



# From the Weeds to the Trees – Where to Look for Opportunities

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The background of the slide is a composite image. The left side shows a dense field of green weeds and wildflowers. The right side shows a forest of tall, slender evergreen trees, likely redwoods or sequoias, with their trunks reaching towards the sky.

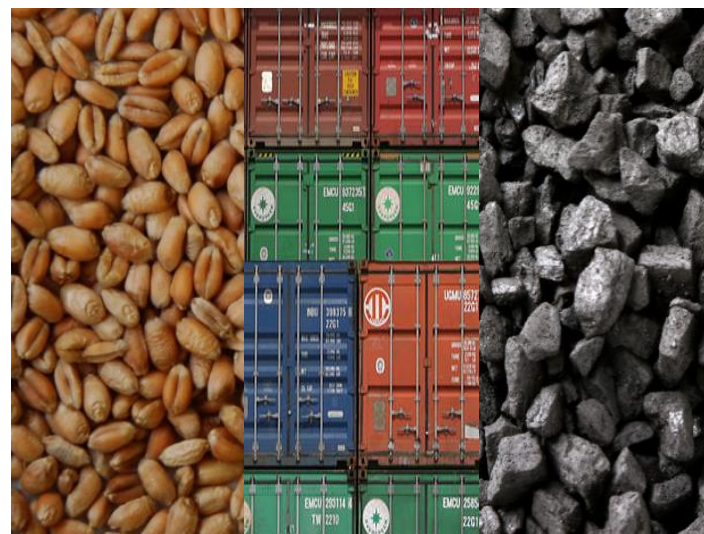
## **From the Weeds to the Trees – where to look for opportunities?**

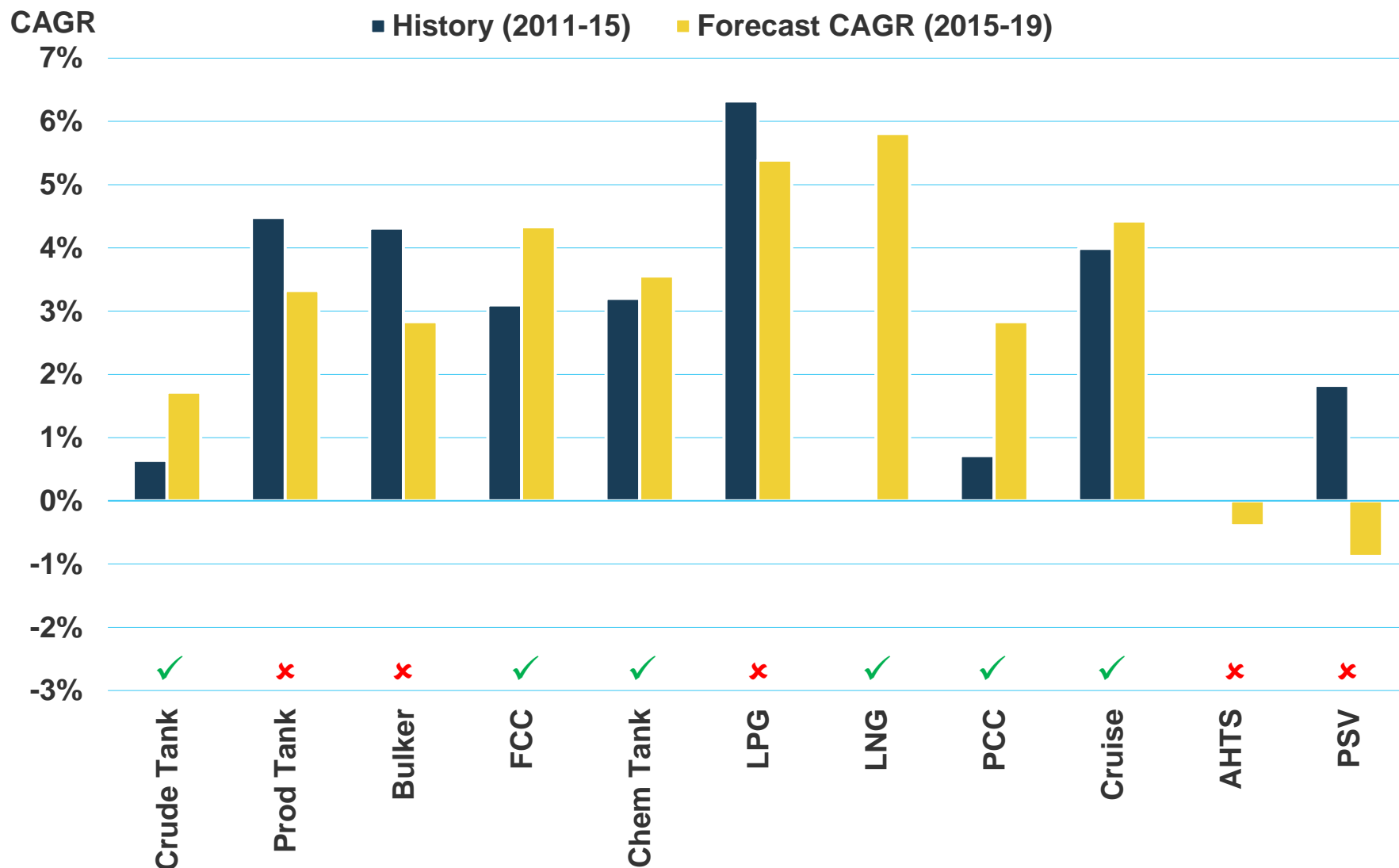
- 1. Demand**
- 2. Supply**
- 3. Earnings**
- 4. Newbuilding Prices**
- 5. Secondhand Prices**
- 6. Where to Plant your Cash?**



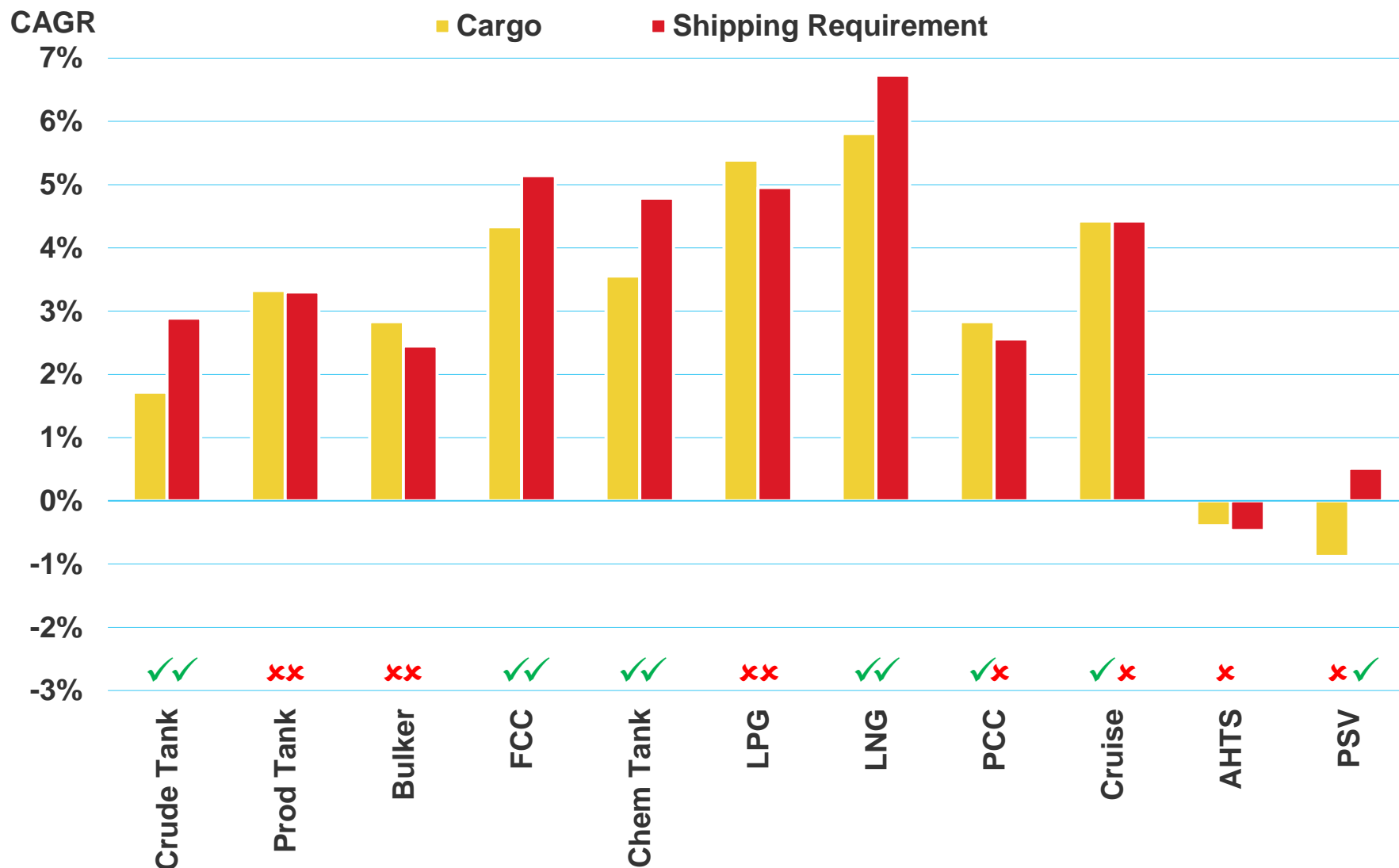
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# Demand

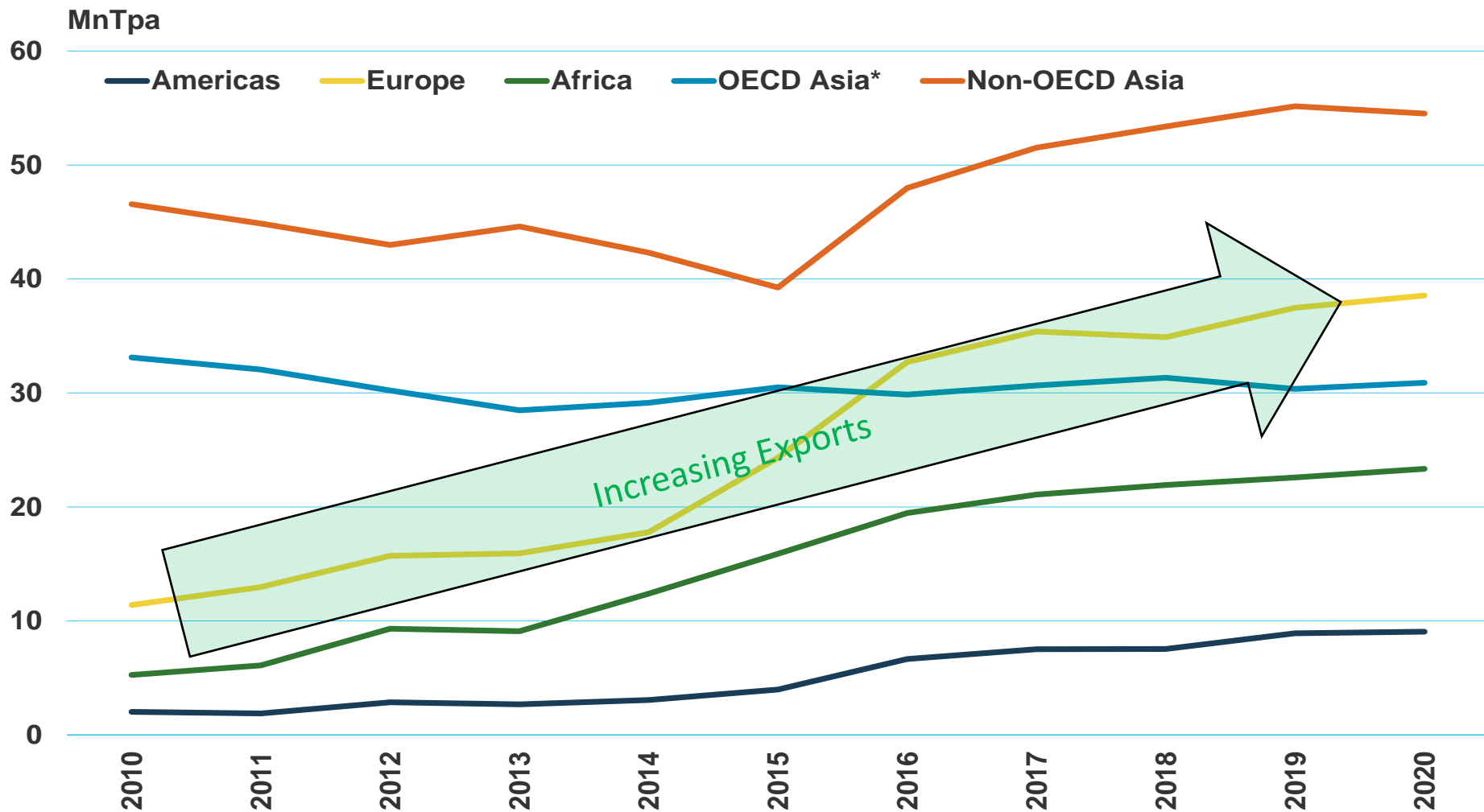




# Trade versus Ship Demand (2015-2019)

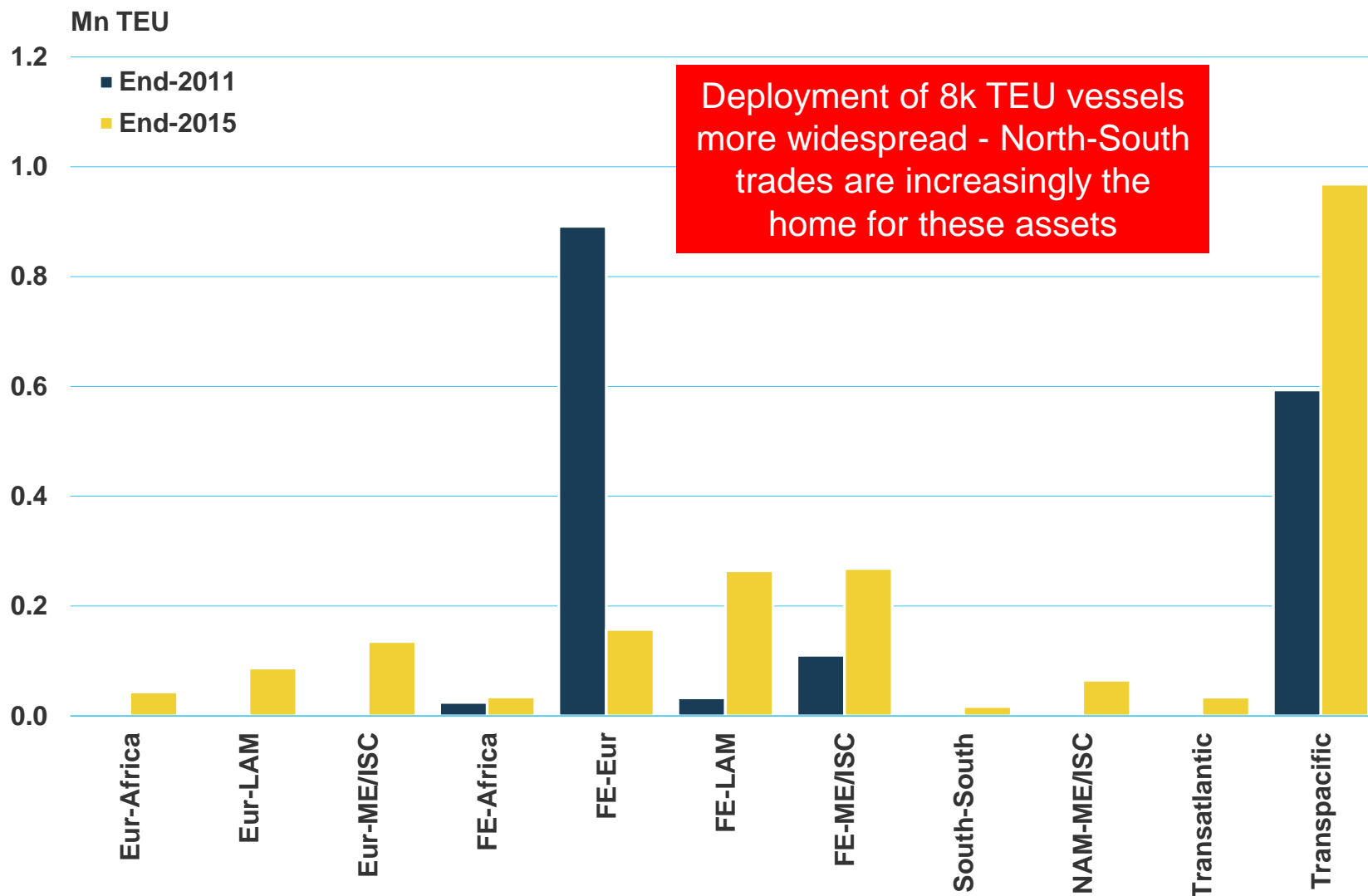


# Middle East Products Exports



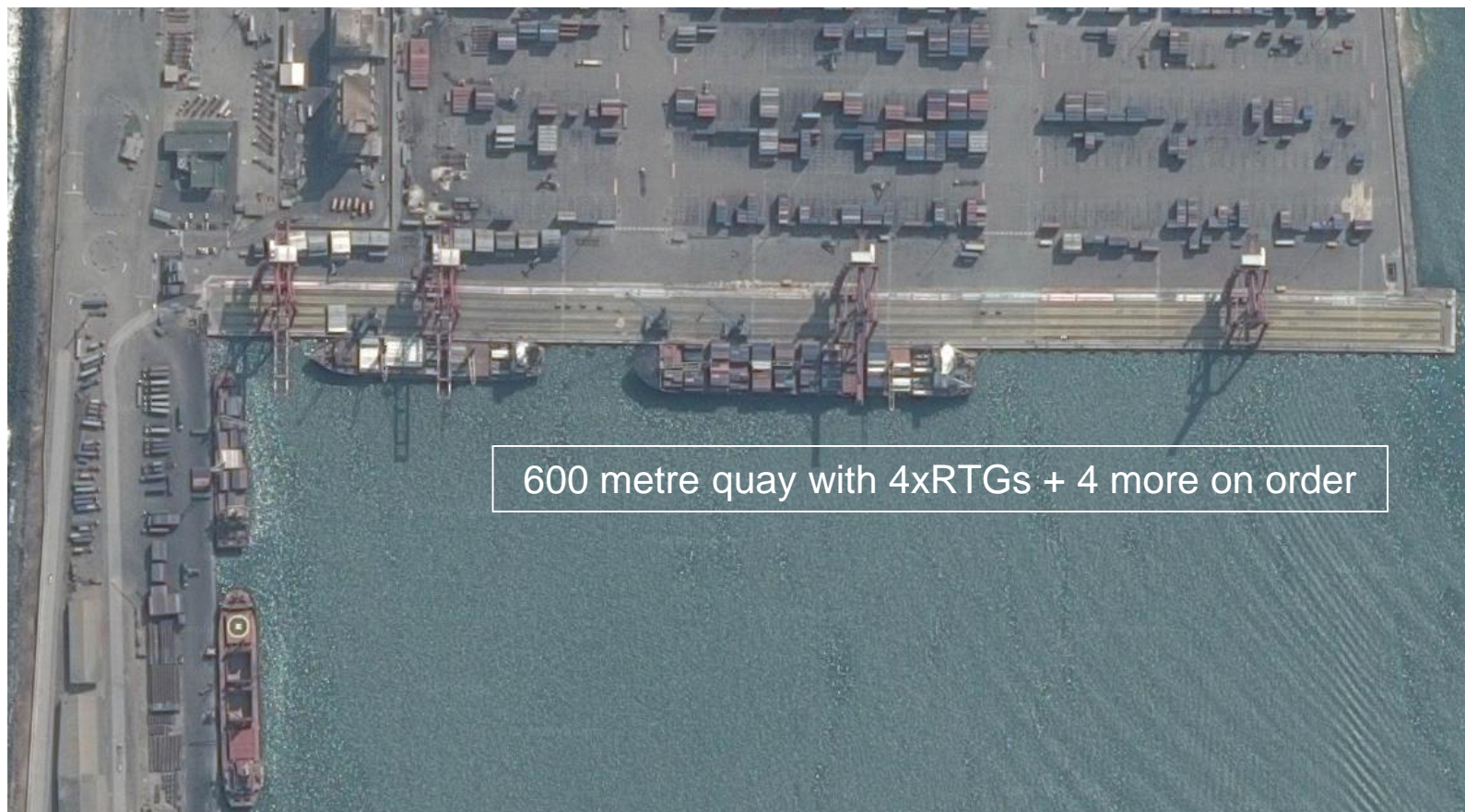
Long haul product tanker story still exists supported by refining capacity additions in the Middle East and reductions in planned capacity (Latin America), low levels of construction (Africa) and consolidation (Europe)

# Deployment patterns redrawn – 8 k TEU



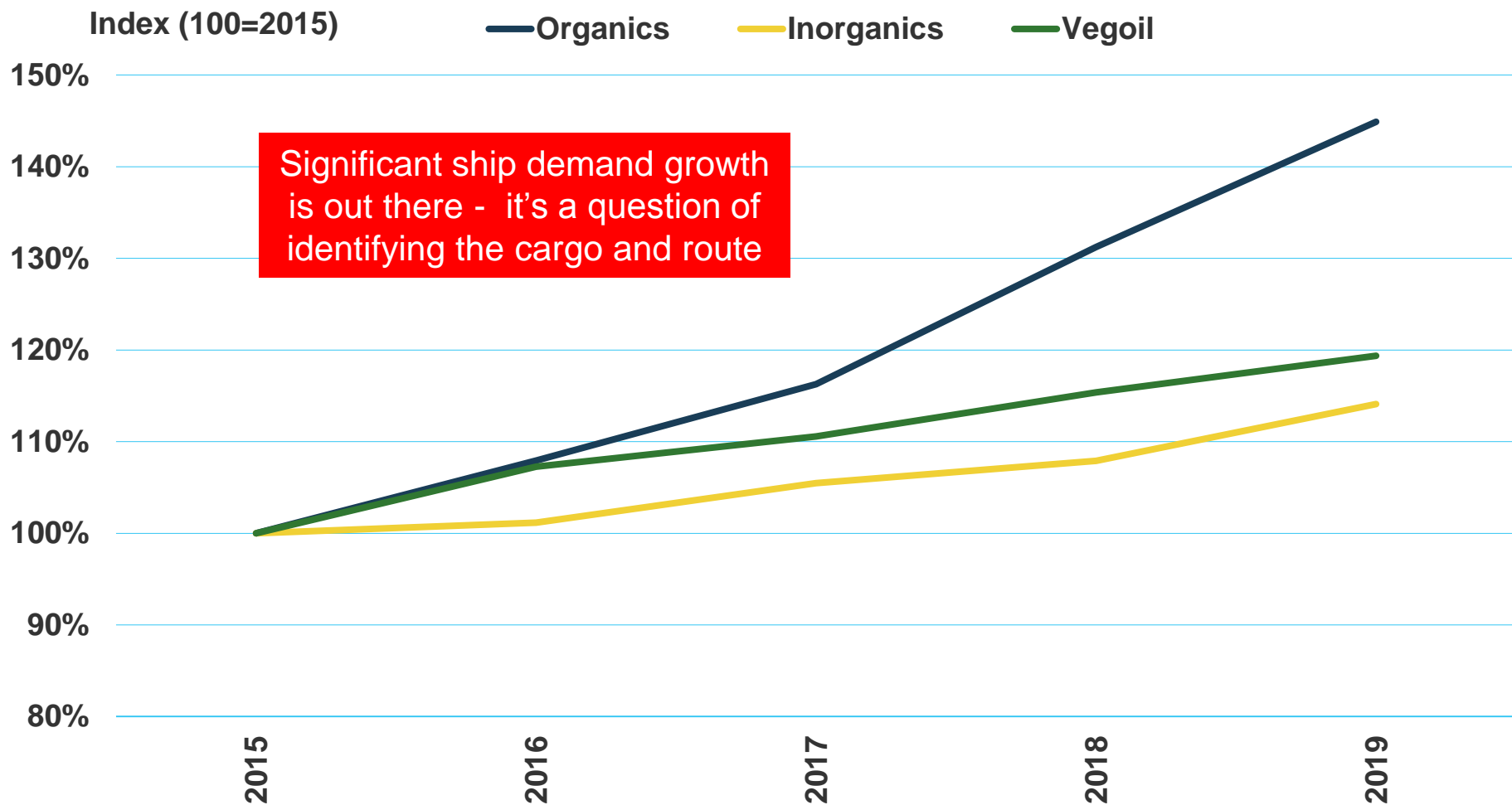
# Why the Cascade Will Ultimately be Efficient

Pointe Noire only used to be able to handle geared ships. Now, theoretically the only restrictions are port efficiency/container yard.



There are very few real limits to cascading, and where there are (Onne, Iquique) these ports will be bypassed. Service consolidation will lead to upsizing and 8 k + TEU vessels will replace smaller ships, with Panamaxes then dominating long-haul intra-regional routes





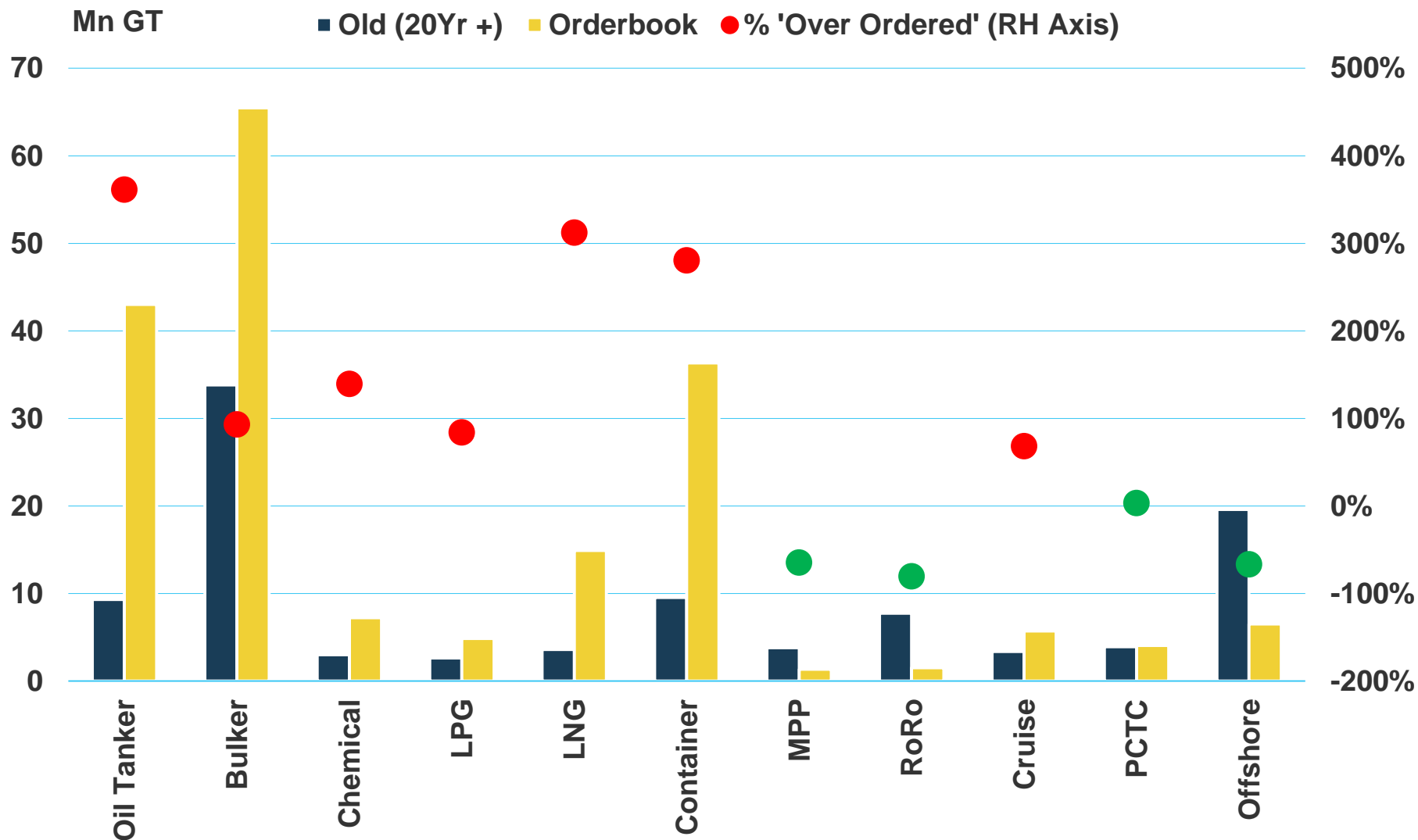
*Includes explicit bilateral trade forecasts for: Methanol, Ethanol, Mono Ethylene Glycol, Para-xylene, Styrene, MTBE, Benzene, EDC, Acetic acid, Mixed xylenes, Phenol, Acrylonitrile, VAM, Alkylbenzene, Propylene Oxide, Toluene, Phosphoric Acid, Sulphuric Acid, Caustic soda, Palm Oil, Molasses, Canola Oil, Soyabean oil, Sunflower oil*

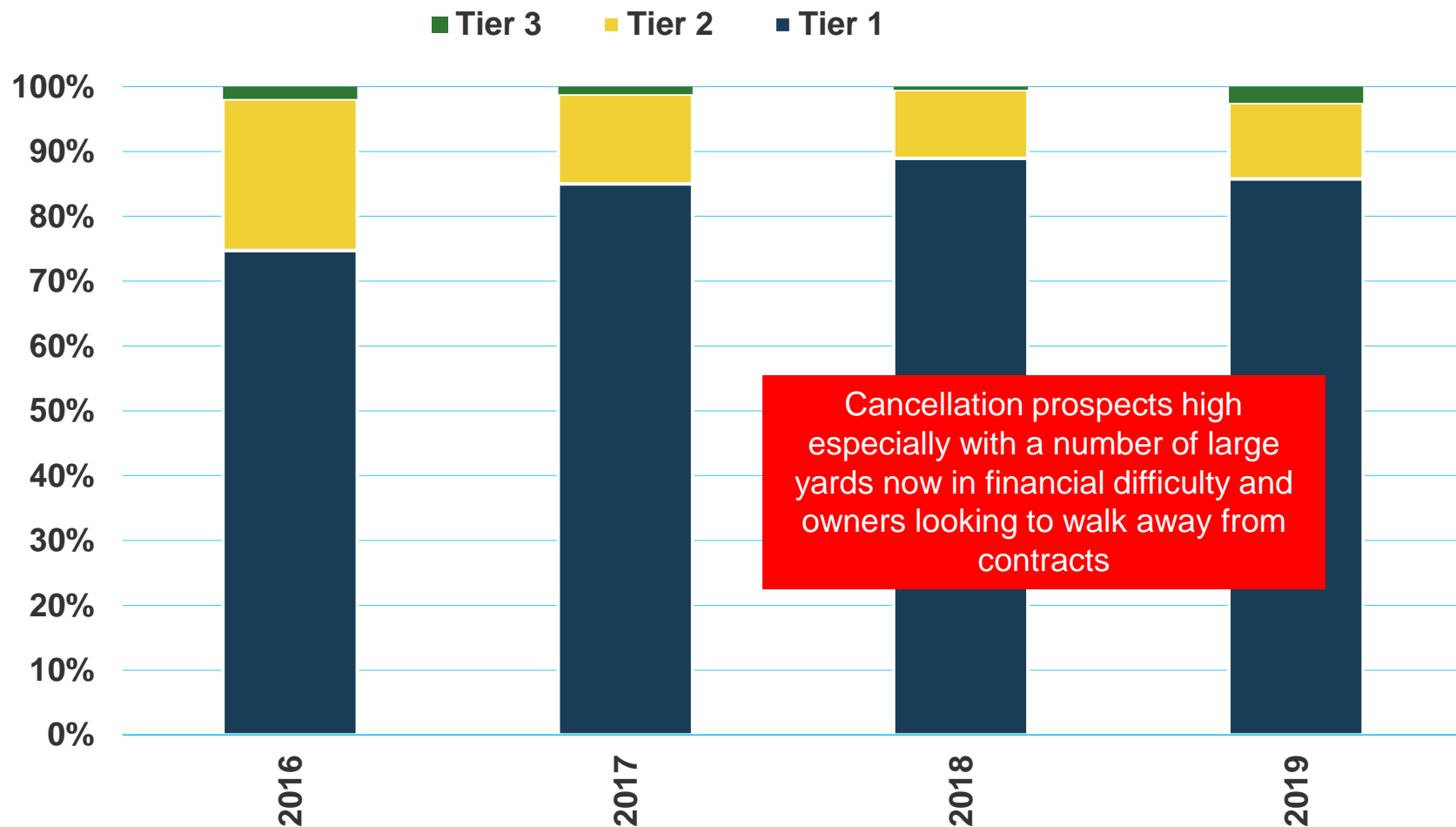
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# Supply



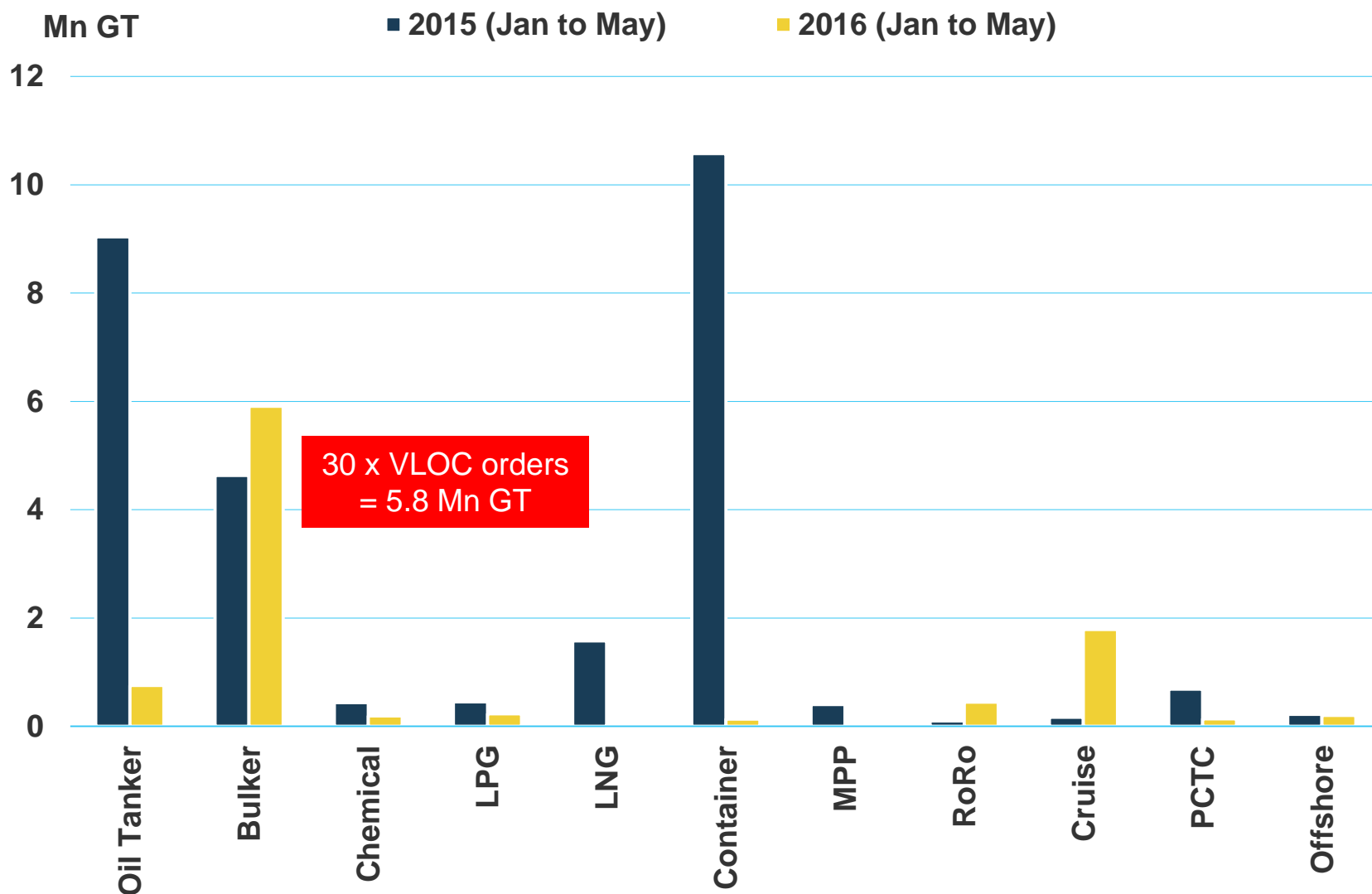
# Replacement Tonnage Requirements



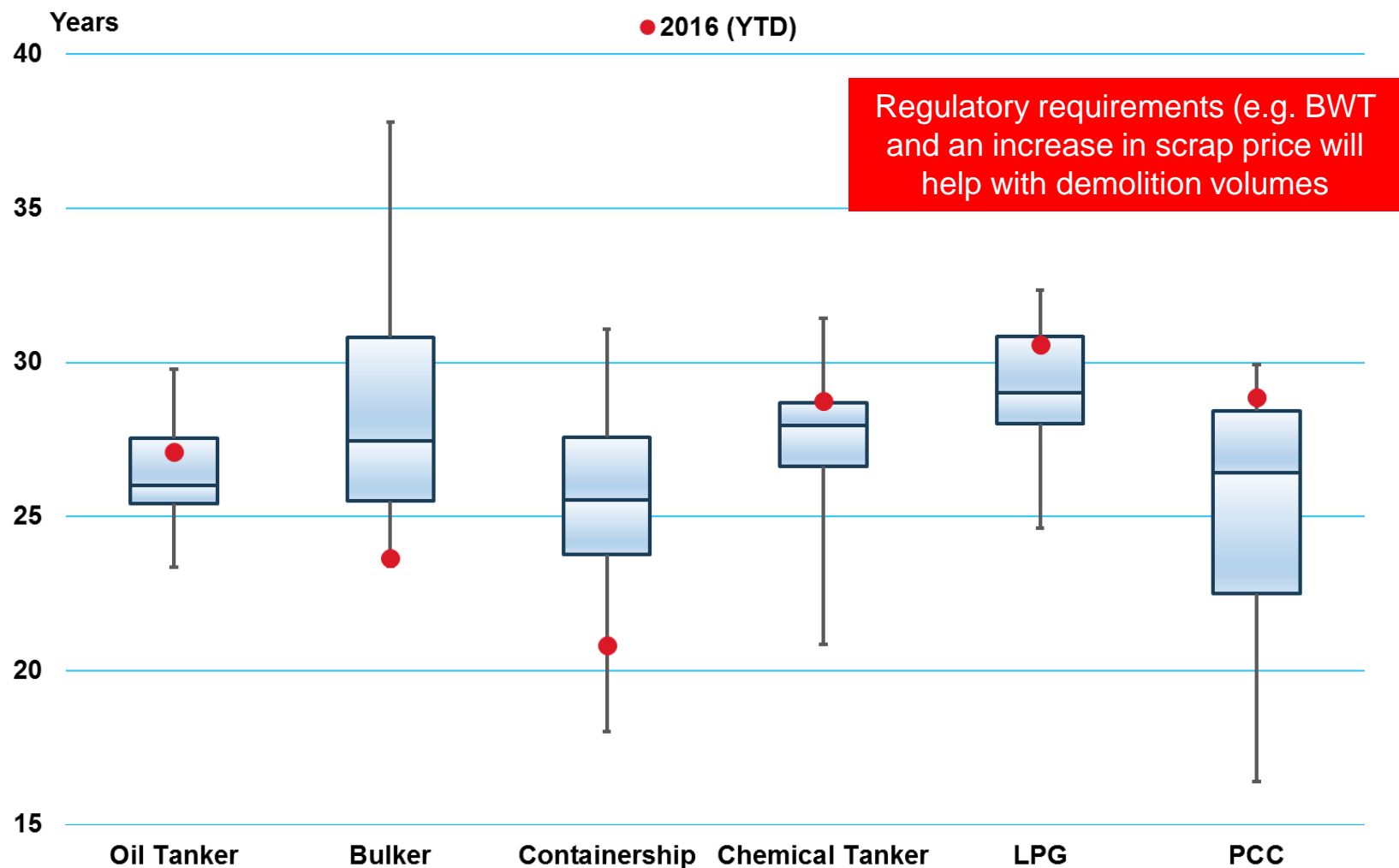




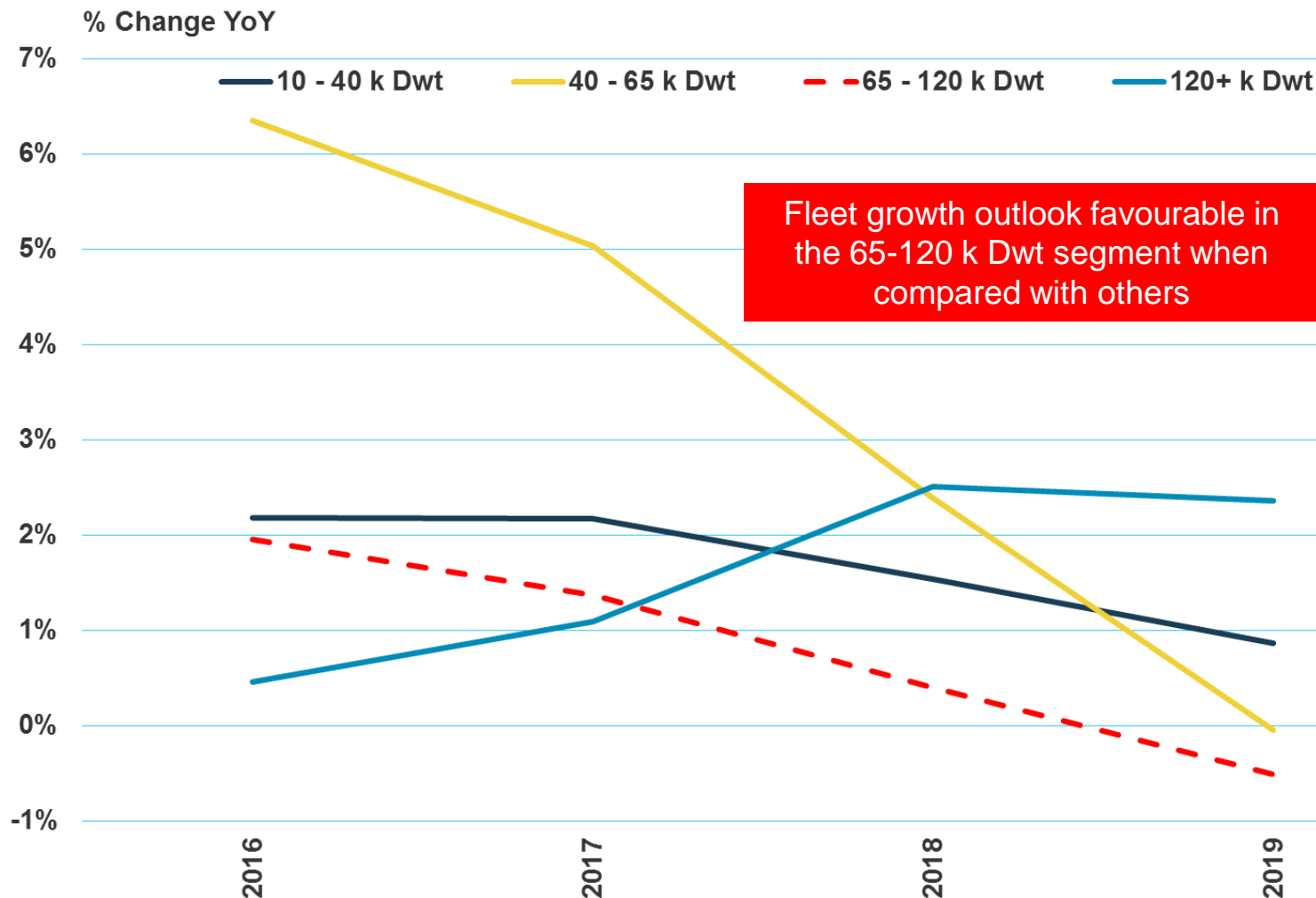
# Contracting Comparison – By Vessel Type



# 2016 Age at Scrap versus Historical\*



\*Annual averages 1990 to 2015



Upsizing opportunities to larger stems and positioned well in long term growth markets – grains (e.g. South America to Asia) and key minor bulks (eg Bauxite from Guinea). Also new trades through new Panama Canal (e.g. US grains and Colombian coal to Far East).

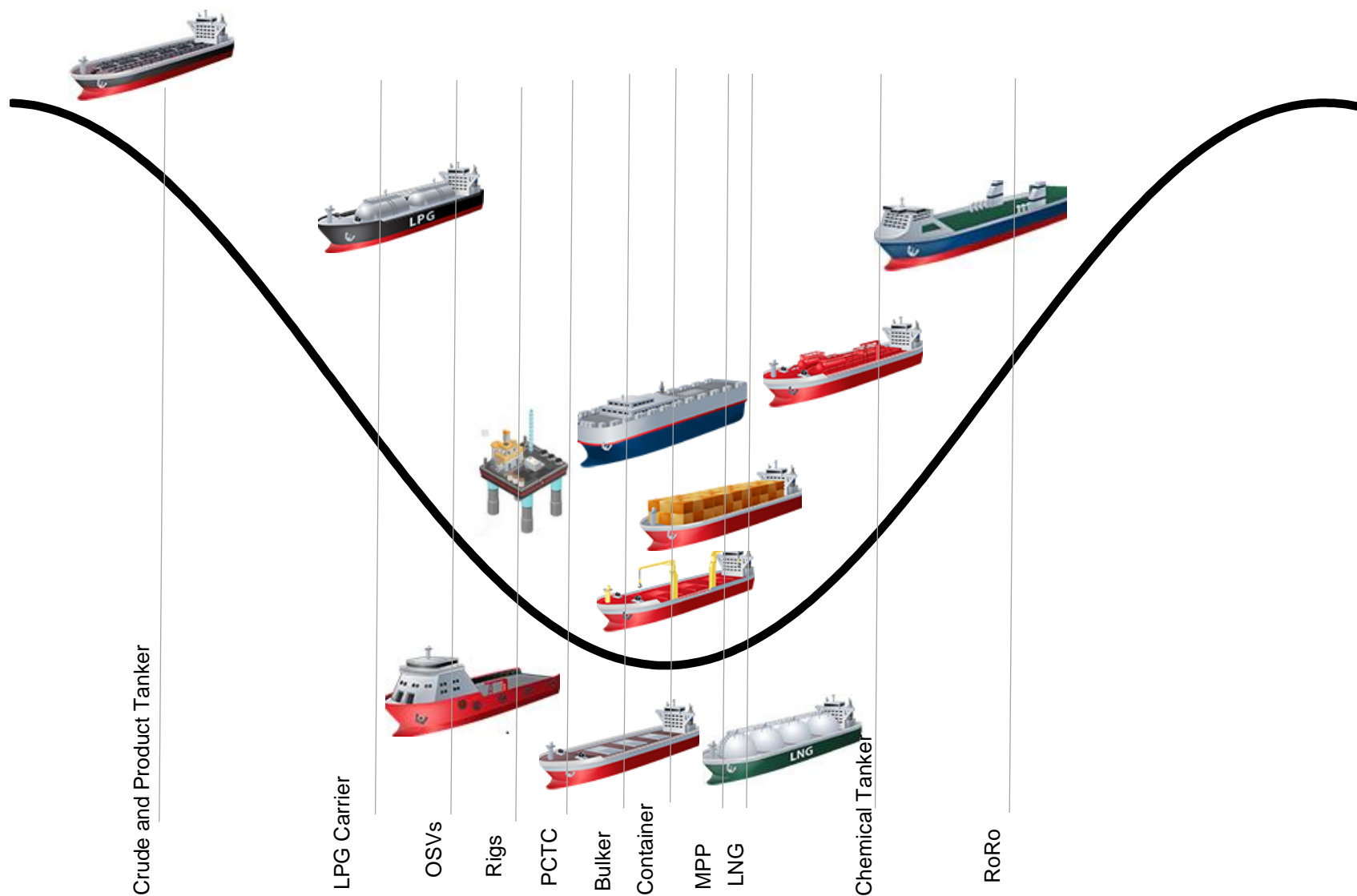
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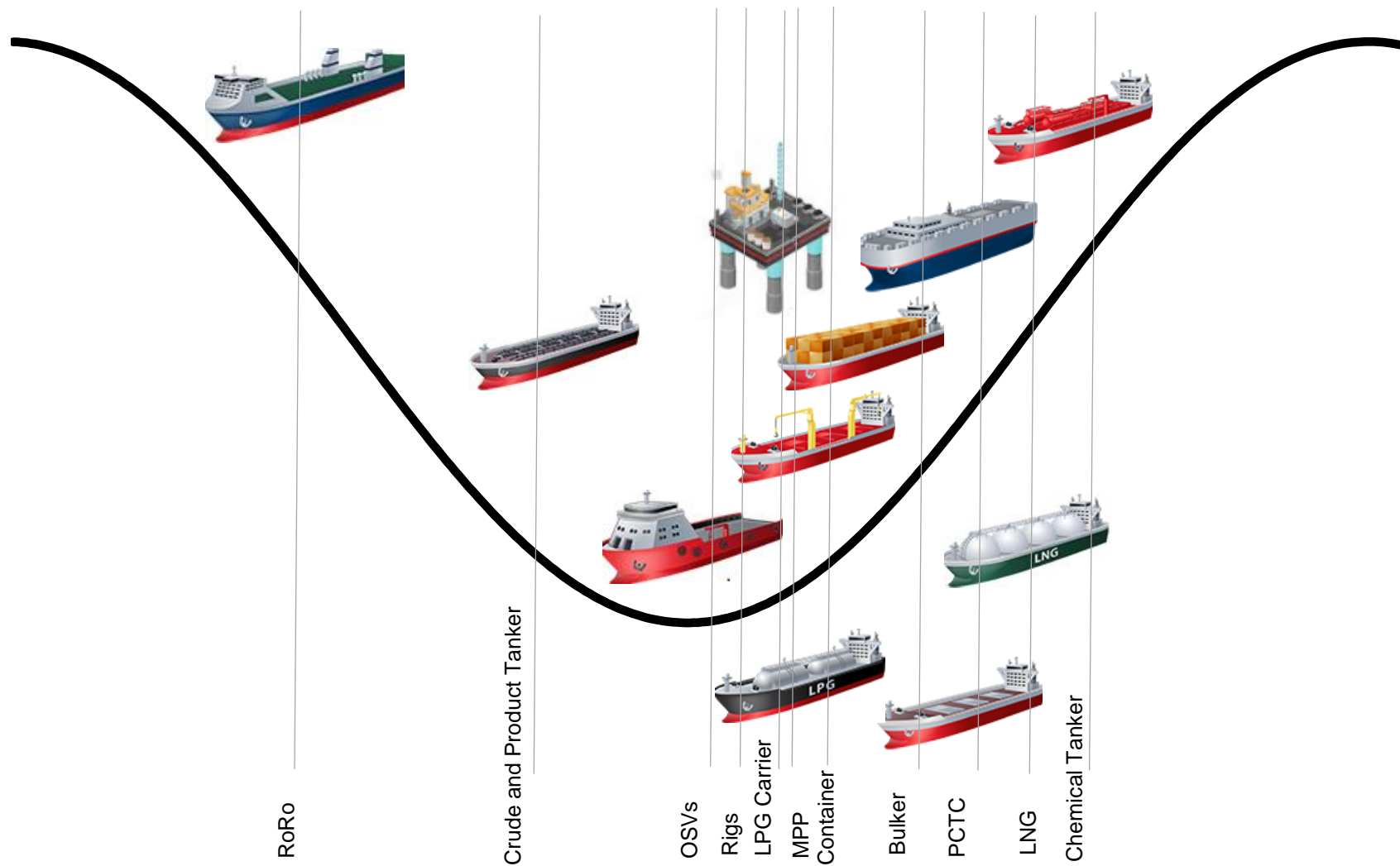
# Earnings





# Where on the Earnings Cycle Are We?



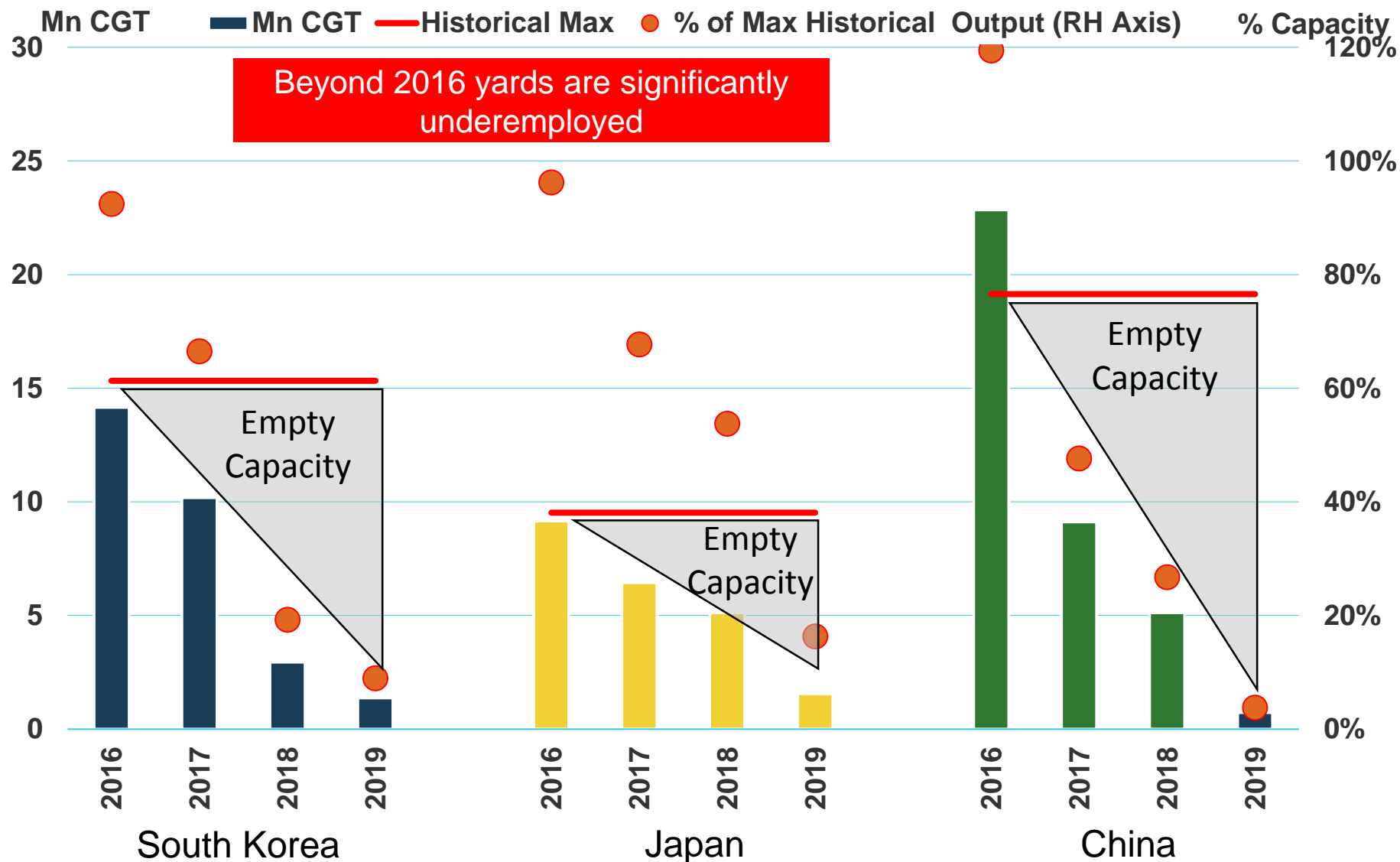


From the Weeds to the Trees

# Newbuilding Prices

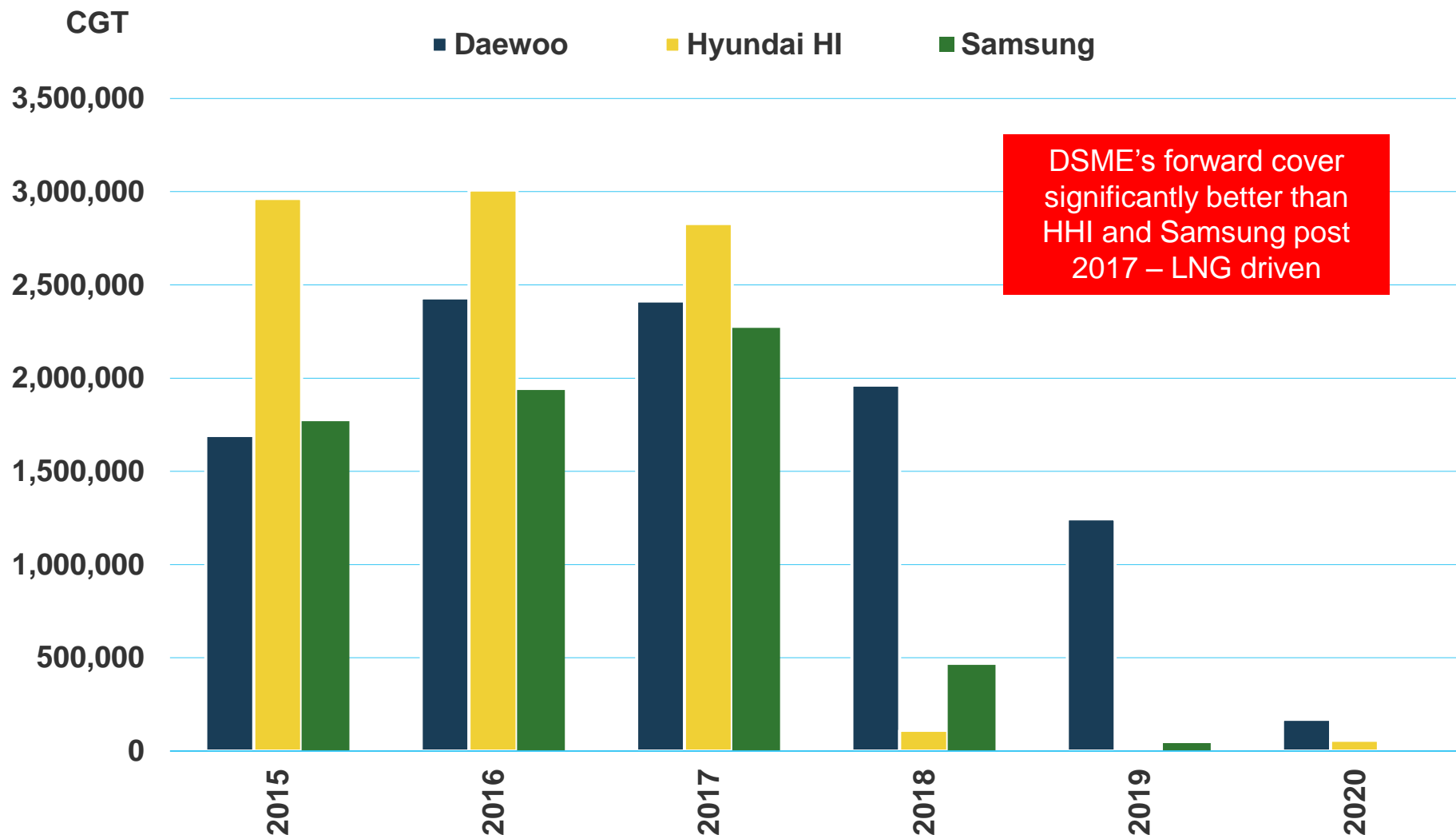


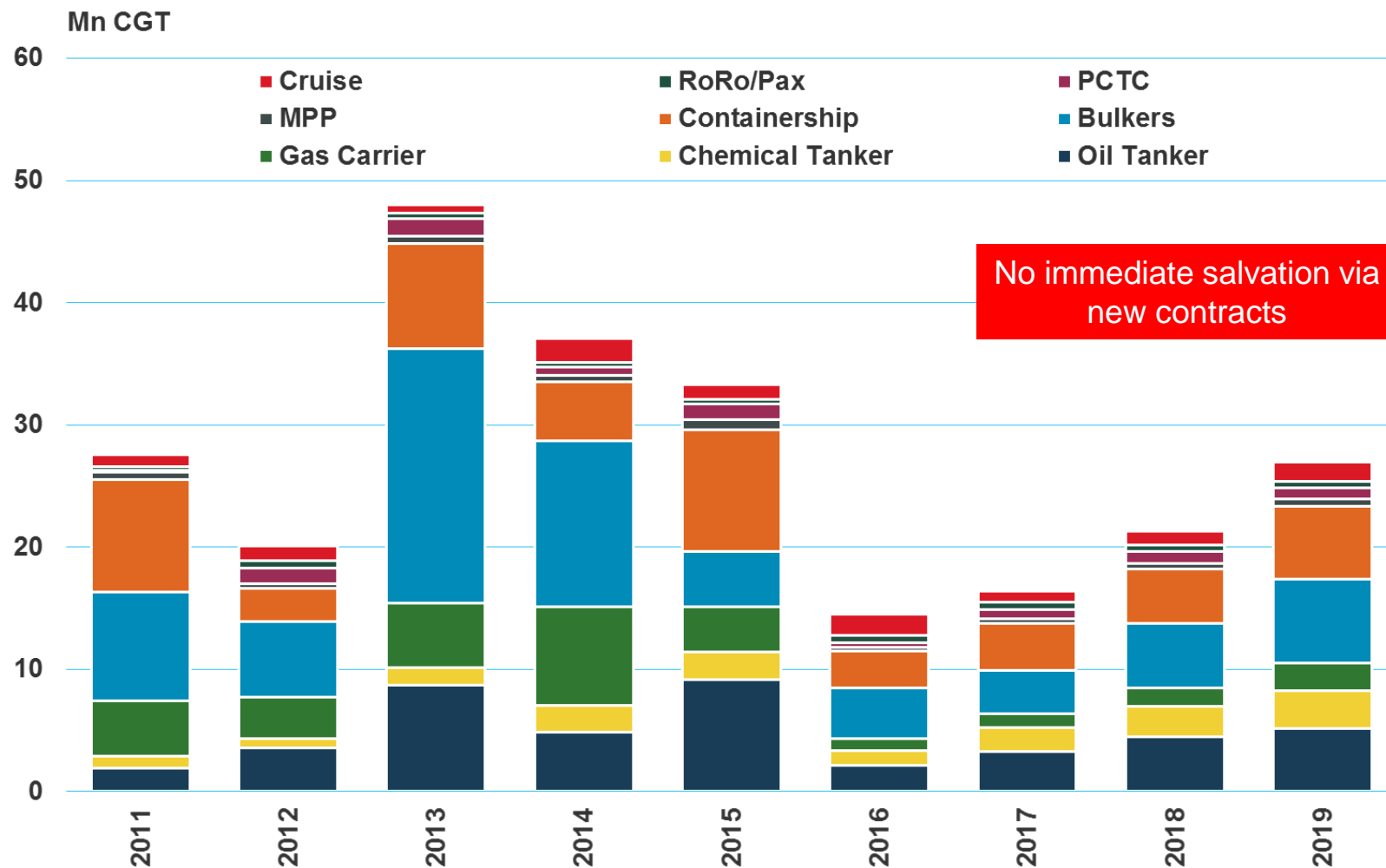
# Are the Yards Panicking Yet?



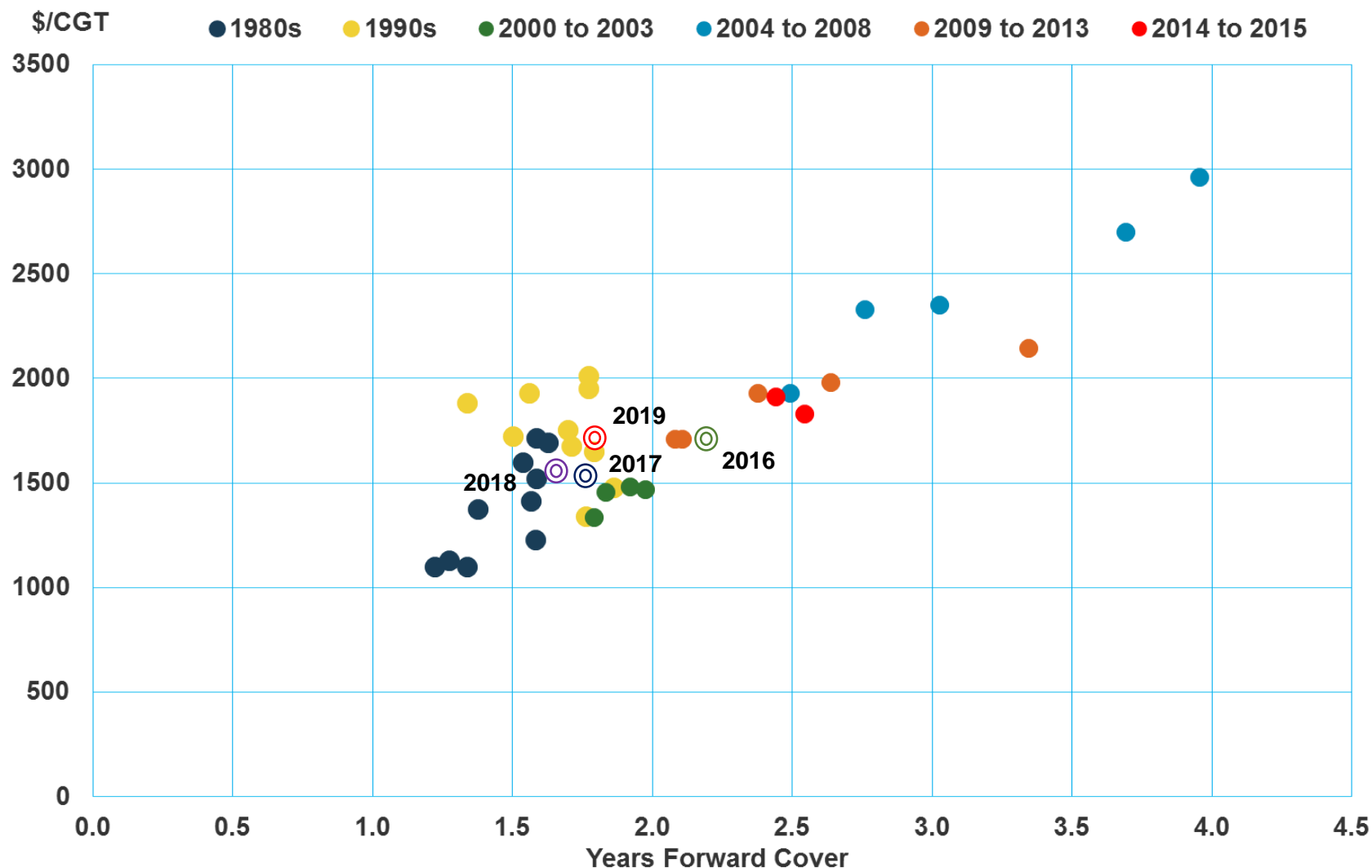


# Big 3 Korean Shipyards Forward Cover



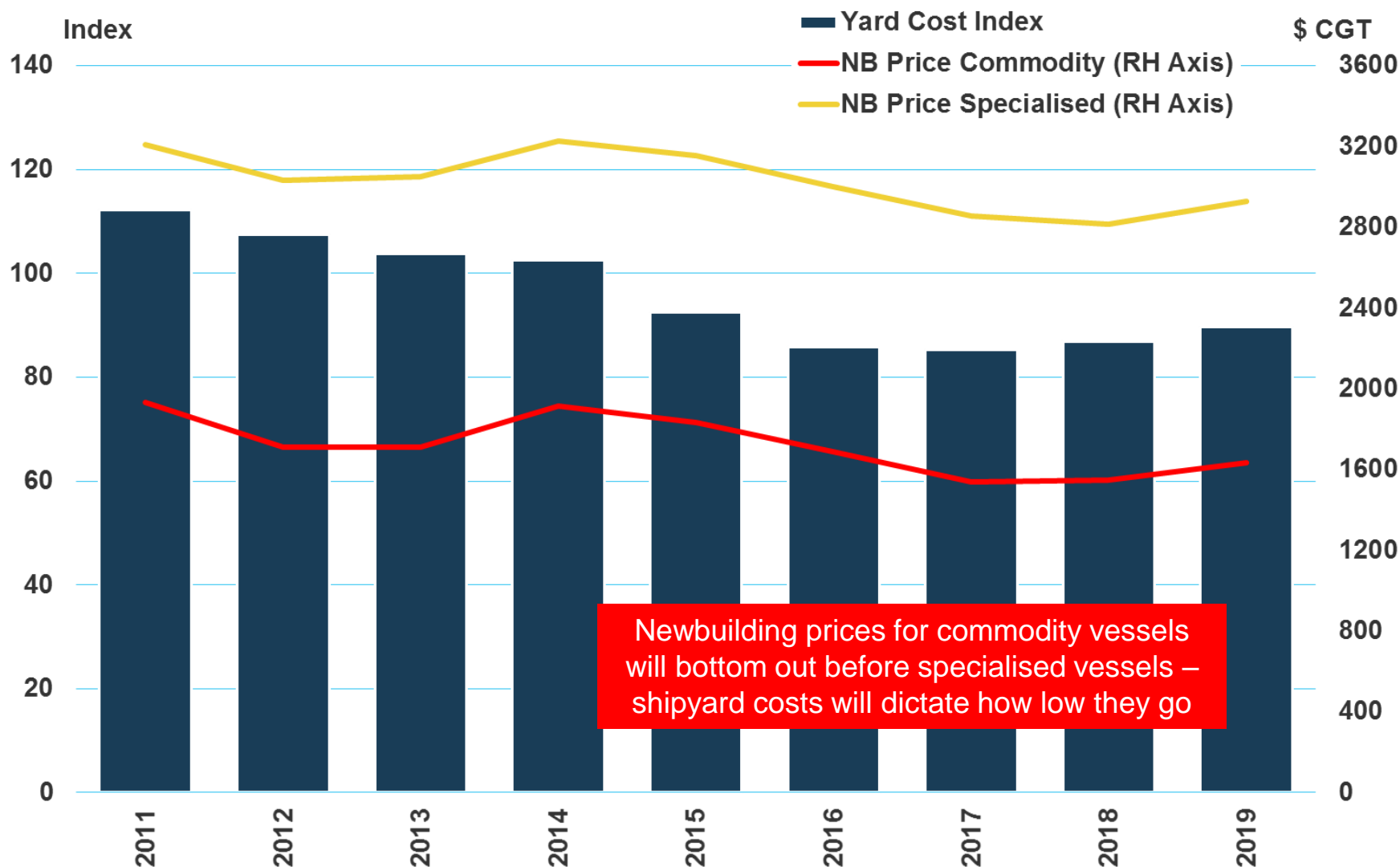


# Forward Cover & Newbuilding Price



Forward Cover = Global Shipyard Orderbook/Global Shipyard Capacity

# NB Prices to Slide – Cost Floor Met



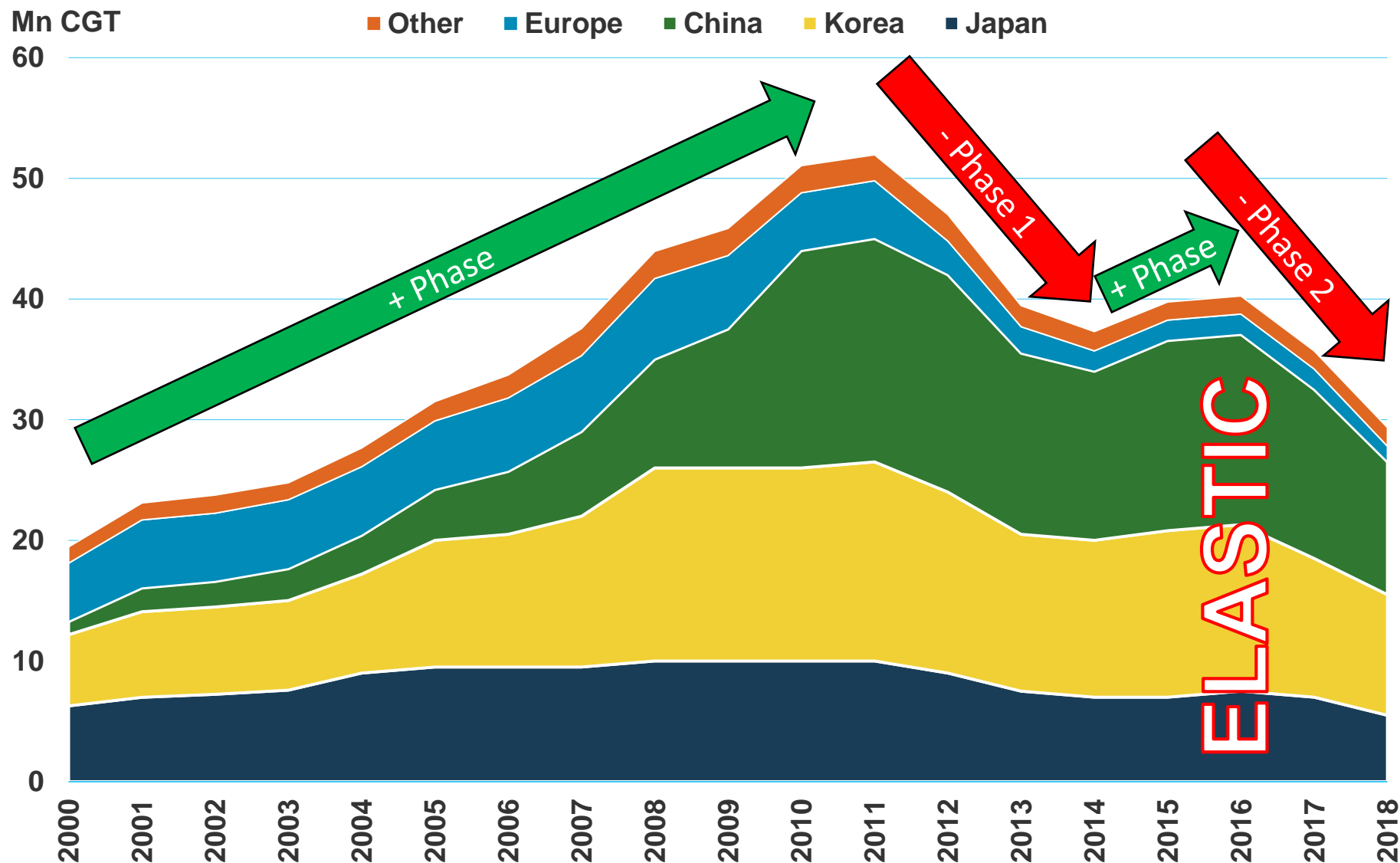
Newbuilding prices for commodity vessels will bottom out before specialised vessels – shipyard costs will dictate how low they go

Commodity = oil tanker, bulk and container, Specialised = all other merchant shipping sectors





# Shipyard Capacity Is a Worry



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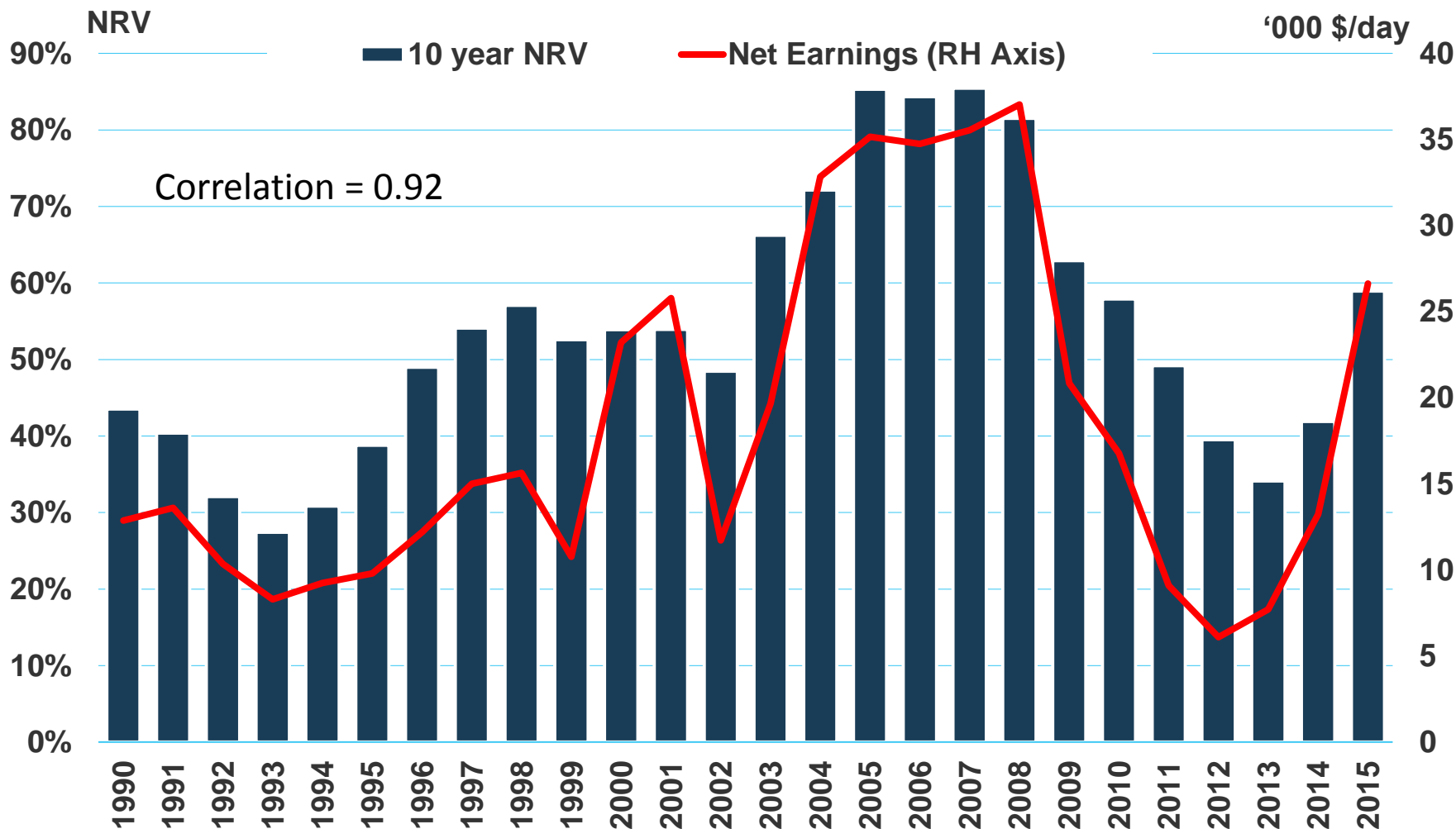
# Secondhand Prices



• NRV depreciation =

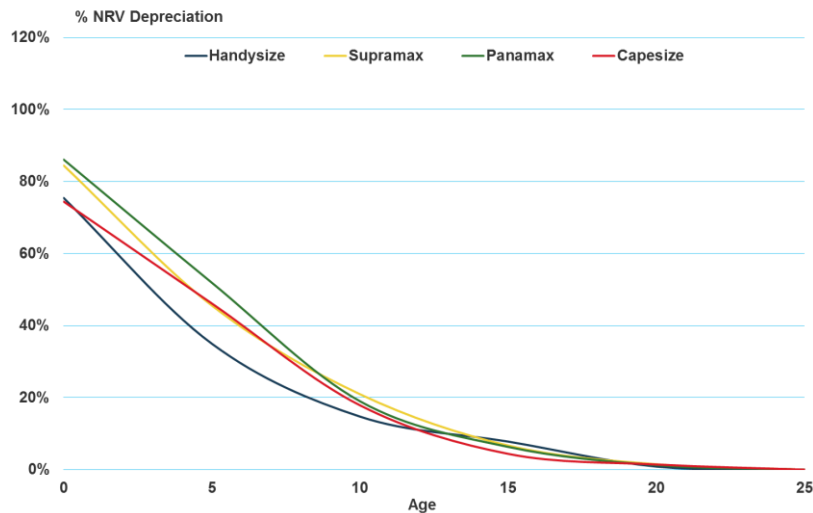
$$\frac{(2^{\text{nd}} \text{ hand price} - \text{scrap price in YoS})}{(\text{Newbuilding price in YoS} - \text{scrap price in YoS})}$$

## Suezmax Tanker

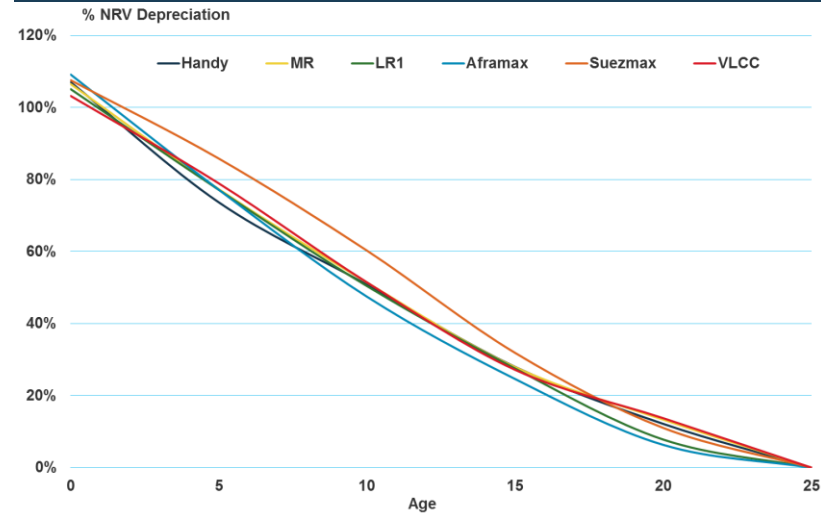


# Current NRV Depreciations Compared

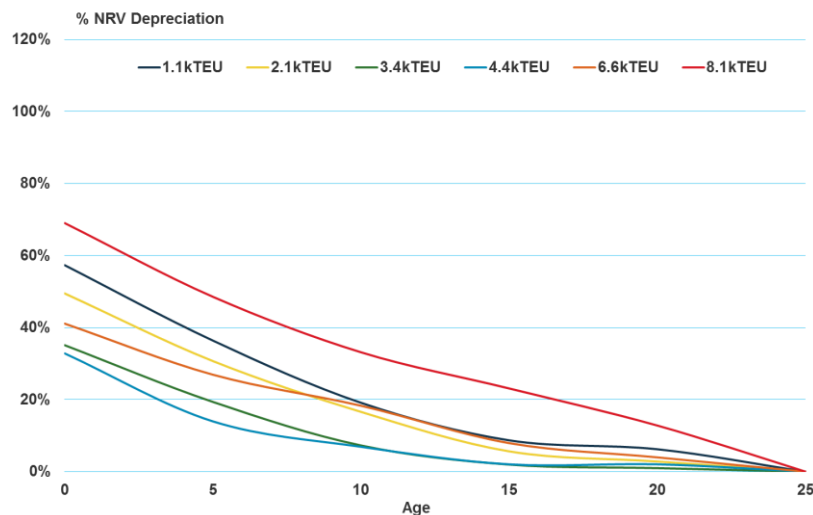
## Bulkers



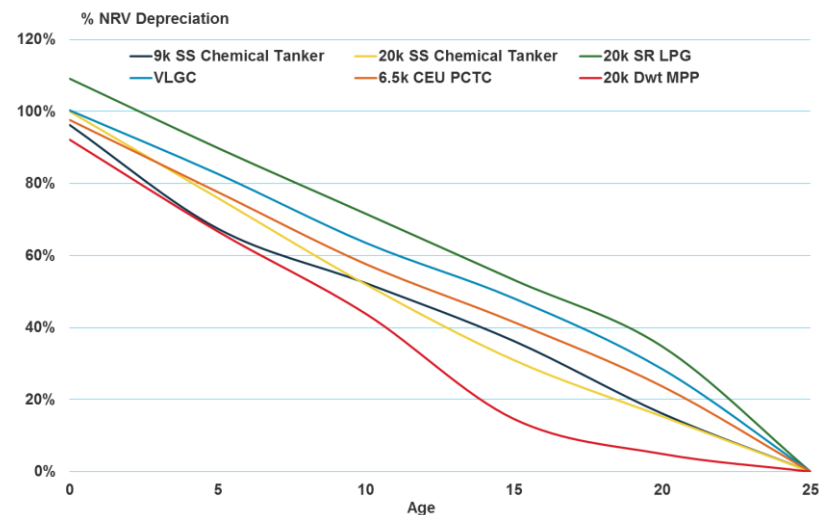
## Oil Tankers



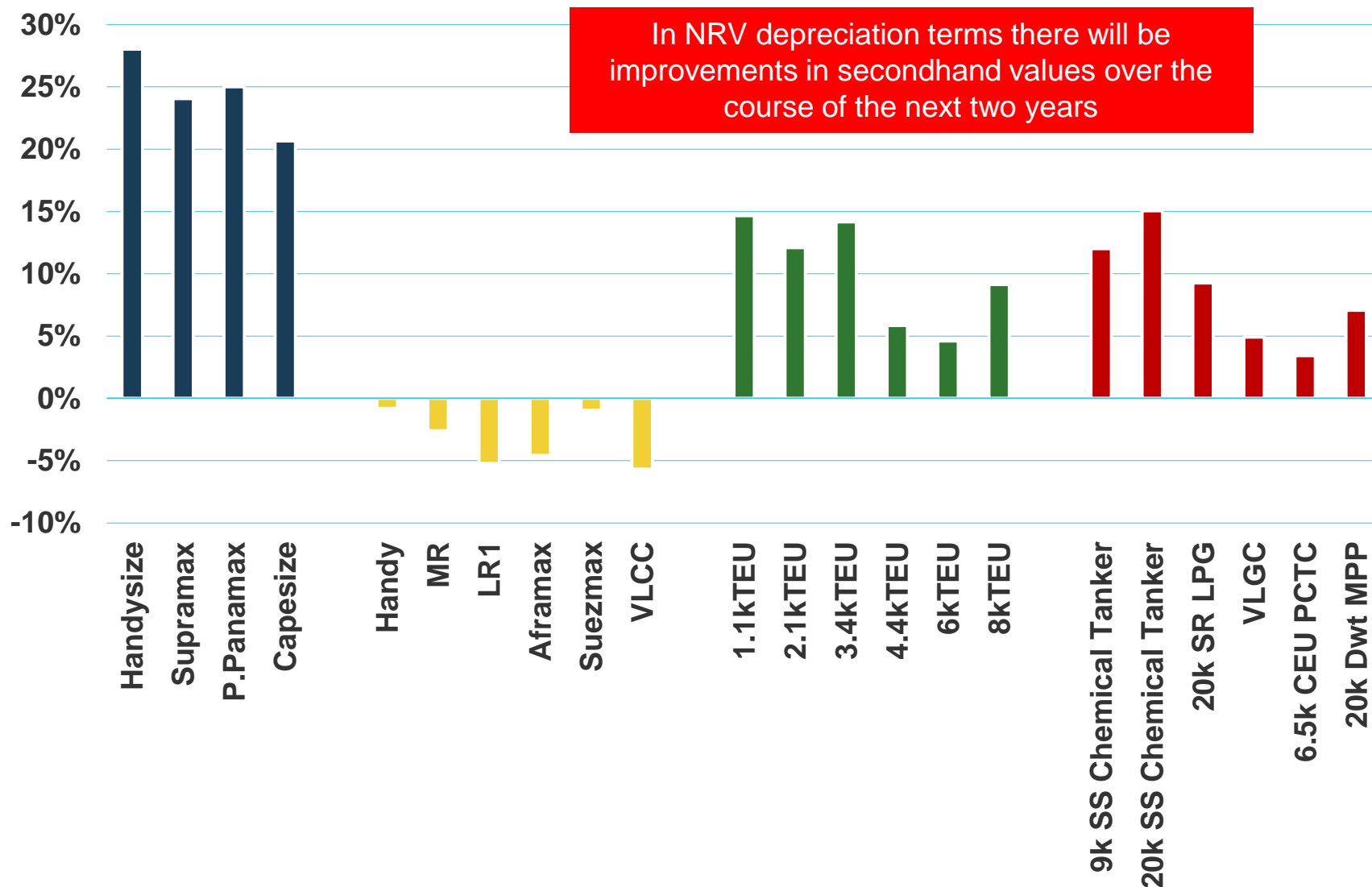
## Containers



## Specialised Sectors



# 2018 5 Year Old NRV Depreciation - Net Position versus Today



From the Weeds to the Trees

# Where to Plant Your Cash





- MSI Forecast Marine eValuator (FMV) is the first **web-based** tool to provide **forecast and historical price data** covering virtually all of the deepsea shipping fleet.
- Data includes **forecasts of newbuilding, second-hand prices, 1 year timecharter rates and operating costs** for specific vessels.
- MSI FMV draws on MSI's **proven, proprietary models** and a consistent cross-sectional view across all principal shipping sectors. It puts asset values in the context of the near term market to enable reliable benchmarking with outputs based on annual averages.
- Coverage:



Crude Oil Tanker



Chemical Tanker



Multi Purpose



Product Oil Tanker



LPG Carrier



Containership



Dry Bulk Carrier



LNG Carrier



PCC/PCTC

[www.msiltd.com/fmv](http://www.msiltd.com/fmv)

## Vessel Forecast Data

### Vessel Details

Vessel Name: MM NYC 2016  
 Sector: Oil Tanker  
 Size (Dwt): 160000  
 Year of Build: 2013  
 Ice Class: None

Country of Build: South Korea  
 Yard Tier: Tier 1  
 Tank: Crude  
 Efficiency: 0

### Forecast Details

Downloaded: 22 Jun 2016  
 MSI Base Case: v162.1  
 Downloaded By: Adam Kent  
 Downloaded For: Maritime Strategies International Ltd.

### Quarterly average timeseries

	2016 Q1	2016 Q2	2016 Q3	2016 Q4
Fair Market Value (\$ Mn)	62.9	58.8	58.0	56.6
1 Yr T/C (\$ k/day)	35.6	29.9	28.8	30.7

### Annual average timeseries

	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022
Newbuilding Contract Price (\$ Mn)	65.7	60.3	58.4	67.6	66.3	61.8	56.7	55.8	58.3	60.7	64.2	66.3
Age (years)	-	-	0	1	2	3	4	5	6	7	8	9
Fair Market Value (\$ Mn)	-	-	56.5	66.6	68.1	59.1	51.1	48.0	47.5	47.6	47.2	46.1
1 Yr T/C (\$ k/day)	-	-	15.9	21.4	35.0	31.3	26.8	24.9	28.3	33.3	34.5	29.9
Operating Costs (\$ k/day)	-	-	8.0	8.1	8.2	8.2	8.4	8.9	9.1	9.4	9.7	9.9



[www.msiltd.com/fmv](http://www.msiltd.com/fmv)

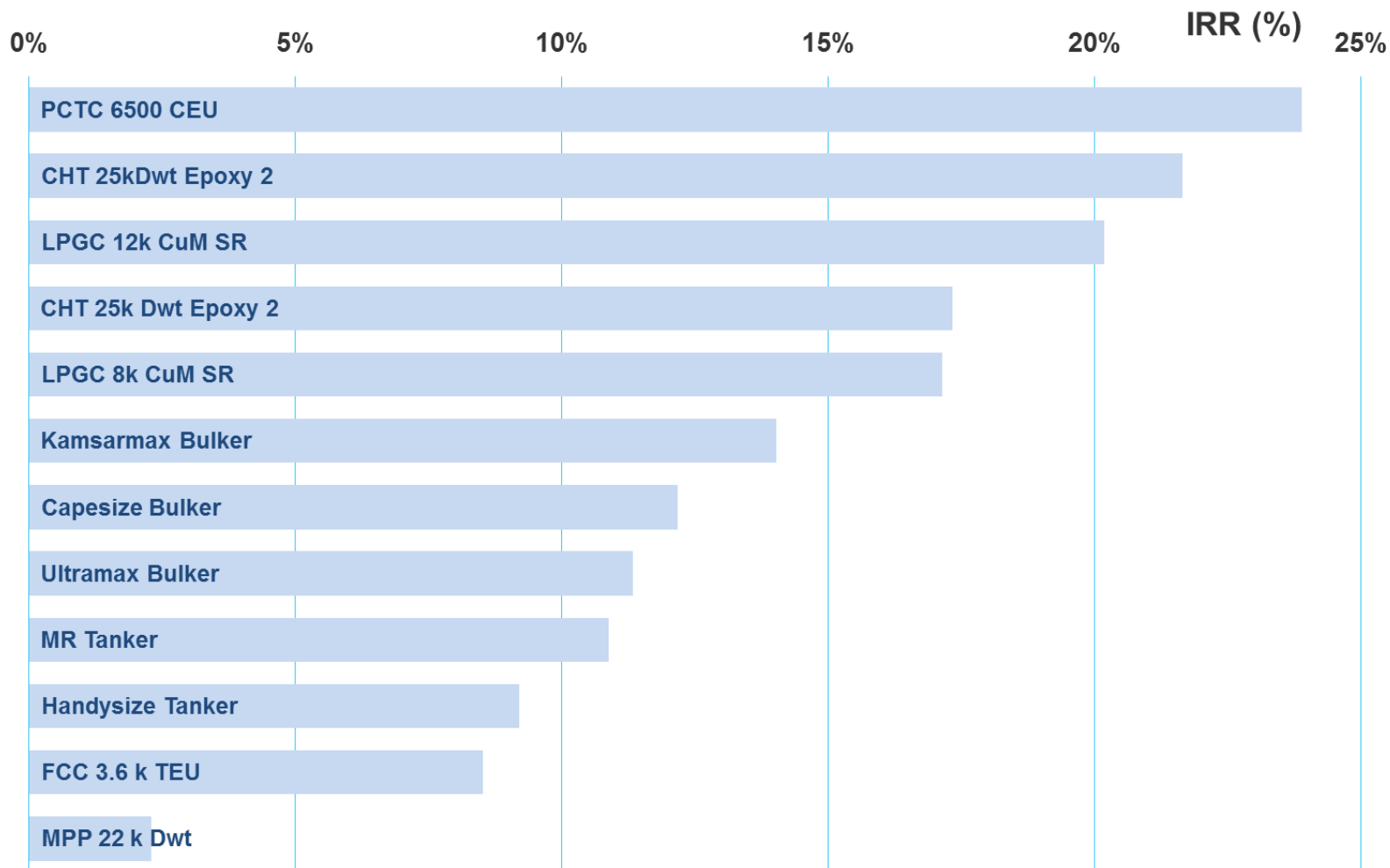
Quarterly Fair Market Value & 1 Year Time Charter Rate (1Q history, current Q, 2Q forecast)

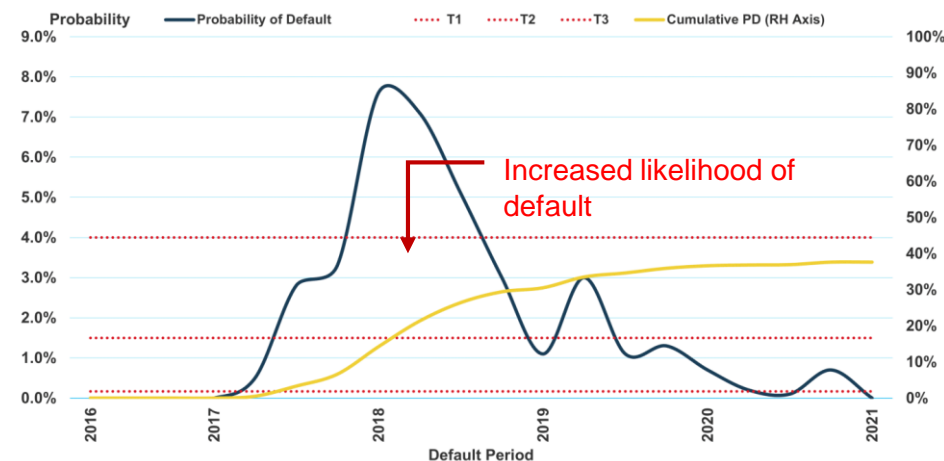
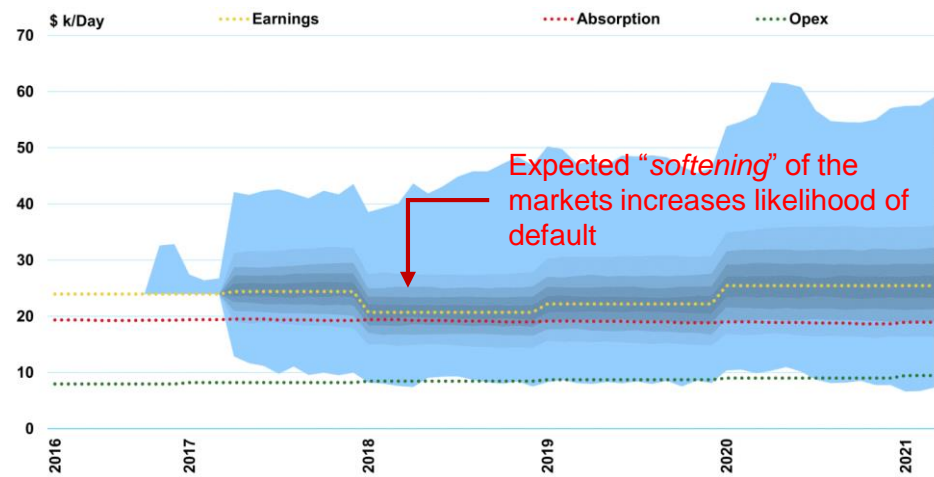
Annual average:

- Newbuilding contract price
  - Fair Market Value
  - 1 Year Time Charter Rate
  - Operating Cost
- 5 years history and 15 years forecast

Price Development Chart detailing forecast price development in relation to historical metrics

# \$25 Mn to invest in shipping... which vessel should I buy?





Descriptive Statistics	MSI Approach	Traditional Shipping
Earnings forecasts (Cycles accommodated)	Yes	No
Conditional (time varying) volatility	Yes	No
Opex and scrap value forecasts (model derived)	Yes	Yes
Ability to stress the forecasts with endogenous and exogenous scenarios	Yes	Only Proxy Based
Stable calibration procedures	Yes	No
Copula based dependency	Yes	No
Model based Enforcement delays	Yes	No
Costs estimates for enforcements	Yes	Only anecdotal experience
Model based (time varying) recovery estimates	Yes	No
Risk based pricing tool for asset values	Yes	No
Accommodate credit enhancements (cash cushions, dividend payouts etc.)	Yes	Subjective or experience based
Sensitivity to input parameters	Yes	No

The model is similar to those applied by rating agencies, but with enhanced data, econometrics and inputs. The model incorporates volatility wrapped around cyclical trends, enforcement and recovery scenarios and targeted optimisation of loan structure

*“Keep an eye out for crosswinds,  
when the weeds meet the trees”*

Kent, MM NYC 2016

**Thank You**



For over 30 years, MSI has developed integrated relationships with a diverse client base of financial institutions, ship owners, shipyards, brokers, investors, insurers and equipment and service providers.

MSI's expertise covers a broad range of shipping sectors, providing clients with a combination of sector reports, forecasting models, vessel valuations and bespoke consultancy services.

MSI is staffed by economists and scientists offering a structured quantitative perspective to shipping analysis combined with a wide range of industry experience.

MSI balances analytical power with service flexibility, offering a comprehensive support structure and a sound foundation on which to build investment strategies and monitor/assess exposure to market risks.



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