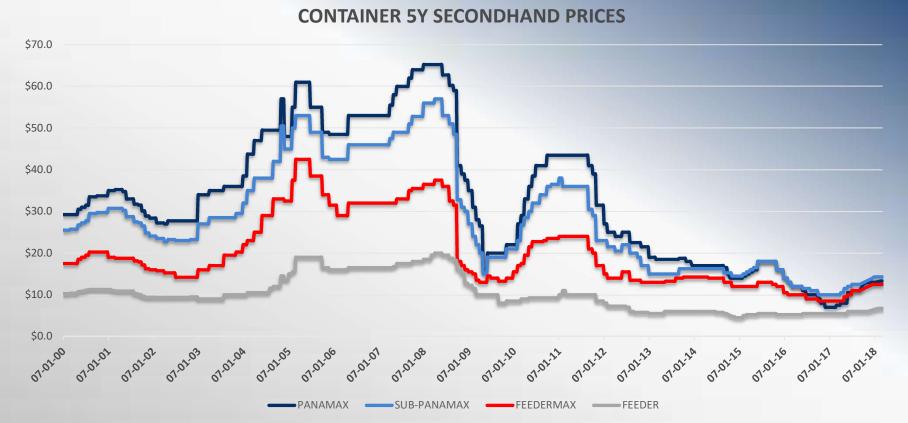
CONTAINERS



Orderbook / Fle	book / Fleet Ratio (DWT) 15000 - 15,000			8,000 - 12,000		CONTAINERS FEEDER	
61.3% 00 Order					0%		
 On Order 		On Order		On Order	C	On Order	
Ship Size Segment	Active ships	On Order Ships	Ratio	Active mil TEU	On Order mil TEU	Ratio	
	Active	On Order		Active	On Order		
Ship Size Segment	Active ships	On Order ships	Ratio	Active mil TEU	On Order mil TEU	Ratio	
Ship Size Segment >15000	Active ships 106	On Order ships 62	Ratio 59%	Active mil TEU 1,967	On Order mil TEU 1,205	Ratio 61.3%	
Ship Size Segment >15000 12,000 - 15,000	Active ships 106 223	On Order ships 62 39	Ratio 59% 17.5%	Active mil TEU 1,967 3,034	On Order mil TEU 1,205 535	Ratio 61.3% 17.6%	
Ship Size Segment >15000 12,000 - 15,000 8,000 - 12,000	Active ships 106 223 611	On Order ships 62 39 39	Ratio 59% 17.5% 6.4%	Active mil TEU 1,967 3,034 5,635	On Order mil TEU 1,205 535 423	Ratio 61.3% 17.6% 7.5%	
Ship Size Segment >15000 12,000 - 15,000 8,000 - 12,000 6,000 - 8,000	Active ships 106 223 611 268	On Order ships 62 39 39 0	Ratio 59% 17.5% 6.4% 0.0%	Active mil TEU 1,967 3,034 5,635 1,798	On Order mil TEU 1,205 535 423 0	Ratio 61.3% 17.6% 7.5% 0.0%	

5Y Secondhand Prices

CONTAINERS



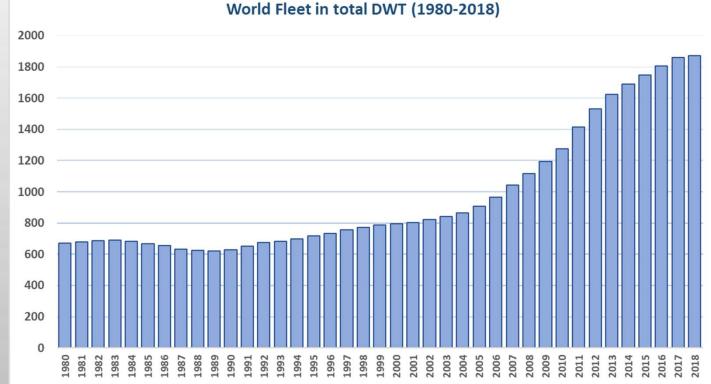
- Feeder lowest \$4.5mil early 2015 Today \$7mil
- Feedermax lowest \$8.5mil 2016 early 2017 Today \$12.9
- SubPanamax lowest \$10mil all of 2016 early 2017- Today 14.8mil
- Panamax lowest \$7mil end 16 early 17 Today \$13.5mil
- Post Panamax lowest \$16mil 2016-early 2017 Today \$25mil

World Cargo Fleet

- Since 2008 fleet has grown by 60% in DWT
- 2018: 93,000 ships 1,862m.DWT
- 2008: 90,500 ships 1,120m.DWT
- 2000: 86,000 ships 795m.DWT incr. 133%
- 1990: 78,000 ships 630m.DWT

Global OrderBook

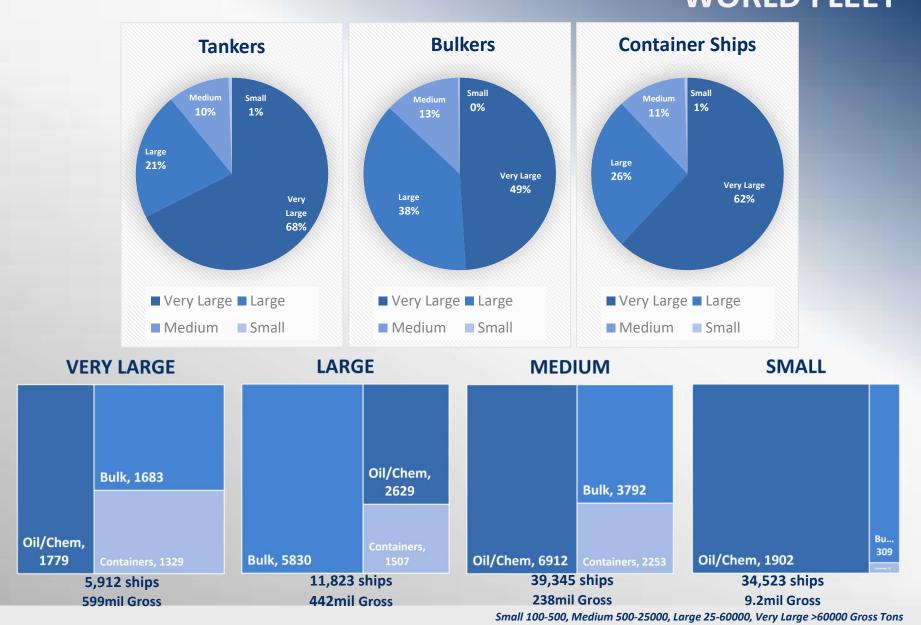
- 2008 was 50%
- 2018 is now 10%



The world fleet has grown continuously since the beginning of the 1990s.

This growth accelerated in 2005. As a result, in 2017, the world fleet reached 1.9 billion dwt, twice the size as it had 12 years ago.

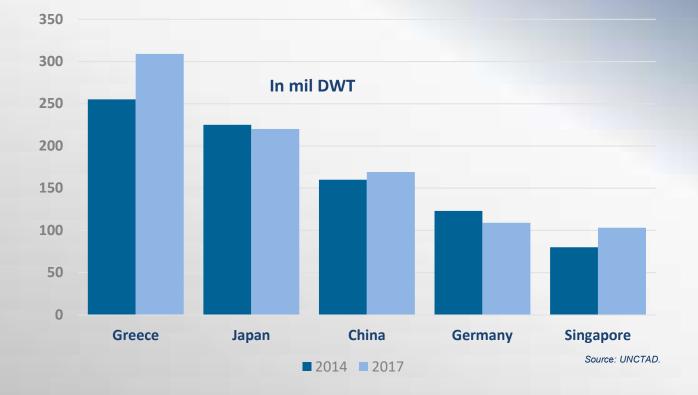
Today, bulk carriers account for 43 per cent of the fleet, followed by oil tankers (29 per cent) and container ships (13 per cent).



Rank (Deadweight)	Country or Territory	No Of Vessels	DWT (mil tons)	% (DWT)	Rank (\$)	Total Value (mil USD)	Average value per ship (mil USD)	
1	Greece	4,199	309.23	20%	3	72,538	17.3	
2	Japan	3,901	223.85	14%	2	77,989	20.0	Top5 nations
3	China	5,206	165.42	11%	4	65,044	12.5	– control 59%
4	Germany	3,090	112.03	7%	8	38,412	12.4	in dwt.
5	Singapore	2,599	104.41	7%	7	39,182	15.1	
6	Hong Kong (China)	1532	93.63	6%	9	25,767	16.8	
7	Republic of Korea	1656	80.97	5%	11	20,983	12.6	50% of World
8	United States	2104	67.10	4%	1	96,182	45.7	Fleet is owned by entities from Asia
9	Norway	1842	51.82	3%	5	58,134	31.7	entities nom Asia
10	United Kingdom	1360	51.12	3%	6	40,671	29.9	
11	Bermuda	440	48.06	3%	13	19,962	44.8	
12	Taiwan (prov of China)	926	46.90	3%	17	10,857	11.7	
13	Denmark	920	36.53	2%	15	18,974	20.3	
14	Monaco	338	31.65	2%	23	7,903	23.4	
15	Turkey	1563	27.78	2%	20	9,055	5.8	
16	Switzerland	405	23.68	2%	22	8,456	20.9	
17	Belgium	263	23.55	2%	27	6,505	24.7	
18	India	986	22.65	1%	25	6,938	7.0	
19	Russian Federation	1707	22.05	1%	19	9,081	5.3	
20	Italy	768	20.60	1%	10	23,184	30.2	

Source: UNCTAD secretariat calculations, based on data from Clarksons Research.

Top5 merchant fleet owning economies 2014-2017



Shipping Market Projections

Projections: Seaborne Trade Growth

Seaborne Trade	Developing	Developed	World
2011	5,297	2,982	8,784
2016	6,046	3,595	10,287
Change	14.5%	20.6%	17.5%

Source: UNCTAD 2017 handbook of statistics

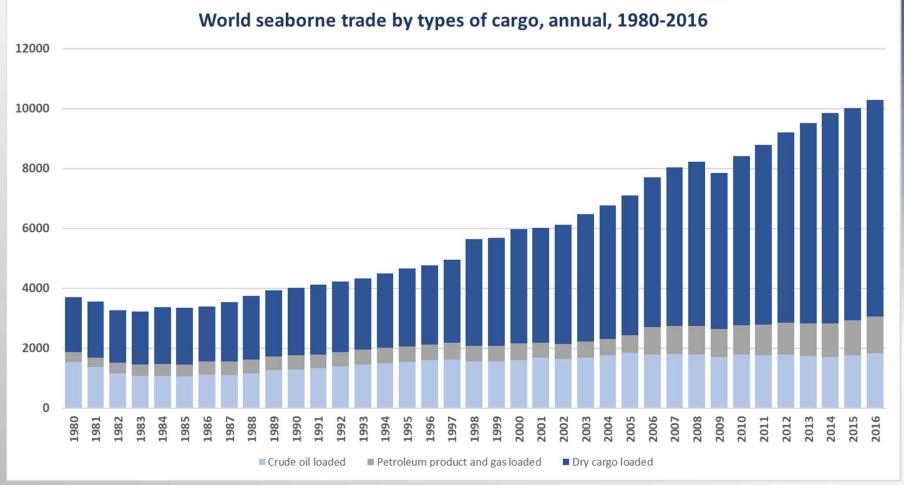
Above Figures in Millions of metric tons

- World Seaborne Trade amounts to 10.3 billion tons in 2016
- Expected Seaborne trade growth 3.5% for 2018
- 58% of Seaborne Trade comes from Asia, including 25% from China
- China's Trade has grown 50% from 2007 to 2017
- Seaborne Trade for developed economies currently in balance
- 61% of goods delivered by sea are unloaded in Asian Seaports
- Developing economies unloading exceeds loading by 541million tons

Projections: Seaborne Trade Growth

Seaborne Trade Growth	Projection Time Horizon	Source
3.1%	2017-2026	Lloyds List
2.7%	2016-2030	IHS Markit
3.2%	2017-2022	UNCTAD

Projections: Seaborne Trade Growth



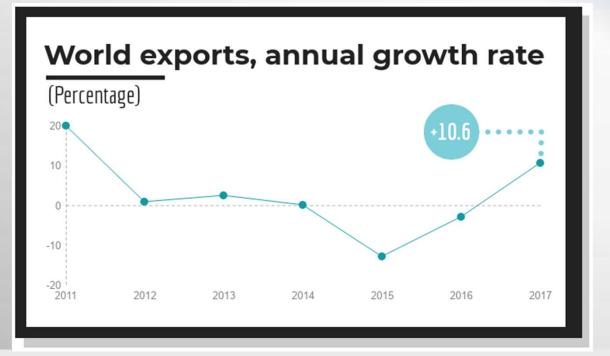
Source: UNCTAD 2017 handbook of statistics

World Seaborne Trade:

2009 931 million metric tonnes – 2016 1220 million metric tonnes – 31% increase

Projections: Dry Bulk Trade Growth

Dry Bulk Trade Growth	Projection Time Horizon	Source
3.6%	2017-2026	Lloyds List
5.6%	2017-2022	UNCTAD



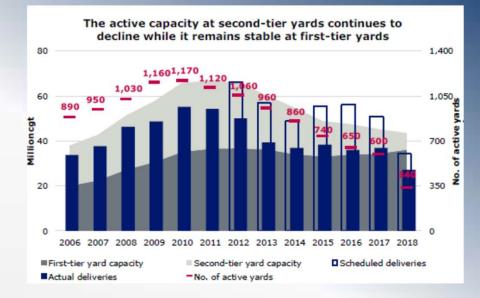
Projections: Wet Trade Growth

Oi/Product Tanker Trade Growth	Projection Time Horizon	Source
2.5%	2017-2026	Lloyds List
3.4% Product	2018	McQuilling
1.2% Crude	2017-2022	UNCTAD
1.7% Product	2017-2022	UNCTAD

Projections: Container Trade Growth

Container Trade Growth	Projection Time Horizon	Source
4.6%	2017-2026	Lloyds List
5.1%	2018	Clarksons
4.5%	2018-2019	MSI
5.0%	2017-2022	UNCTAD

- >90% of shipbuilding capacity in Japan, S. Korea, China
- Consolidation
- Rapid decline in shipyard capacity
- Highest delivery reliability in a decade.
- Out of the 600 yards about half have zero/minimal orderbook.
- First-tier yards 76% of capacity, 38% of yards, avg cover >2 years.
- Recent update: Sungdong into receivership for court protection. STX to continue operation upon 30% fixed-cost decrease and 40% layoffs.
- Fewer yards \rightarrow price setters
- Fewer yard supply → higher shipbuilding prices

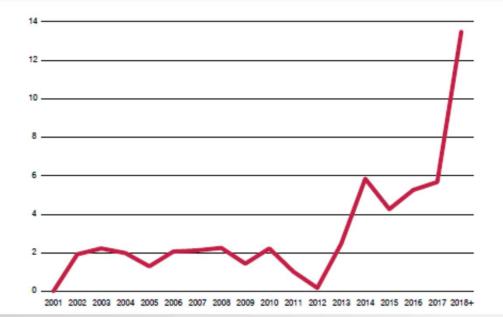


- In 2017, the number of Yards with at least 1 order over 1000 Gross Tons declined to 150, while in 2015 there where 277 Yards.
- In 2018 so far only 42 Shipbuilders have inked one order or more.

 New technologies & regulations will rejuvenate and redefine the industry

Innovation race

The routing possibilities for liquefied natural gaspowered vessels are limited by the relatively small number of ports providing liquefied natural gas bunkering facilities. However, this number is increasing, particularly along the main shipping Lanes. Share of liquefied-natural-gas-capable newbuildings, as of 2001 (Percentage of gross tonnage)



	C	October 20	17	December 2016		
Nation	Ships	Capacity (Mil DWT)	Value (\$bil)	Ships	Capacity (Mil DWT)	Value (\$bil)
China	1,338	76.3	58.4	1,665	96.9	67.9
Japan	614	48.4	30.8	852	60.1	30.8
S. Korea	378	41.6	54.7	490	51.3	65.5
			Order	book by S	hipbuildi	ng nation

25mil 22mil 13mil – Gross tons delivered



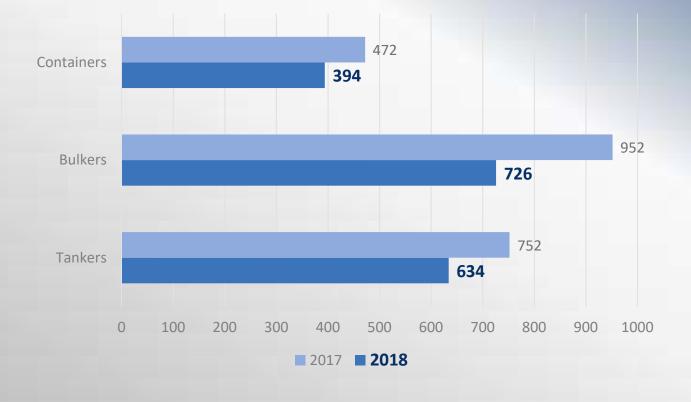
Rank	Shipyard	Ships	m. CGT
1	Daewoo (DSME)	88	6.3
2	Hyundai HI (Ulsan)	73	3.5
3	Samsung HI	59	3.1
4	Shanghai Waigaoqiao	57	2.6
5	Imabari SB	30	1.8
6	Meyer Werft	13	1.8
7	Jiangsu New YZJ	83	1.7
8	STX France	11	1.7
9	Hudong Zhonghua	31	1.7
10	Hyundai Mipo	59	1.3

Orderbook by Shipyard

Rank	Order Owner Nation	Ships	m. CGT
1	Japan	430	25.1
2	China P.R.	421	24.5
3	Greece	243	15.3
4	USA	175	8.6
5	Singapore	226	3.5
6	Norway	134	3.2
7	S. Korea	95	2.6
8	Italy	46	2.6
9	Canada	62	2.3
10	Denmark	70	2.1

Orderbook by Owner Country

Orderbook size by number of Vessels





Seaports

- Consolidation
- Links with hinterland
- Inter-port competition should encouraged
- Digitalization
- Security

World Container Port Volumes:

- Asia 64%
- Europe 16%
- North America 8%
- America other 6%
- Africa 4%
- Oceania 2%

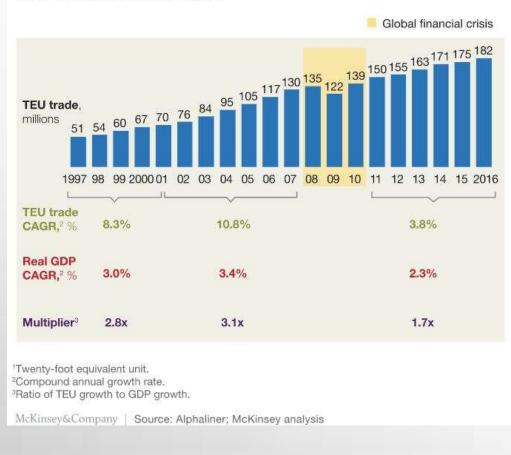
Milestones & Perspectives

Structural Demand Trade

Economic growth is under structural –not just cyclical- change.

- Continued urbanization
- Silver economy (implications for Cruise)
- Shift towards services
- De-manufacturing
- Re-shoring
- De-carbonization
- 3D printing
- Finance scarcity
- Digitalization
- China's rebalancing
- Shale oil & gas

Not all shipping segments are homogeneously exposed to the structural shifts. Container-trade growth has slowed since the financial crisis.



Global TEU¹ trade and real GDP growth

Key items going forward

- 2020
- Emissions
- Energy efficiency
- Pollution
- Blockchain, Cryptos
- Cybersecurity
- Digitilization
- Maritime piracy and security
- New –disruptive- technologies
- Smart, autonomous, unmanned Vessels

RECAP

The last decade, we experienced shipping *as good as it gets* (2008) and the *perfect storm* Drybulk (2016), Containers (2016-17), Tankers (2017-18).

The Ocean Shipping Industry undergoes *structural* (not just cyclical) changes related to both Supply and Demand.

New Technologies, New Regulations, and the *necessity* for Green and Energy efficient Ships are transforming the industry.

In the era of *Great Shipping Consolidation* innovation is essential to survive and <u>create</u> <u>true value</u>.

Perhaps exaggerating, the inherent value hidden in *Shipping Big Data* maybe higher than the value of the shipping asset *per se!*



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Key References

- Xclusiv Shipbrokers Proprietary Data
- IMF, UNCTAD, FT, Clarksons, McQuilling, McKinsey, MSI, Lloyds Maritime Intelligence.