

2019 CONTAINER SHIPPING OUTLOOK

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CEO and Founder
Sea-Intelligence

April 9th, 2019
TOC Asia

Sea-Intelligence

Container Shipping Analysts

- Founded January 6th, 2011
- Fully independent, private company with no interests from brokers, banks or others.
- 10 Analysts, Developers & Consultants in Copenhagen, Bucharest and Singapore.
- 3-person Management Team with 60 years of experience in Container Shipping

Core values:

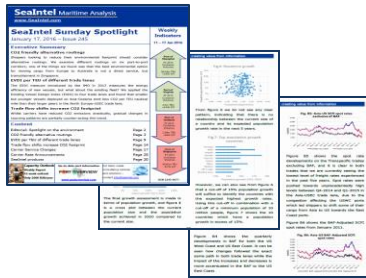
- Integrity
- Methodology
- Assumptions
- Data Quality

Major Milestones:

- 1,000+ Research & Analysis articles published since March 2011
- 5,000+ citations in Industry Press (Lloyd's List, JoC, etc.)
- World's most comprehensive database on Carrier Reliability
- Complete overview of all deep-sea networks and deployment
- Curriculum provider at the World Maritime University
- Curriculum provider at the Blue MBA at Copenhagen Business School

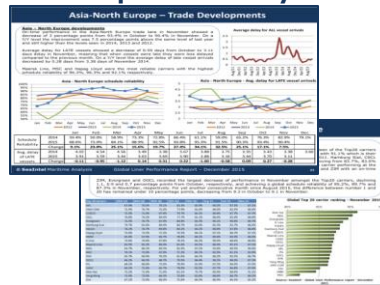
SeaIntel subscription reports

SeaIntel Sunday Spotlight (SSS) - Weekly



- Weekly report with ground-breaking container market analysis
- Quantitative insights into important market drivers
- Regular topics include: Supply/Demand, deployment patterns, freight rate analysis, environmental issues, reliability, and much more

Global Liner Performance (GLP) report - Monthly



- World's largest study of carrier on-time performance
- Report covering 65+ carriers, 300+ distinct carrier services/loops, 300+ ports, across 34 trade lanes
- 116 pages including global carrier performance Top20 and niche operators, benchmarking alliances and detailed trade performance

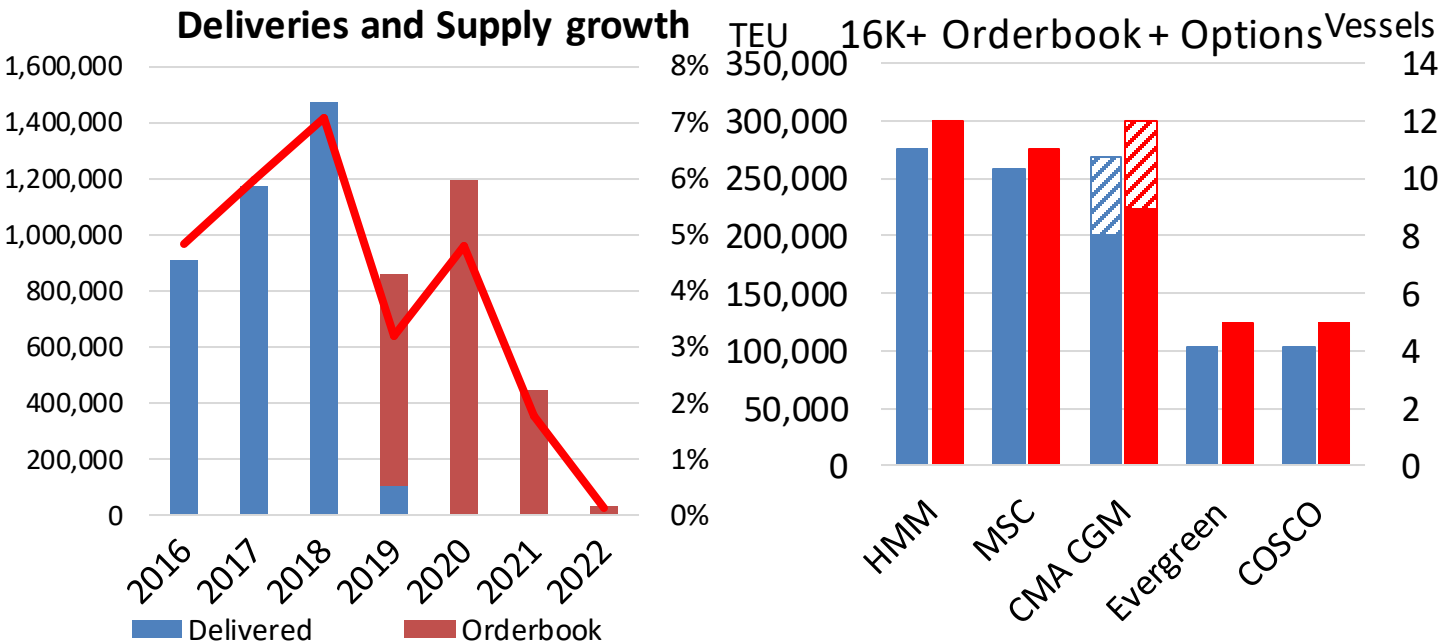
Tradelane Capacity Outlook (TCO) report - Weekly



- 12-week future outlook on container space supply
- Most accurate and updated capacity deployment figures for 23 trade lanes between Asia, Europe, North and South America
- Based on actual vessel schedules of individual named vessels on all services in the trade lanes

Supply/Demand

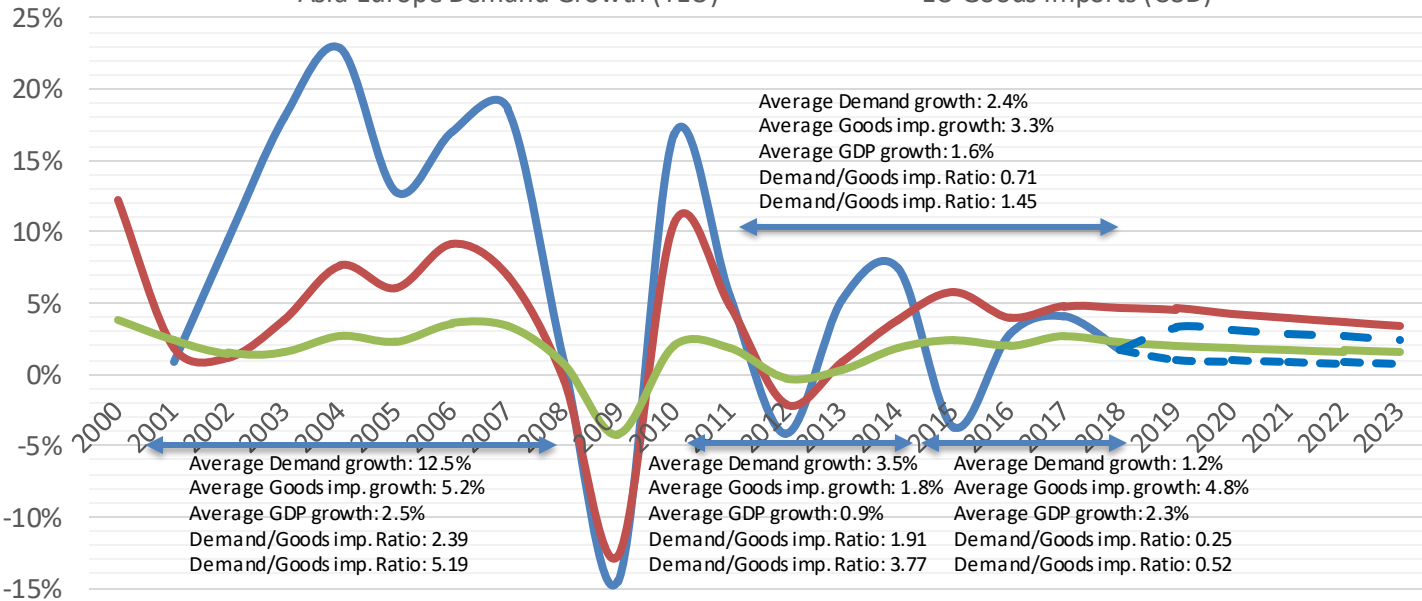
Restrained ordering, but still 43 mega-vessels in orderbook



Weaker GDP/Goods ratio suggest 1-3% A-E demand growth

Asia-Europe Demand & EU economic growth

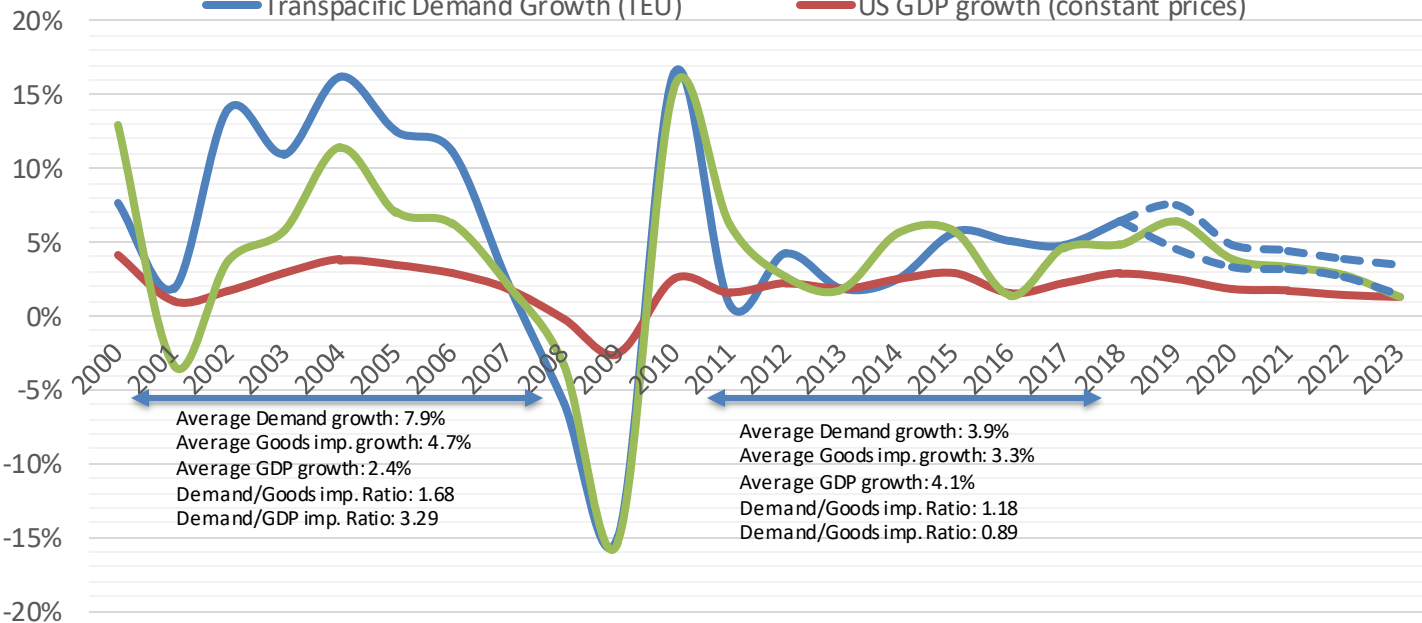
— Asia-Europe Demand Growth (TEU) — EU Goods Imports (USD)



GDP/Goods models suggest TP demand heading to 2-3%

Transpacific Demand & US economic growth

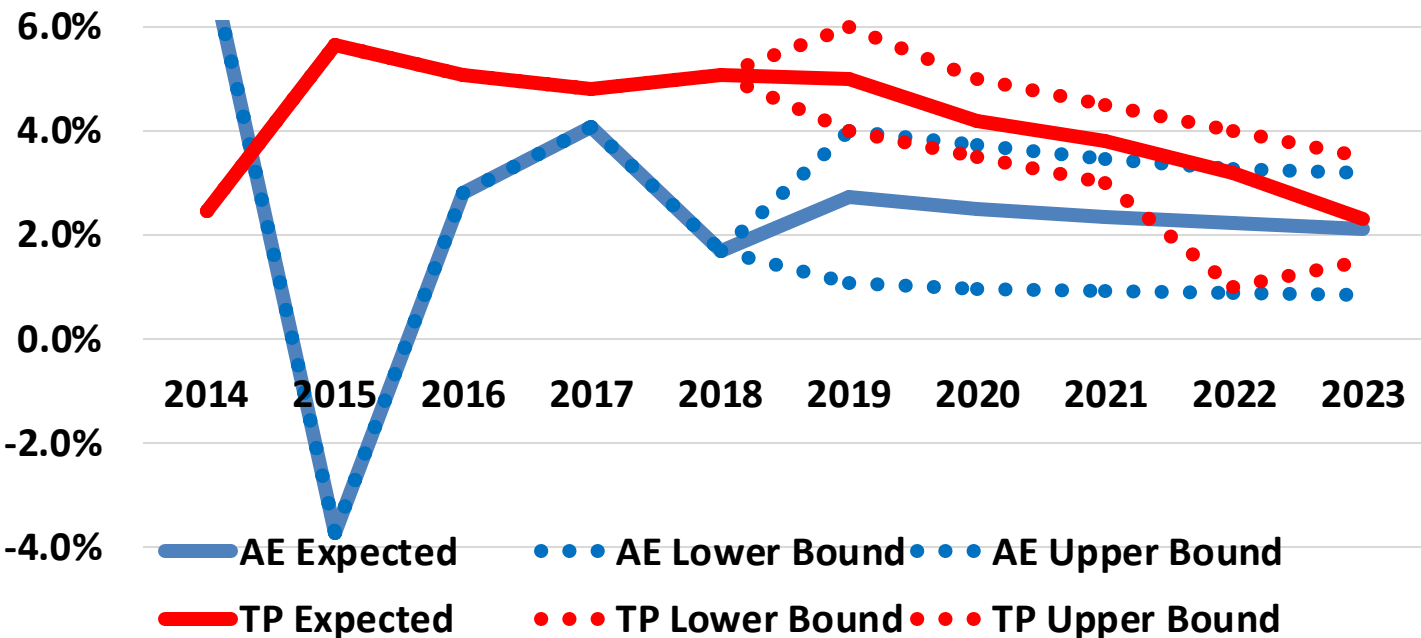
— Transpacific Demand Growth (TEU) — US GDP growth (constant prices)



Average Demand growth: 7.9%
 Average Goods imp. growth: 4.7%
 Average GDP growth: 2.4%
 Demand/Goods imp. Ratio: 1.68
 Demand/GDP imp. Ratio: 3.29

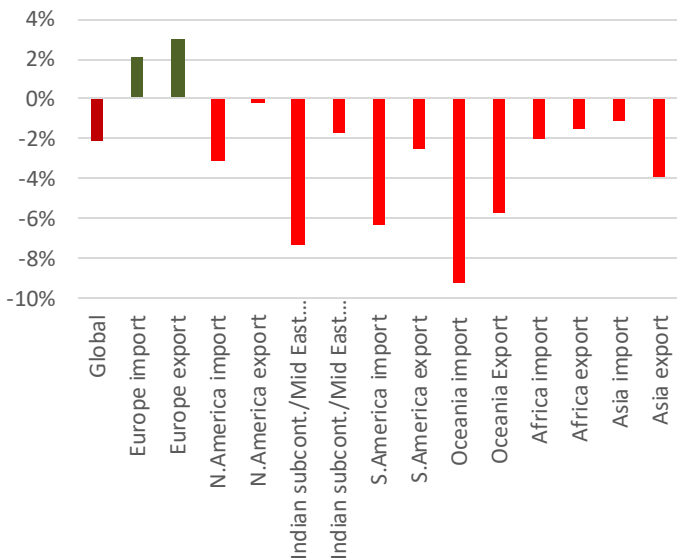
Average Demand growth: 3.9%
 Average Goods imp. growth: 3.3%
 Average GDP growth: 4.1%
 Demand/Goods imp. Ratio: 1.18
 Demand/GDP imp. Ratio: 0.89

AE & TP Demand growth heading towards 2% Y/Y

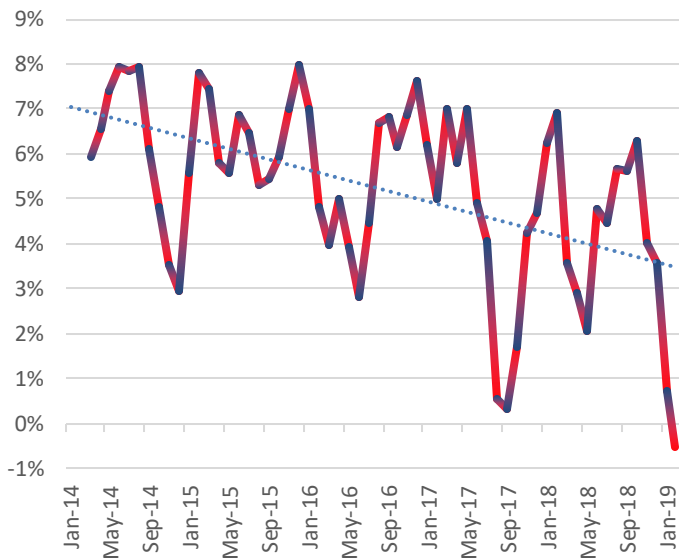


2019 Jan/Feb demand has been very weak

Volume growth Jan/Feb 2019 vs Jan/Feb 2018



Y/Y global volume growth (3 month rolling avg)



Impact on carrier returns

2018 carrier revenues have been strong

Liner Carrier Revenue 2010-2018 in Million USD											Change Y/Y
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2018-9M*	2017 Y/Y
Maersk Line	26.038	25.108	27.117	26.196	27.351	23.729	20.715	22.023	28.366	21.556	28,8%
CMA CGM	N/A	14.900	15.900	15.900	16.739	15.700	16.000	21.116	23.476	18.066	11,2%
COSCO**	7.015	6.497	7.700	7.896	8.183	8.047	9.586	13.336	N/A	N/A	N/A
Hapag Lloyd	8.222	7.964	9.044	8.997	8.309	10.029	8.138	11.966	13.192	9.966	10,2%
ONE	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	8.055	N/A
Evergreen***	N/A	N/A	4.837	4.622	4.545	4.148	3.839	5.069	5.534	4.263	9,2%
OOCL	6.033	6.012	6.459	6.232	6.522	5.953	5.298	5.425	5.963	4.585	9,9%
Yang Ming	N/A	N/A	4.508	3.947	4.246	3.954	3.559	4.412	4.638	3.567	5,1%
ZIM	3.717	3.784	3.960	3.682	3.409	2.991	2.539	2.978	3.248	2.497	9,1%
HMM	7.258	6.408	7.554	6.695	5.966	4.800	3.798	4.715	4.700	3.699	-0,3%
Wan Hai	N/A	N/A	2.159	1.982	2.110	1.980	1.769	2.046	2.184	1.669	6,8%

*Q2-Q4 as originally reported **COSCO SHIPPING Holdings Co., Ltd. ***Evergreen Marine Corp. (Taiwan) Ltd.

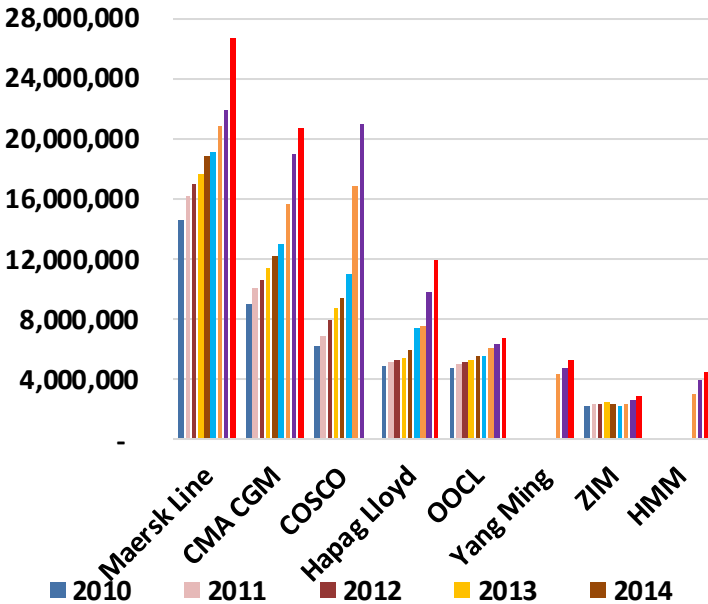
2018 EBIT: Size matters!

Liner Carrier EBIT/Operating Profit 2010-2018 in Million USD											Change Y/Y	SUM EBIT
	2010	2011	2012	2013	2014	2015	2016	2017	2018	2018-9M*	Delta 18-17	Sum 2012-18
Maersk Line**	2.642	-482	525	1.571	2.504	1.431	-396	641	627	630	-14	6.903
CMA CGM	N/A	729	1.034	756	973	911	29	1.574	494	406	-1.080	5.771
COSCO***	543	-997	-242	-161	165	121	-884	434	N/A	N/A	N/A	N/A
Hapag Lloyd	772	105	3	87	-467	416	133	493	508	441	14	1.173
ONE****	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	-490	N/A	N/A
Evergreen*****	N/A	N/A	-38	-26	118	-119	-242	162	30	31	-132	-115
OOCL	919	175	328	90	329	353	-138	232	N/A	N/A	N/A	N/A
Yang Ming	N/A	N/A	-67	-200	88	-200	-454	26	-185	-114	-211	-993
ZIM	223	-276	-206	-191	-263	98	-52	135	-29	-27	-164	-508
HMM	509	-309	-478	-343	-215	-238	-690	-381	-519	-366	-137	-2.865
Wan Hai	N/A	N/A	98	74	170	125	58	106	32	27	-74	662

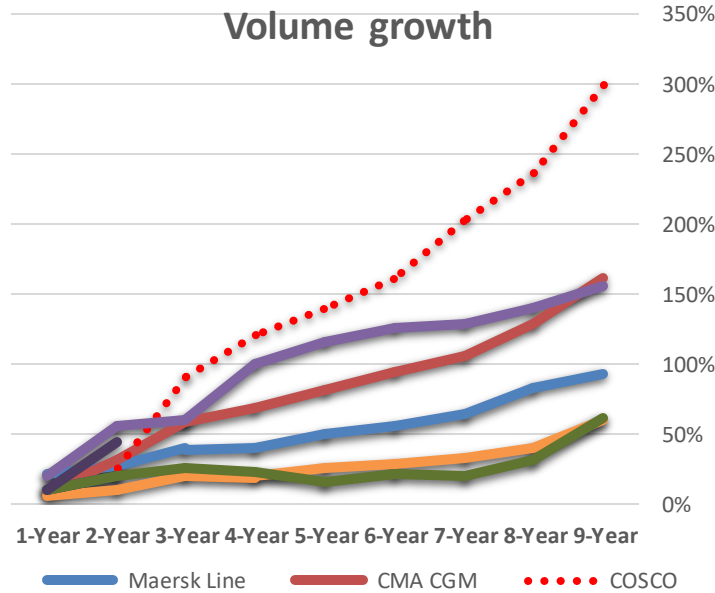
*Q2-Q4 as originally reported **2017&2018: Group EBIT, rest: Maersk Line EBIT ***COSCO SHIPPING Holdings Co., Ltd. ****Net result *****Evergreen Marine Co

Most carriers grew around 10% in 2018

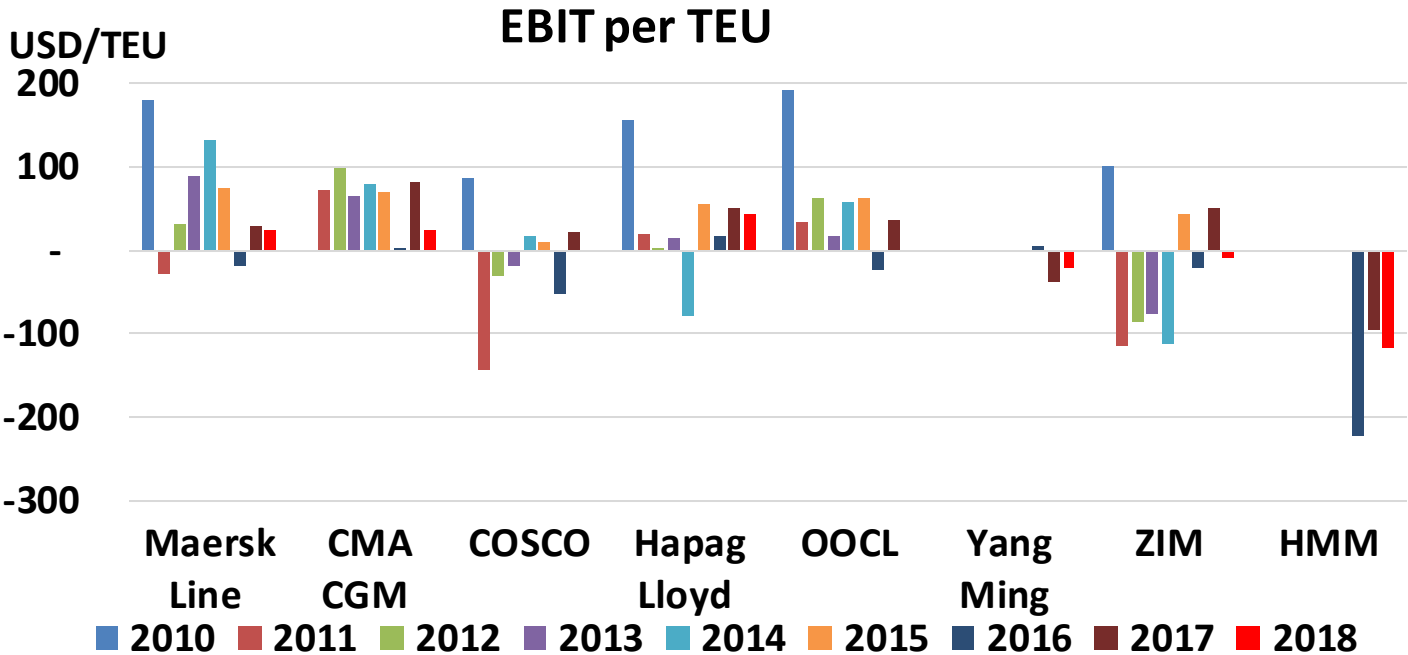
Global Transported Volumes (TEU)



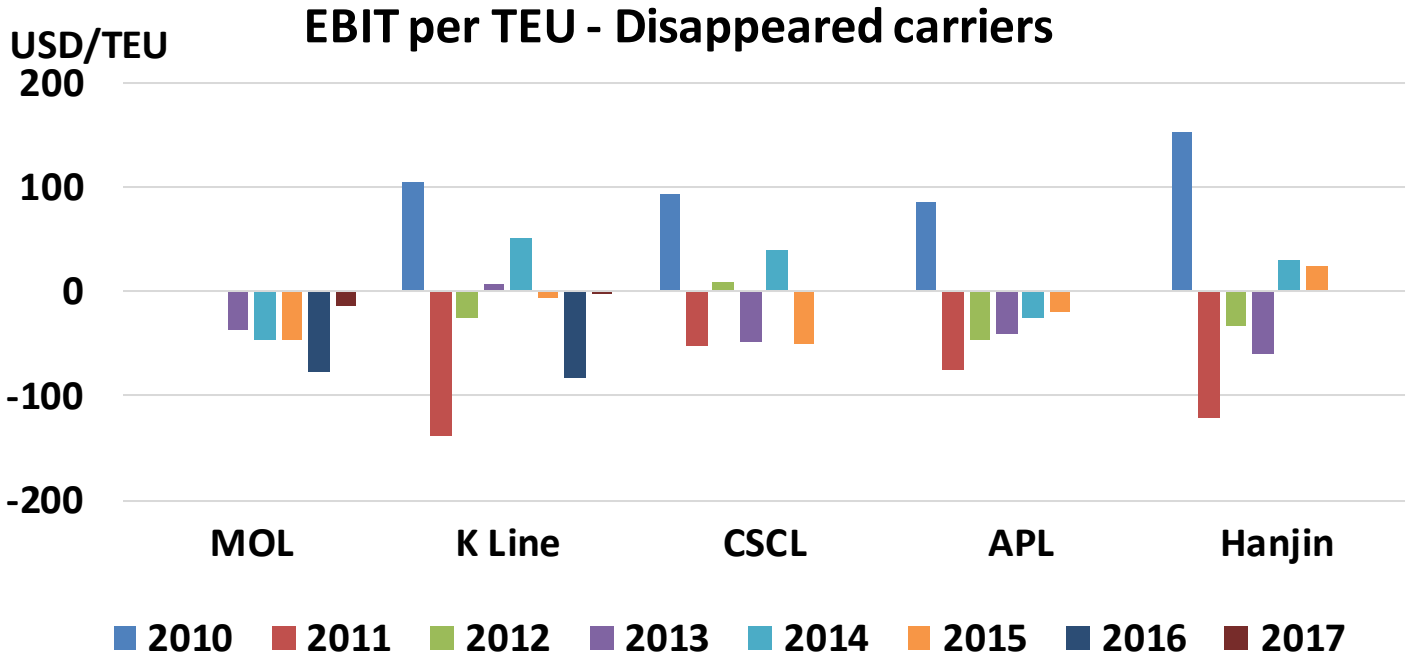
Cumulative Global Volume growth



EBIT/TEU: Confirms that size matters

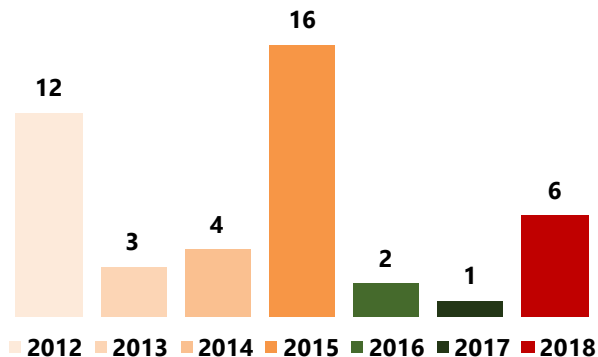


EBIT/TEU: Never forget the friends we lost

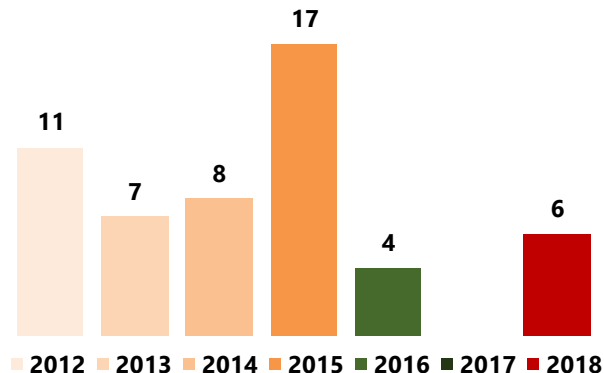


Carriers re-introduced peak season blanking in 2018

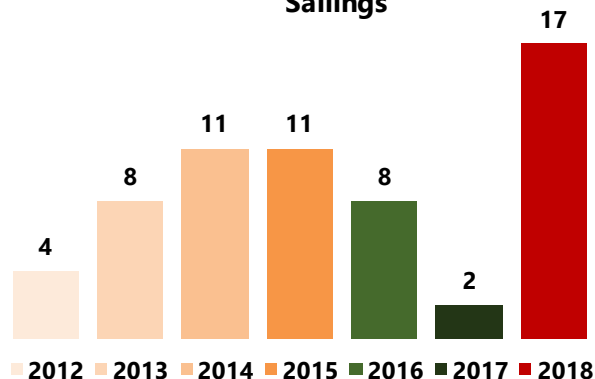
Asia-North Europe Q3 Blank Sailings



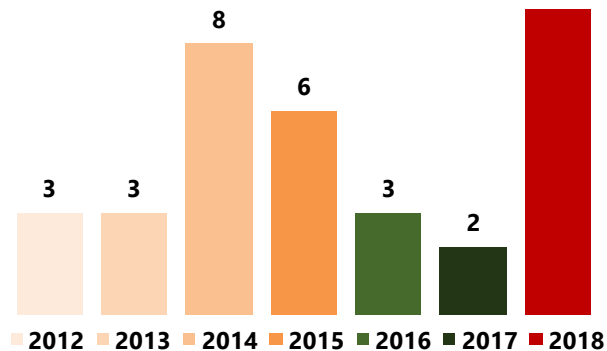
Asia-Mediterranean Q3 Blank Sailings



Asia-North America West Coast Q3 Blank Sailings

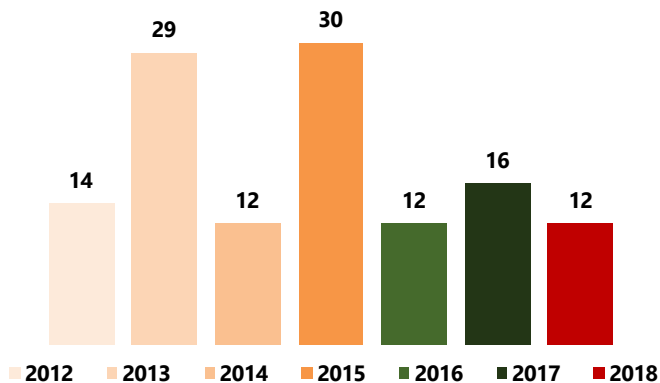


Asia-North America East Coast Q3 Blank Sailings

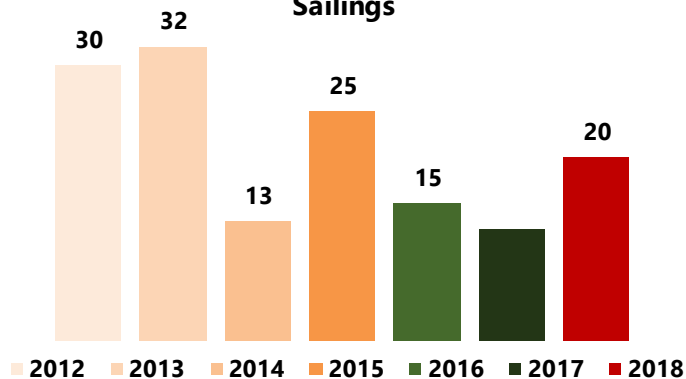


But 2018-Q4 blank sailings were a bit more modest

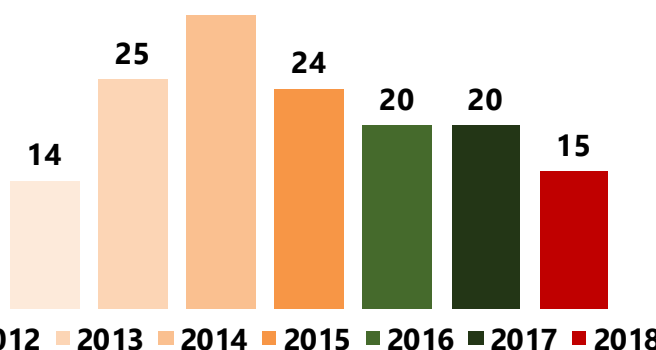
Asia-North Europe 2018-Q4 Blank Sailings



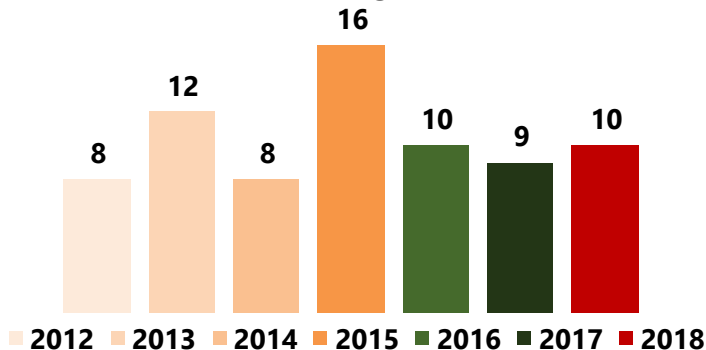
Asia-Mediterranean 2018-Q4 Blank Sailings



Asia-North America WC 2018-Q4 Blank Sailings

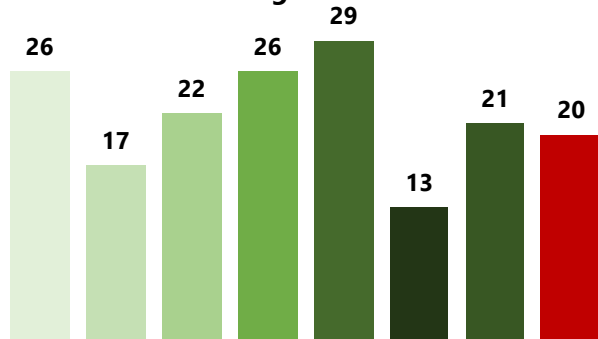


Asia-North America EC 2018-Q4 Blank Sailings

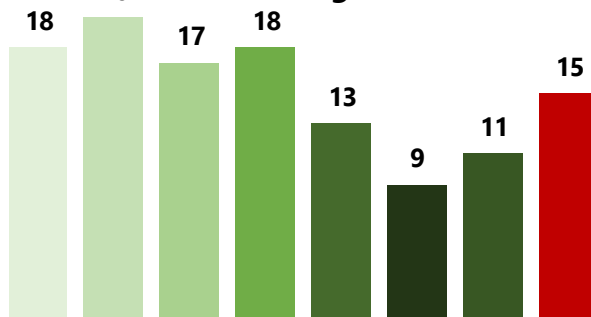


And 2019-Q1 blank sailings are in the higher end

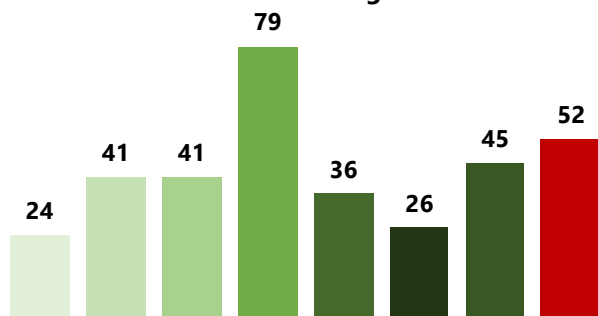
Asia-North Europe 2018-Q4 Blank Sailings



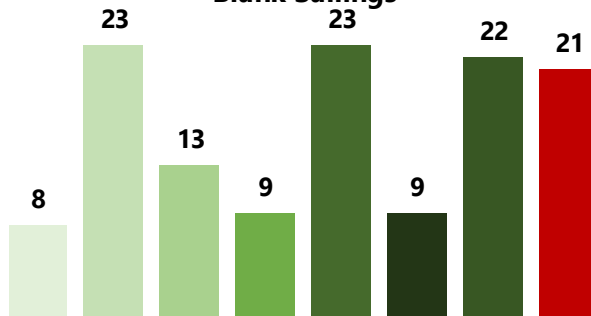
Asia-Mediterranean 2018-Q4 Blank Sailings



Asia-North America West Coast 2019-Q1 Blank Sailings

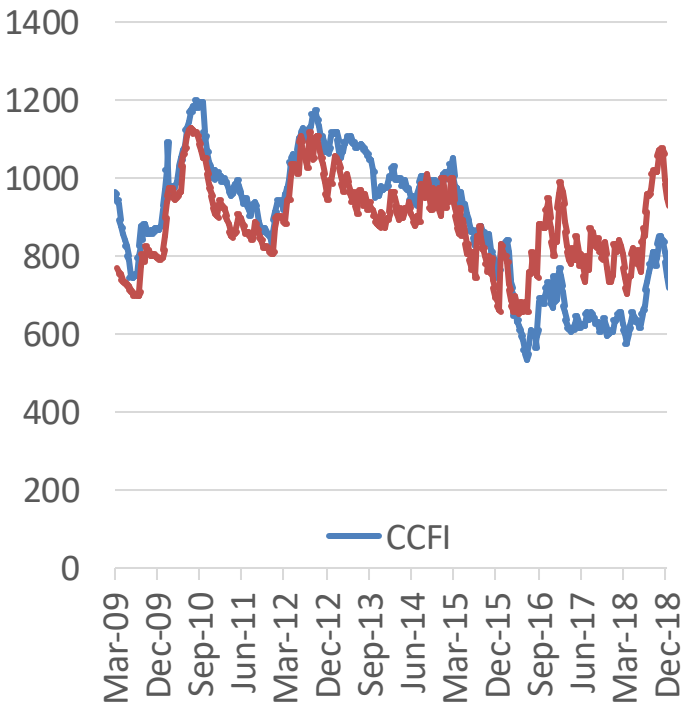


Asia-North America East Coast 2019-Q1 Blank Sailings

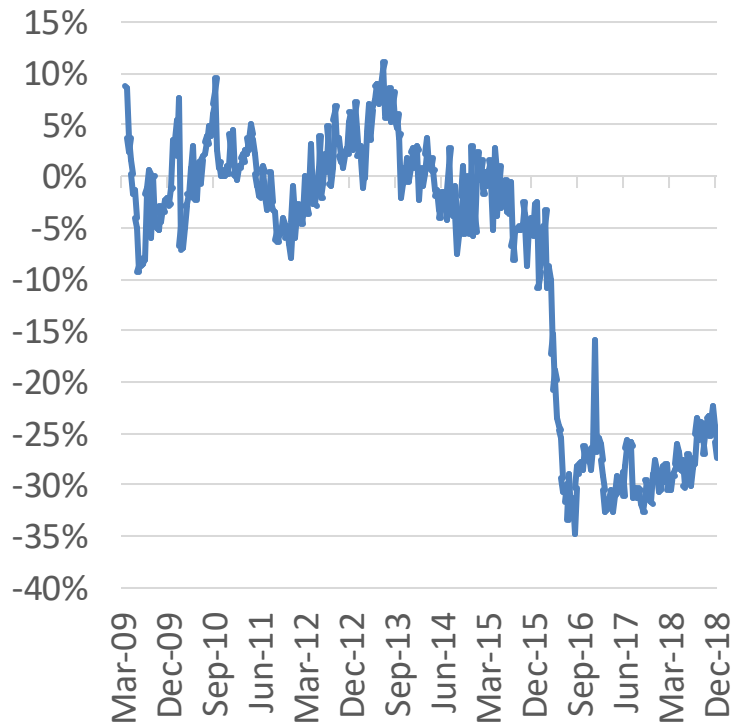


Modeling TP contract rates on spot suggests a 20% increase

CCFI versus model based on spot rates (Asia-USWC)



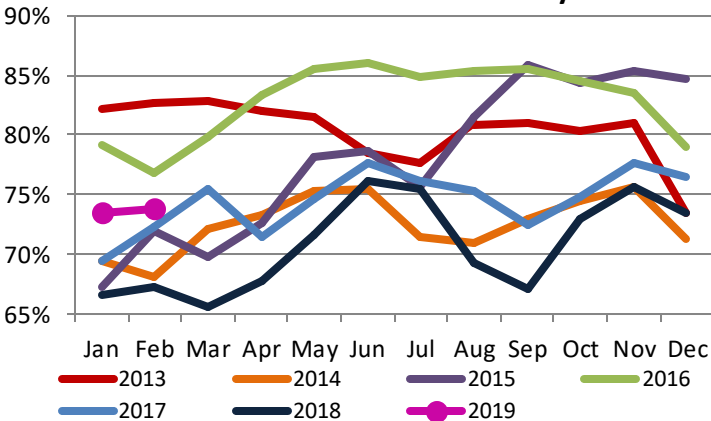
Contract rate deviation from spot model (Asia-USWC)



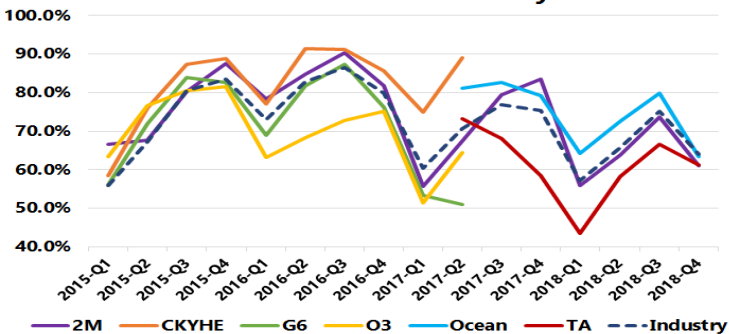
Impact on service levels

2018 saw the worst reliability in 7 years

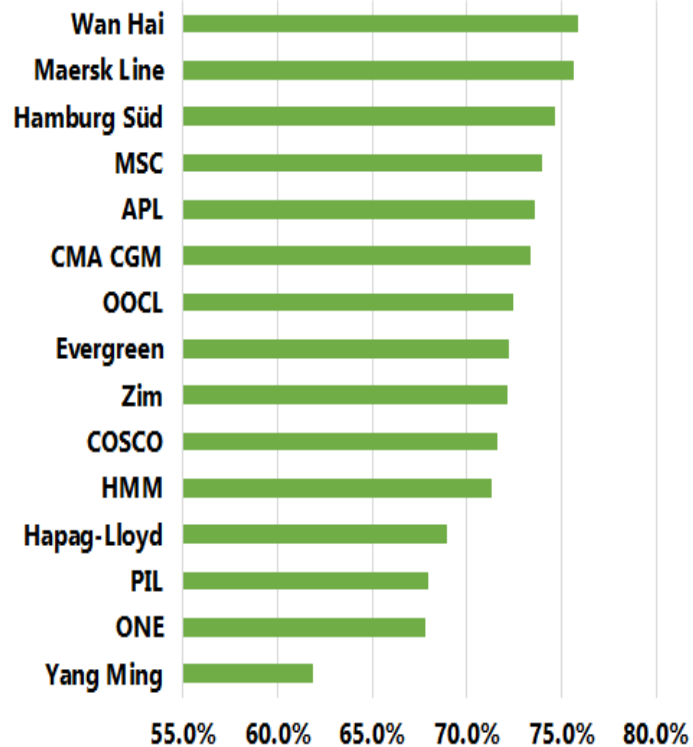
Global schedule reliability



Alliance Schedule Reliability

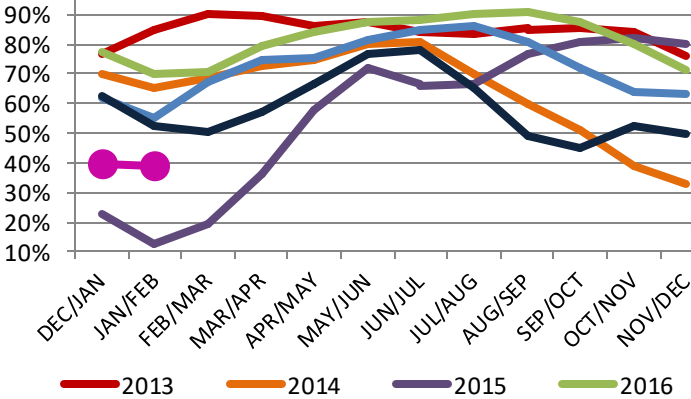


2018 Reliability - Top15 Carriers

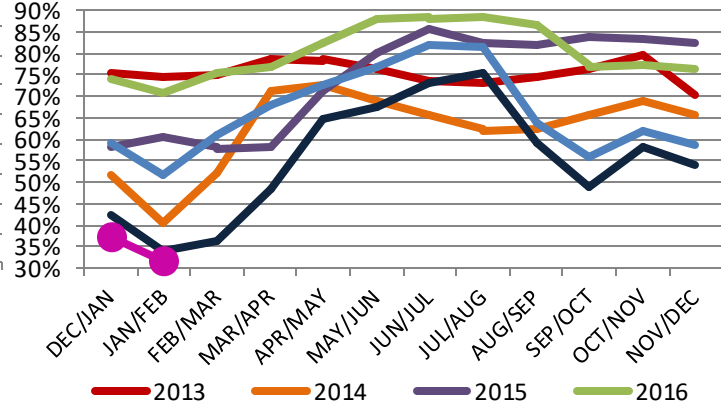


2018 reliability especially bad in Transpacific

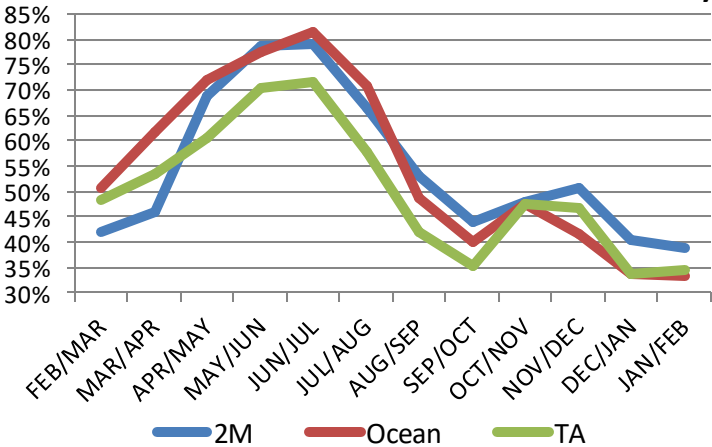
Asia - NAWC schedule reliability



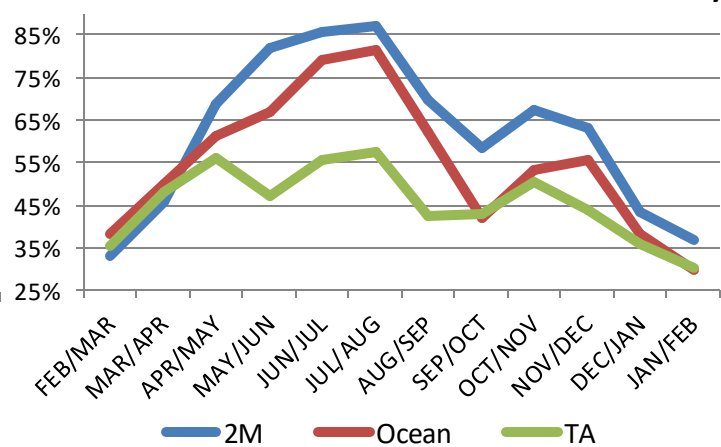
Asia - NAEC schedule reliability



Asia-NAWC Alliance schedule reliability

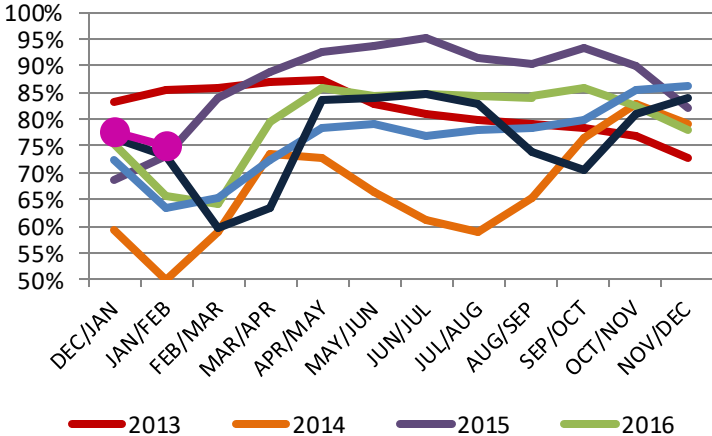


Asia-NAEC Alliance schedule reliability

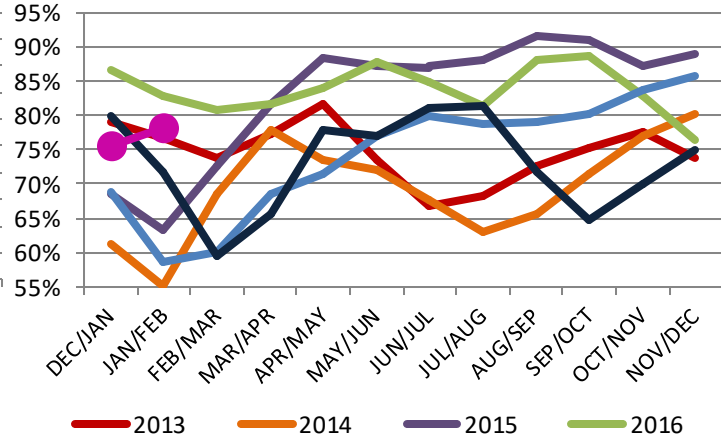


Asia-Europe not quite as bad

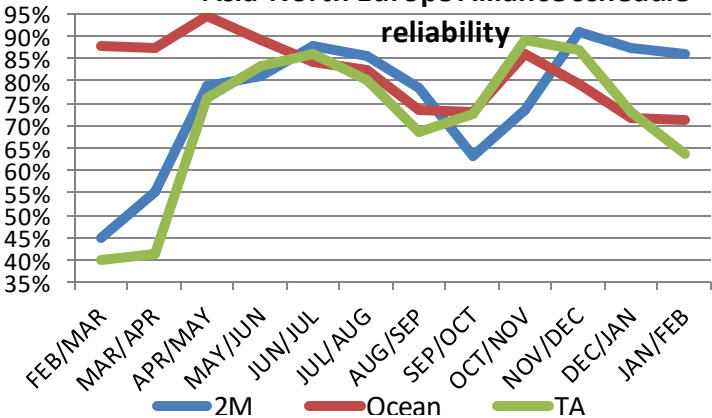
Asia - North Europe schedule reliability



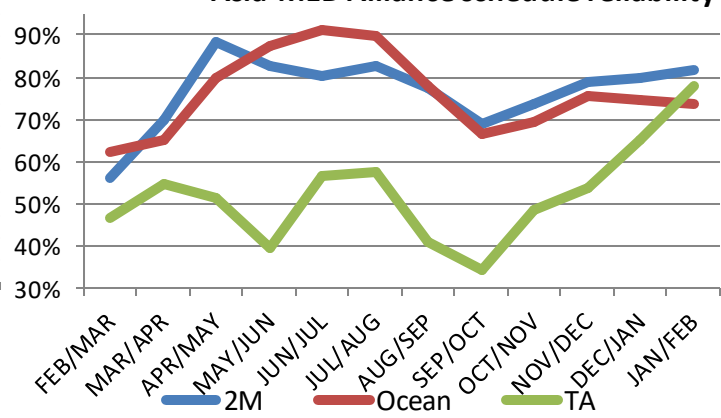
Asia - Mediterranean schedule reliability



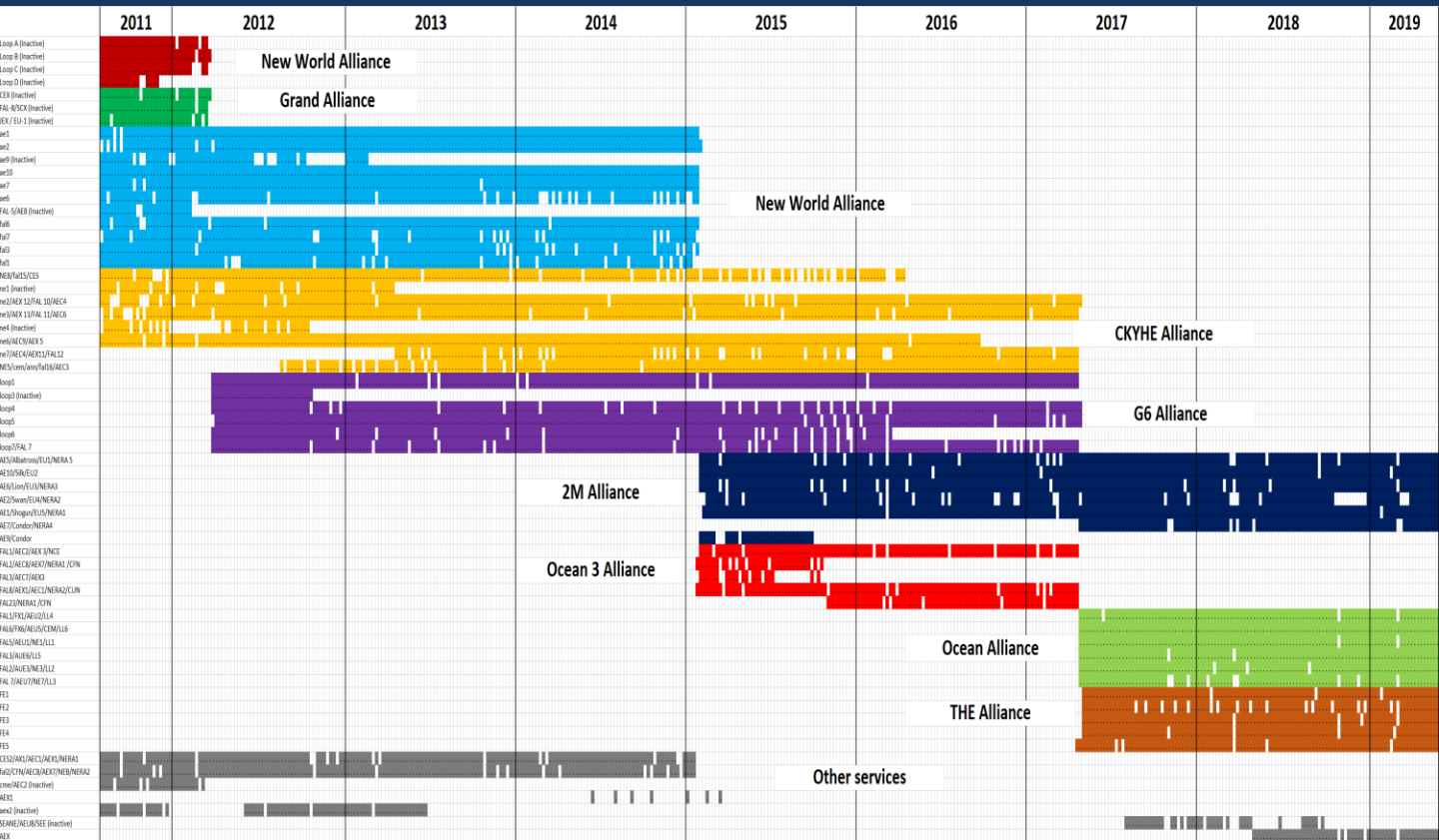
Asia-North Europe Alliance schedule reliability



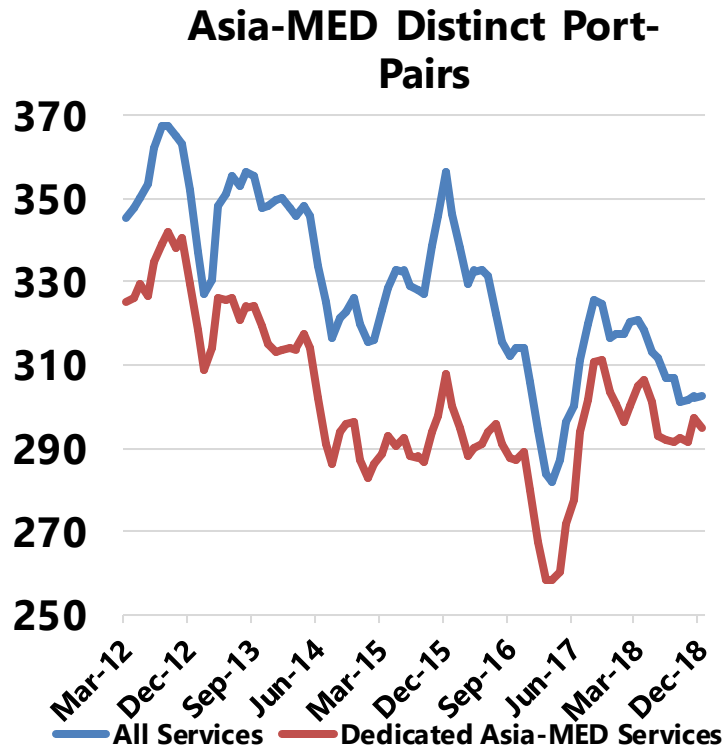
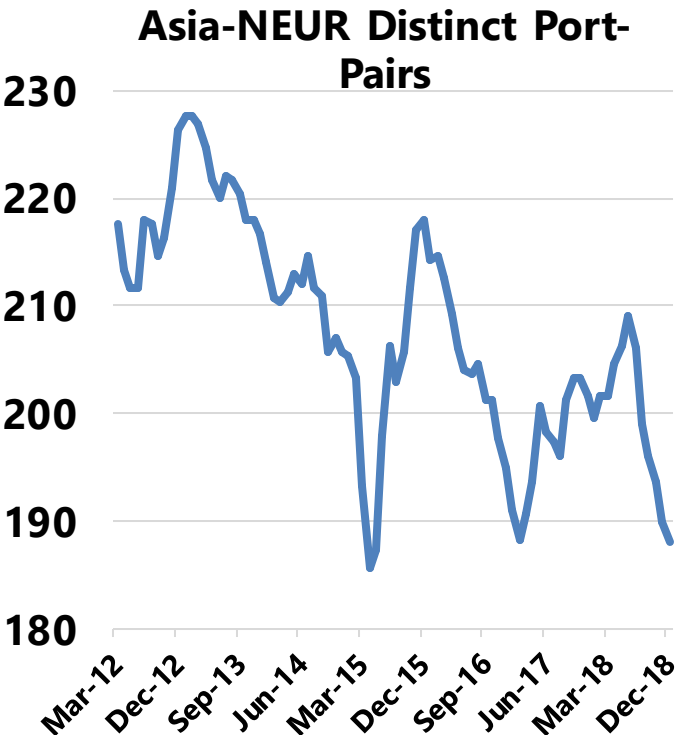
Asia-MED Alliance schedule reliability



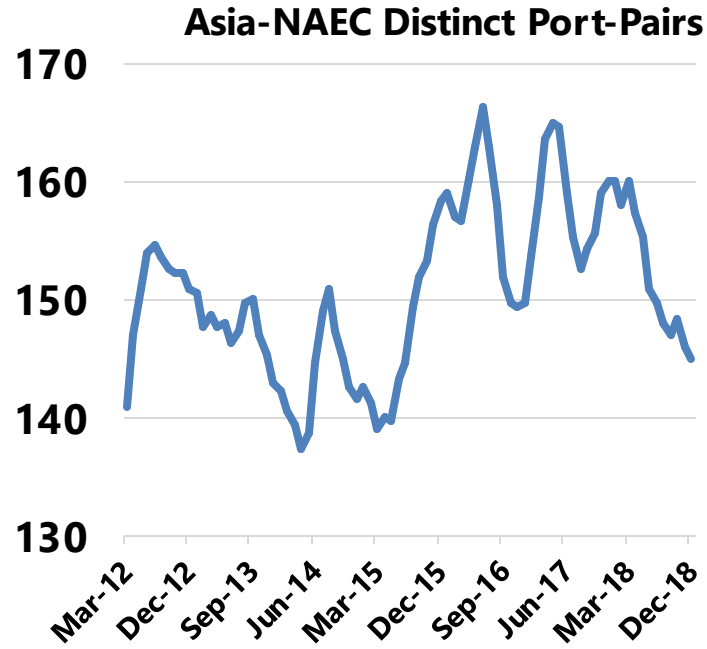
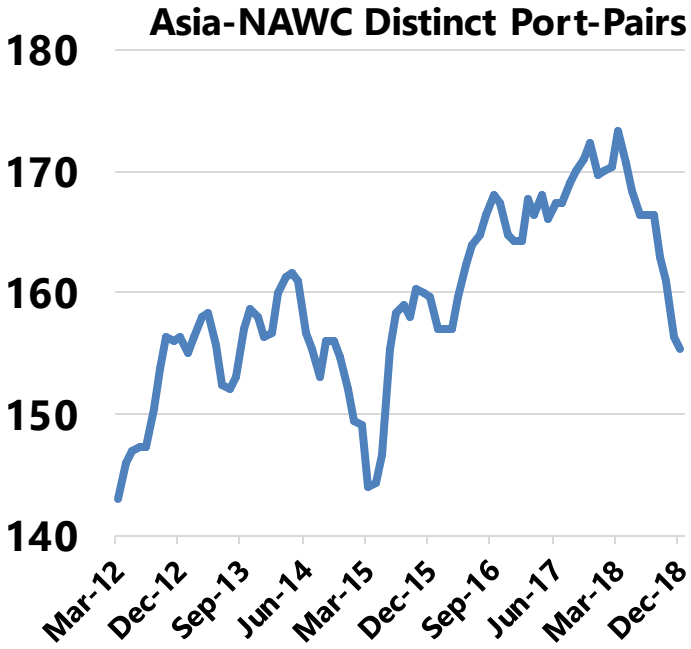
Asia-NEUR service disruptions



No. of direct ports has steadily declined

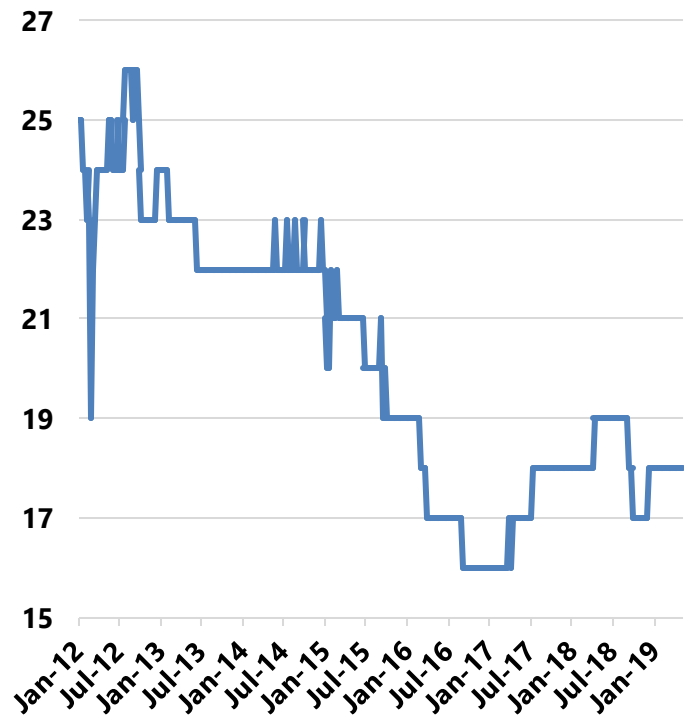


Direct TP port-pairs see a sharp decline in 2018

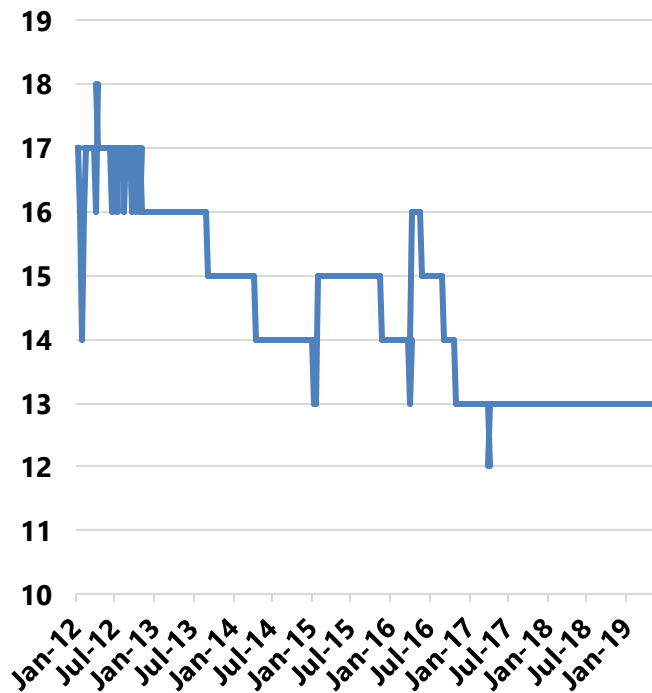


No. of Asia-Europe services on decline

Asia-NEUR no. of services

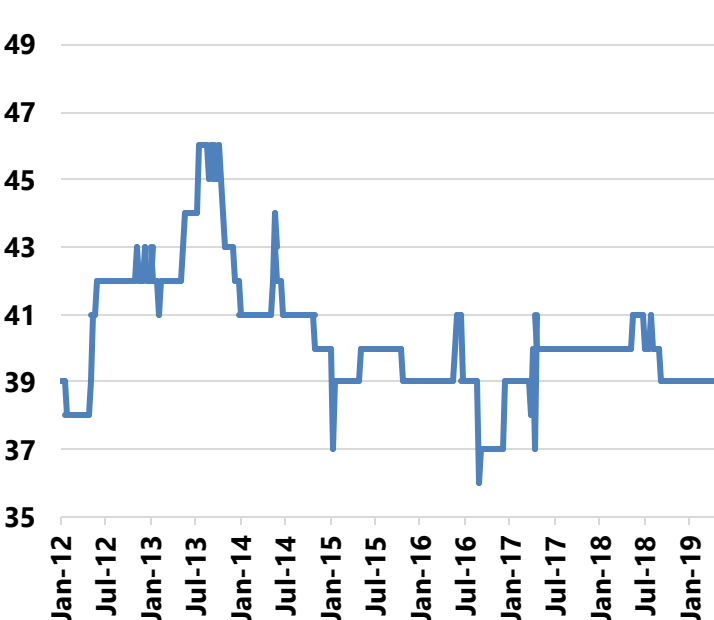


Asia-MED no. of services

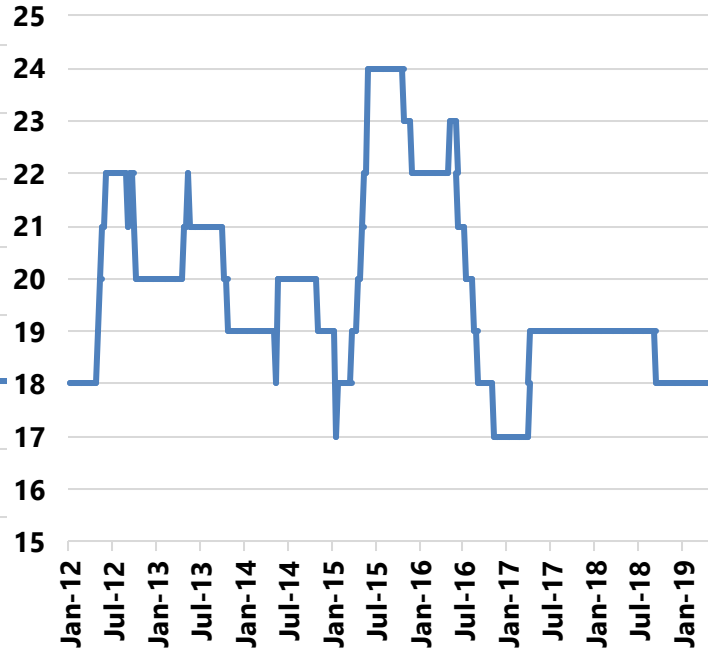


No. of Transpac services seems to have stabilised

Asia-NAWC no. of services



Asia-NAEC no. of services



Concluding remarks

Things are gradually getting better for the shipping lines, but service levels are poor

- Supply/Demand balance slowly improving, with a pre-2009 balance possible by 2022-2023
- The market consolidation has mitigated the worst excesses of the past
- Service levels have been very poor in recent years

There are a number of major risks to this outlook

- If carriers fail to pass on the IMO 2020 bunker costs, they will be forced to lay up significant tonnage, with massive disruptions to service networks.
- Demand is slowing down to a long-term growth rate of 2-3% on the main East-West trades.
- The EU Commission may end the Block Exemption Regulation in 2020, making alliances and VSAs more difficult to set up, and more costly to run.
- Irrational vessel ordering (HMM?) could lead to a price war.

In the short term, expect carriers to fight for rate increase on TP

- Contract rates are 20% below comparable spot rates, and carriers showed in the 2018 peak season they are ready to cut capacity deep in order to get rates up.
- Service levels are likely to remain poor, at least to the turn of 2020.

Notes on the 2020 IMO Low-Sulphur requirement

No-one knows what the impact will be



We can't reliably predict oil prices

No-one knows what the premium will be for Low-Sulphur MGO in 2020

Best estimate is that MGO will trade at the current premium (+50%)

Current Global 20 Ports Average HFO Bunker price is 424 USD/MT

Reasonable estimate that cost to liners will be USD 10-15bn

The shipping lines use approximately 65 million MT of bunker fuel per year

At a USD premium of 50%, this translates into an added cost of:

$50\% * 424 \text{ USD/MT} * 65 \text{ million MT/Year} = 13.78 \text{ Billion USD/Year}$

estimates added cost to be USD 2Bn. Maersk capacity market share: 17.8% → USD 11.2Bn for

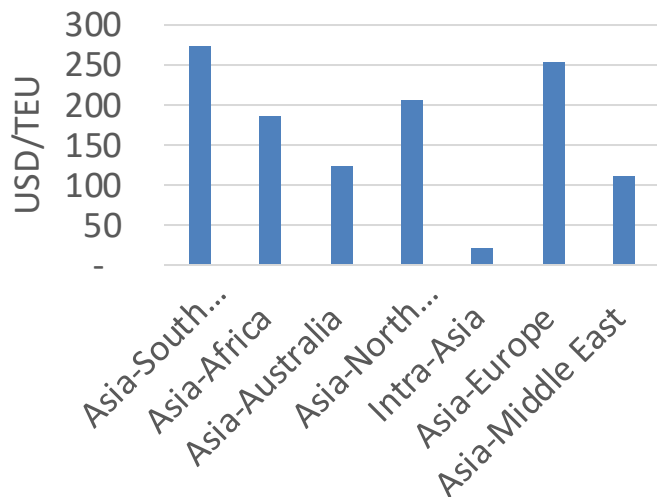
Top-12 liners 2012-17 EBIT: USD 8.6Bn

Table B3: Segment EBIT/Operating Profit 2010-2017 in Million USD									Change Y/Y	SUM EBIT
	2010	2011	2012	2013	2014	2015	2016	2017	Delta 17-16	2012-17
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OOCL	919	175	328	90	329	353	-138	232	370	1.194
Yang Ming	N/A	N/A	-67	-200	88	-200	-454	26	480	-808
MOL***	344	346	-23	-114	-203	-190	-320	-63	257	-913
NYK***	321	-433	-154	-14	41	40	-106	140	246	-54
K Line***	331	-435	-84	25	159	-17	-253	-5	248	-175
ZIM	223	-276	-206	-191	-263	98	-52	135	187	-479
HMM	509	-309	-478	-343	-215	-238	-690	-382	309	-2.347
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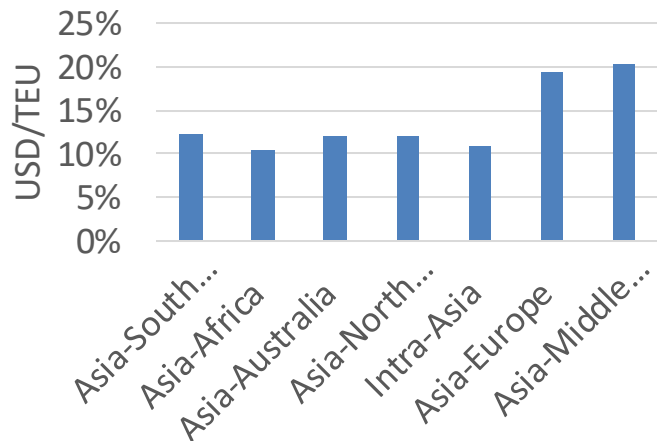
*COSCO SHIPPING Holdings Co., Ltd. **Evergreen Marine Corp. (Taiwan) Ltd., ***Only Liner Segment

Spread across trades based on volume, distance and imbalance

Added low-Sulphur BAF from 2020



Low-Sulphur added BAF compared to current spot rates



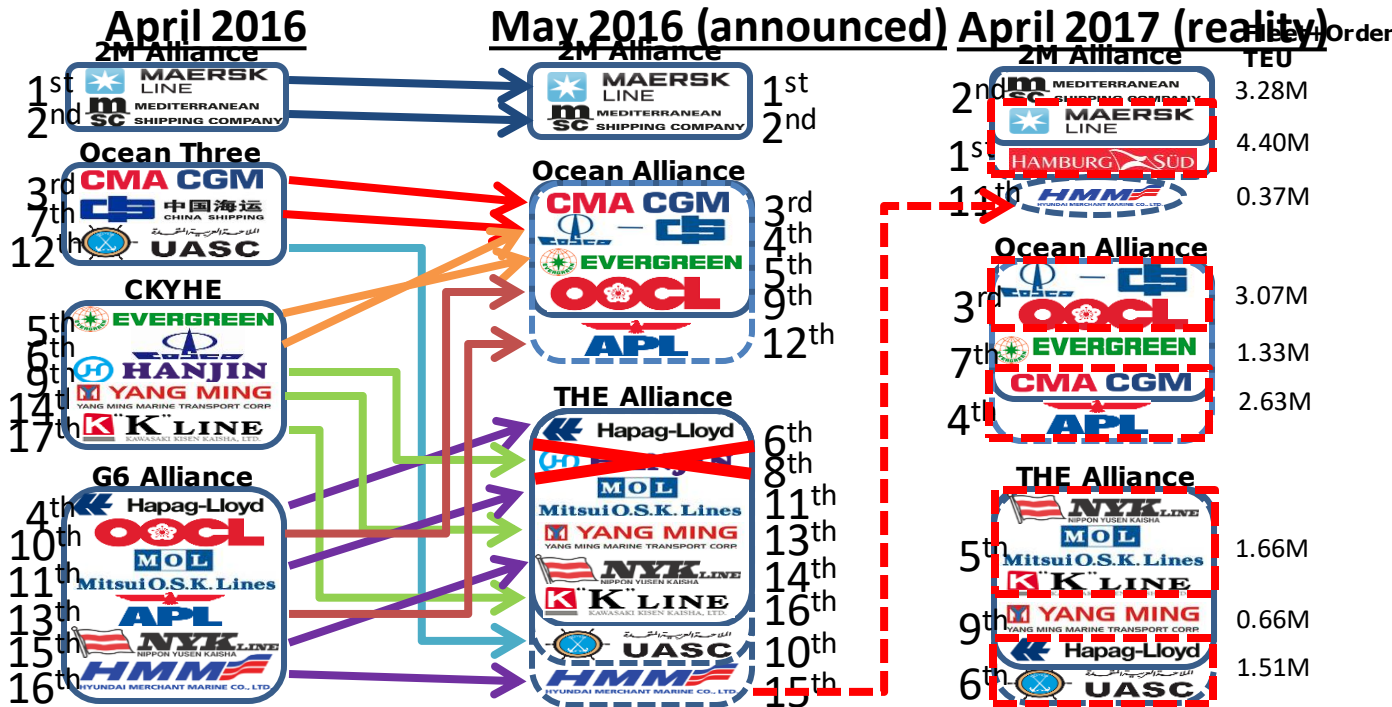
Major carriers have announced their BAF formulas

New BAF levels per carrier (USD/TEU)

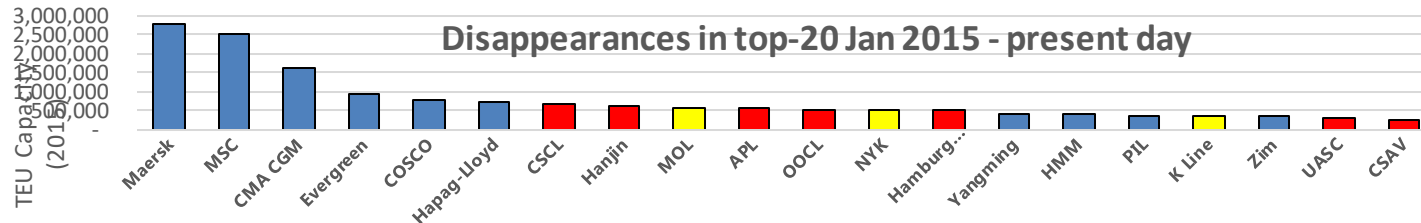
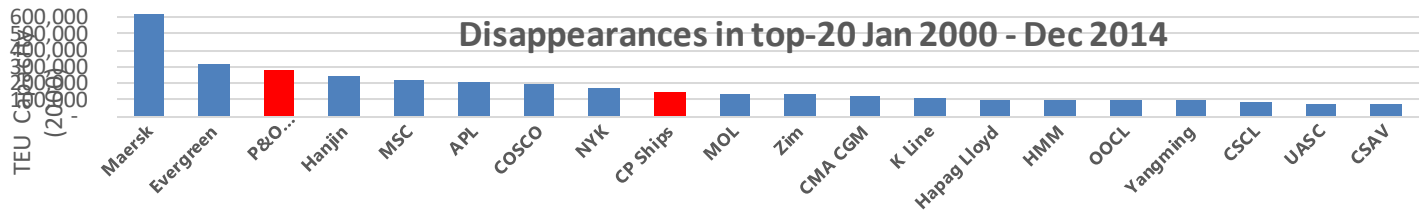
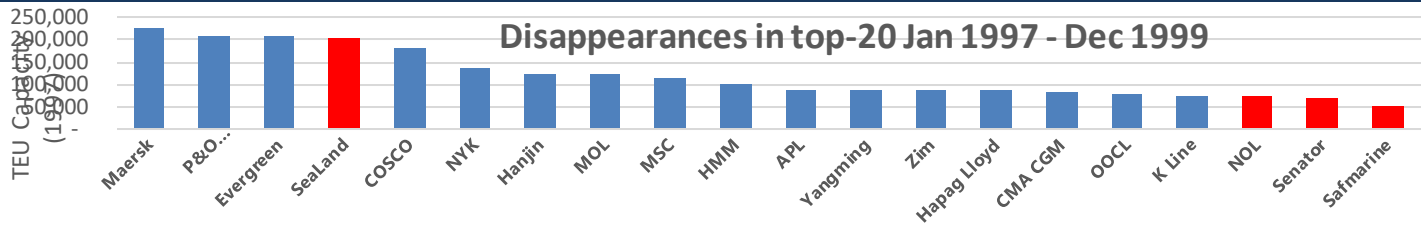
Bunker price (USD/ton)	<i>400</i>	<i>450</i>	<i>500</i>	<i>525</i>	<i>550</i>	<i>600</i>	<i>650</i>	<i>700</i>
Asia-North Europe								
Maersk Line	240	270	300		330	360	390	420
MSC	248	279	310		341	372	403	434
Hapag-Lloyd	213			262			311	
ONE Line			125		153	180	208	236
North Europe - Asia								
Maersk Line	140	157,5	175		192,5	210	227,5	245
MSC	96	108	120		132	144	156	168
Hapag-Lloyd	213			262			311	
ONE Line			100		122	144	166	188
Asia-USWC								
Maersk Line	195	219,5	244		268	292,5	317	341,5
MSC	200	225	250		275	300	325	350
Hapag-Lloyd	130			161			191	
ONE Line			90		112	135	157	179
USWC-Asia								
Maersk Line	45	50,5	56,5		62	67,5	73	79
MSC	40	45	50		55	60	65	70
Hapag-Lloyd	130			161			191	
ONE Line			46		57	68	79	81

Alliances and consolidation

What are the new (April 2017) alliances?

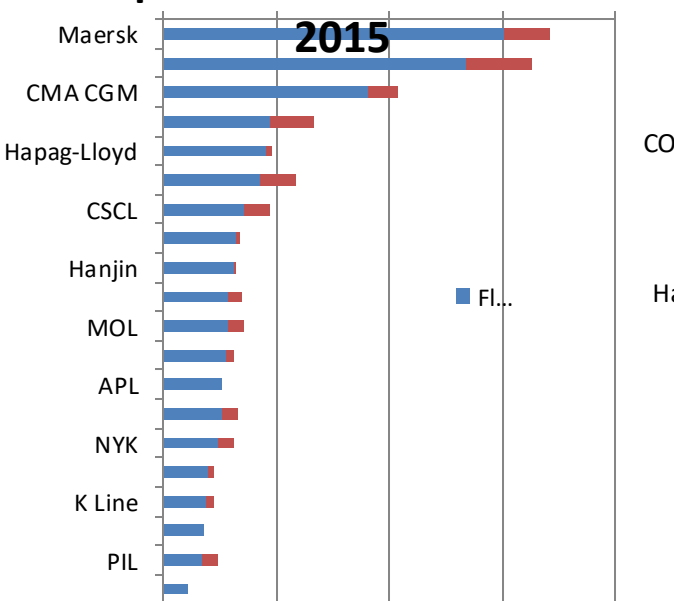


The level of consolidation is unprecedented

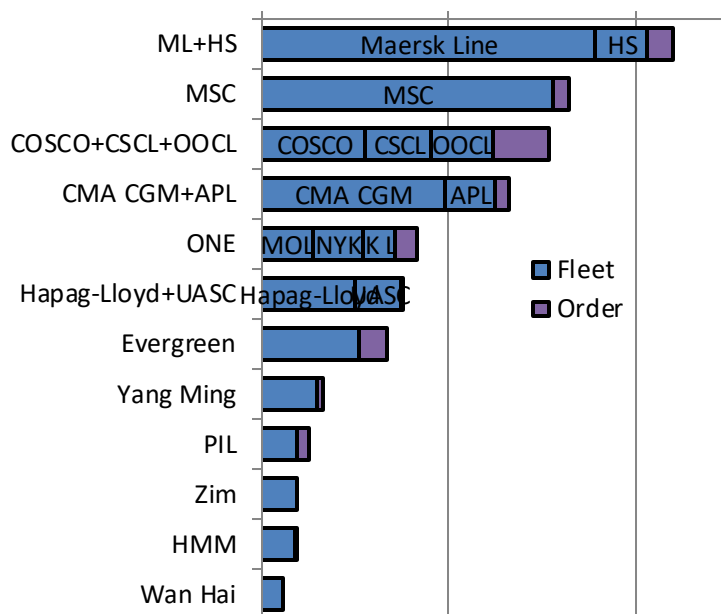


We will end up with 4-7 mega-carriers

Top 20 carrier fleets – Jan 2015



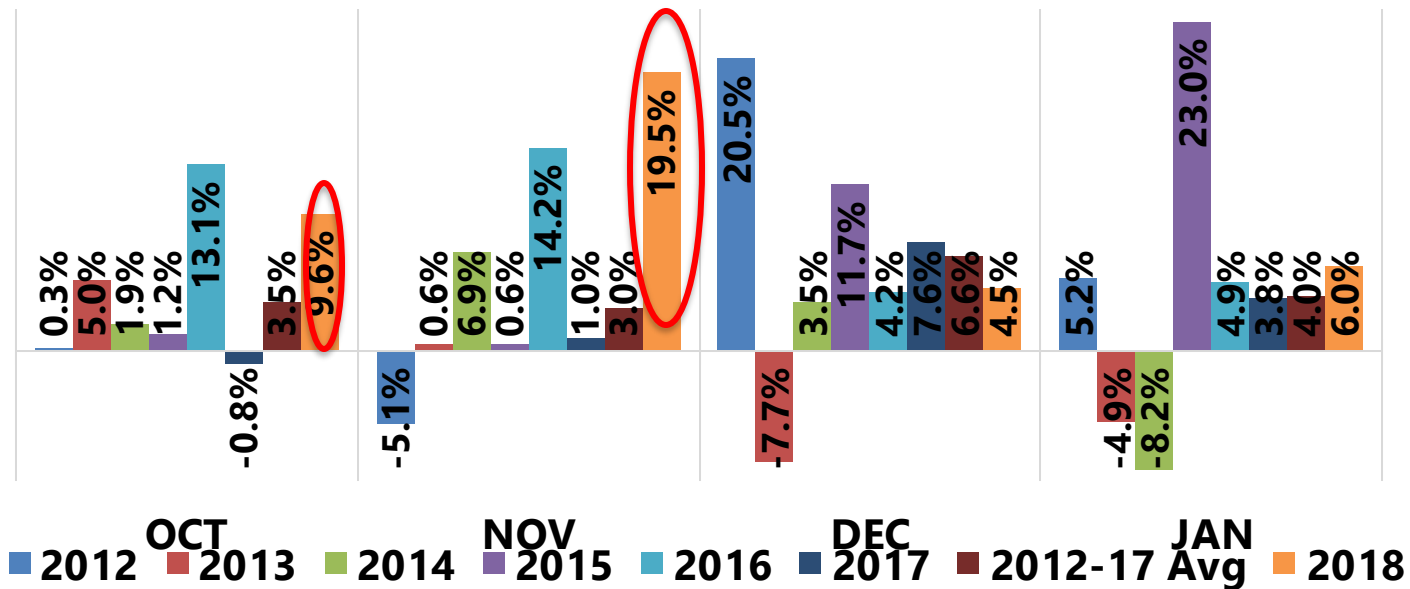
Same carriers Jan 2018



Front-loading of 2019-Q1 volumes due to US-China tariff hike

CTS data shows a loading surge in November

Oct-Jan Y/Y TP volume growth – NOTE: Time of loading



But limited imports surge, and only in NAWC

