



Team Tankers International

Chemical tanker industry



Agenda

Team Tankers

Chemical tanker business

Market outlook

Chemical tanker operators

Summary

TEAM | A Leading Chemical Tanker Company

Global Enterprise

~\$300 million in annual revenue.

~\$265 million equity market capitalization

OSE listed under ticker: TEAM

40 Vessels (30 owned, 10 charters).

33 % Stainless Steel / 67 % Coated.



Westport | Copenhagen | Singapore
Marbella

Strategic focus

The Company's strategic focus is on:

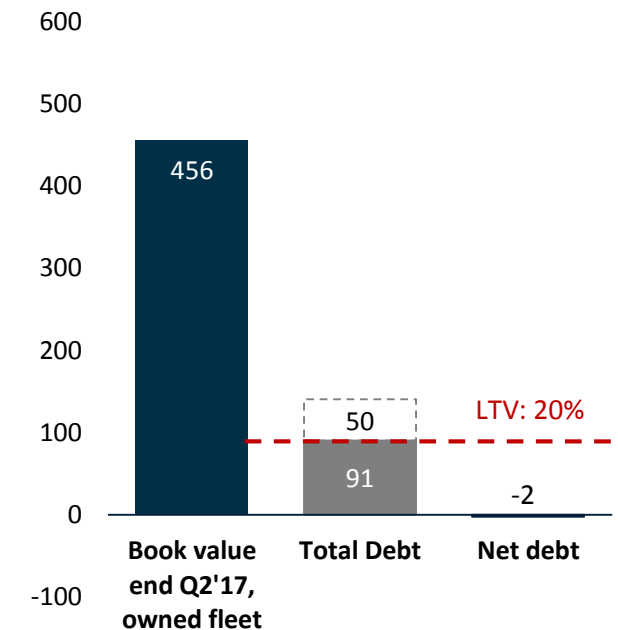
- **Regional stainless steel ships** (11 vessels).
- **Regional coated ships** (18 vessels).
- **IMO 2 deep sea coated ships** (10 vessels).

Strong Balance Sheet

79 % Book equity ratio.

\$143 million in liquidity.*

Capacity to leverage existing fleet.



* Cash plus undrawn credit of \$50 million, as of Q2 2017.

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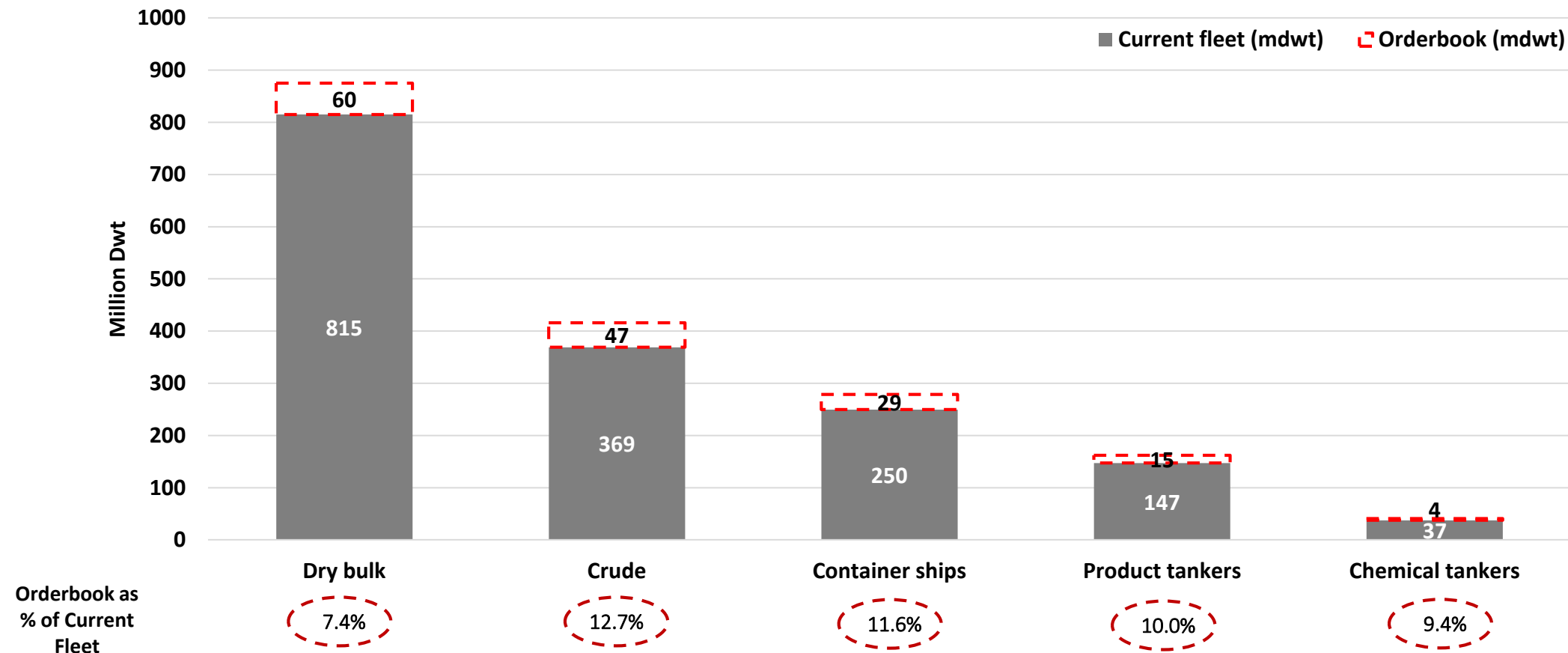
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Business | The global merchant fleet

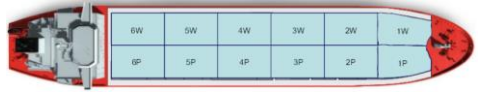

Relative to other classes of merchant vessels, the chemical tanker fleet is small and highly specialized.



Source: Grieg, Drewry, Team

Business | Chemical MR vs Product MR

Most IMO II MR product tankers could not be redeployed to compete with true MR chemical tankers

	MR Product Tanker (IMO II/III)	MR Chemical Tanker (IMO II)	
			
Tanks	Centerline bulkhead with 12 4,500 cbm tanks	All tanks smaller than 3,000 cbm	<ul style="list-style-type: none"> ▶ 3,000 cbm maximum parcel size for chemicals ▶ Product tankers carrying chemicals cannot optimize utilization because the tanks are larger than the maximum allowed parcel size
Inert system	Exhaust-/flu gas	Nitrogen gas generator	<ul style="list-style-type: none"> ▶ A nitrogen gas inert system is required for sophisticated chemical cargos ▶ Retrofitting a product MR for chemical cargos with a nitrogen inert system would require substantial investment (~\$2-5mm)
Deepwell pump design	Typically six segregations	Minimum 16 tanks up to 40+ tanks Separate line and pump for each tank	<ul style="list-style-type: none"> ▶ Coated IMO II Chemical MRs typically have no more than 20-22 tanks and segregations
Tanks	Epoxy coated	Epoxy, zinc, interline coated	<ul style="list-style-type: none"> ▶ Most sophisticated, high-margin chemical cargoes require stainless, zinc or interline coated tanks
Cargoes	Clean and dirty petroleum products Veg. oils, palm oils, CSS (IMO III)	Sophisticated and specialty chemicals and acids in stainless tanks Easy chemicals, aromatics, veg. oil, palm oil and CSS in coated tanks	<ul style="list-style-type: none"> ▶ Chemical MRs primarily lift chemicals as opposed to standard product MRs which primarily carry CPP/DPP

Business | Overview of chemical tankers cargoes

	Major cargoes	Characteristics
Organic chemicals	<ul style="list-style-type: none">▶ Aromatics / BTX (Feedstock)▶ MEG (Plastics, fibers)▶ EDC (PVC plastic)▶ Speciality chemicals (Pharmaceuticals)	<ul style="list-style-type: none">▶ Largest volume of chemicals transported▶ Closely tied to manufacturing sector▶ Feedstock for fibers, plastics, coatings and paints
Inorganic chemicals	<ul style="list-style-type: none">▶ Sulphuric acid (Fertilizer and mining industry)▶ Phosphoric acid (Fertilizer industry)▶ Caustic soda (Paper and aluminium)	<ul style="list-style-type: none">▶ Acids are very corrosive and therefore requires stainless steel tanks▶ Requires strict operational and safety standards
Veg. oils and other	<ul style="list-style-type: none">▶ Veg. oils (Detergents, food industry)▶ Soy bean oils (Detergents, food industry)▶ Rapeseed oils (Detergents, food industry)▶ Tallow (Detergents, food industry)	<ul style="list-style-type: none">▶ Veg. oils are the primary feedstock for biofuels▶ Demand is highly correlated with population growth and urbanization
CPP / DPP	<ul style="list-style-type: none">▶ Refined oil products▶ Clean and dirty	<ul style="list-style-type: none">▶ Motor fuels and electricity generation▶ Prime market for product tankers and swing market for chemical tankers

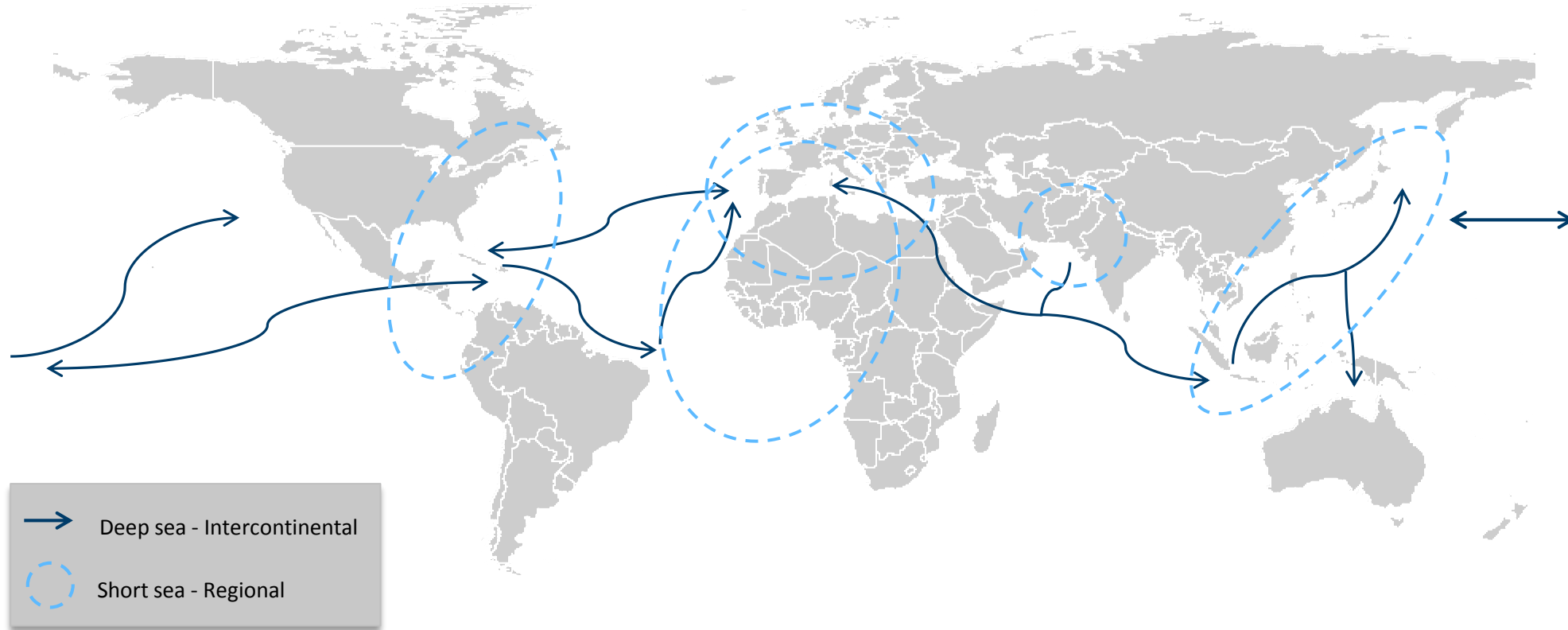
Business | IMO type chemical tankers ¹⁾

IMO type I	IMO type II	IMO type III
<ul style="list-style-type: none"> ▶ A chemical tanker intended to transport products with <u>very</u> severe environmental and safety hazards, which require maximum preventive measures to preclude an escape of such cargo 	<ul style="list-style-type: none"> ▶ A chemical tanker intended to transport products with <u>appreciably</u> severe environmental and safety hazards, which require significant preventive measures to preclude an escape of such cargo 	<ul style="list-style-type: none"> ▶ A chemical tanker intended to transport products with <u>sufficiently</u> severe environmental and safety hazards, which require a moderate degree of containment to increase survival capability in a damaged condition
Typical cargo types		
<ul style="list-style-type: none"> ▶ Chlorosulphonic acid ▶ Decyl acrylate ▶ Metam sodium solution ▶ Nonylphenol ▶ Phosphorus 	<ul style="list-style-type: none"> ▶ Phenol ▶ Xylenes ▶ EDC ▶ ACN ▶ Veg. oil 	<ul style="list-style-type: none"> ▶ Caustic soda ▶ Methanol ▶ Styrene ▶ MEG
Vessels		
<ul style="list-style-type: none"> ▶ Very few vessels (all with stainless steel tanks) 	<ul style="list-style-type: none"> ▶ Chemical tankers - Both coated and stainless steel tanks ▶ TEAM tonnage is in this category 	<ul style="list-style-type: none"> ▶ Chemical tankers - Product tankers with IMO III notation can obtain a certificate to transport veg. oil, veg. oil and certain IMO III products

Source: International Maritime Organization, IMO. 1) Products defined in chapter 17 of the International Bulk Chemical Code

Business | Main trade lanes

In 2016, approximately 280 million metric tons were carried across the main chemical trade lanes.



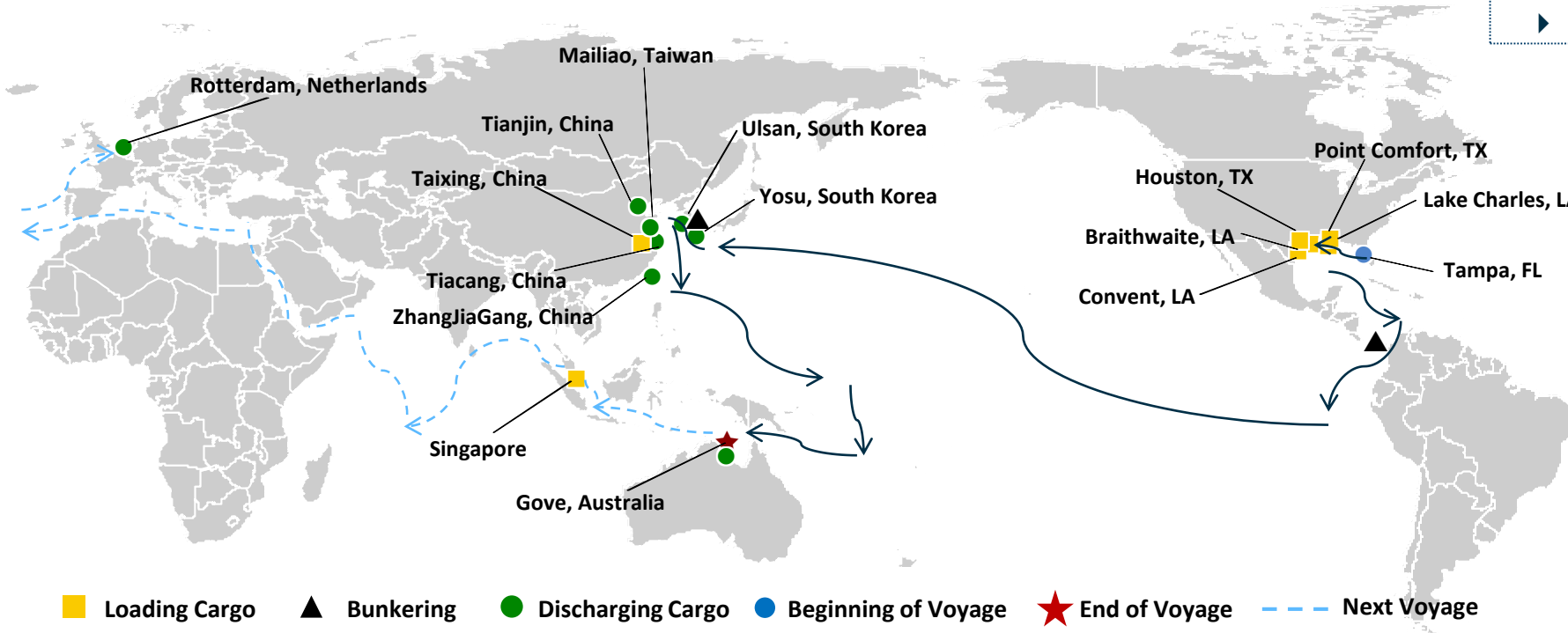
Source: Clarksons Platou

Business | Chemical tanker parcelling

- A typical chemical tanker voyage includes multiple types of cargoes for multiple customers with several loading and discharge ports
- In contrast to operating a crude or product tanker, where a typical voyage involves a single cargo for a single customer loaded at one port and discharged at another, the successful operation of a fleet of chemical tankers requires a highly sophisticated, complex logistics organization

Illustrative MR voyage key data

- ▶ 98 on-hire days
- ▶ 14 port calls (seven load ports, seven discharge ports)
- ▶ Six customers
- ▶ 59% CoA / 41% spot cargos
- ▶ Five cargo types



Business | Barriers to entry

Stringent customer vetting requirements	<ul style="list-style-type: none">▶ Due to the caustic nature of the cargoes and the high environmental sensitivity of the customer base, operators are subject to stringent vetting requirements▶ A long history of positive third-party inspection reports is necessary for access to many cargoes
Parcel nature of cargoes	<ul style="list-style-type: none">▶ Small parcel sizes and greater breadth of cargoes require specialized vessels and more complex operations than is required to operate crude or product tankers▶ Logistical expertise required to optimize earnings across multiple cargo voyages
Technical complexity	<ul style="list-style-type: none">▶ Multiple load / discharge ports▶ Multiple products for multiple customers on each voyage▶ Infrequent ballast return legs
Limited availability of attractive assets	<ul style="list-style-type: none">▶ Limited yard capacity▶ More sophisticated asset classes largely controlled by a small number of operators
Limited availability of quality people	<ul style="list-style-type: none">▶ Commercial and operations expertise unique▶ Given the technical complexity required for vessel operations, there are fewer qualified seagoing professionals available to work on chemical tankers

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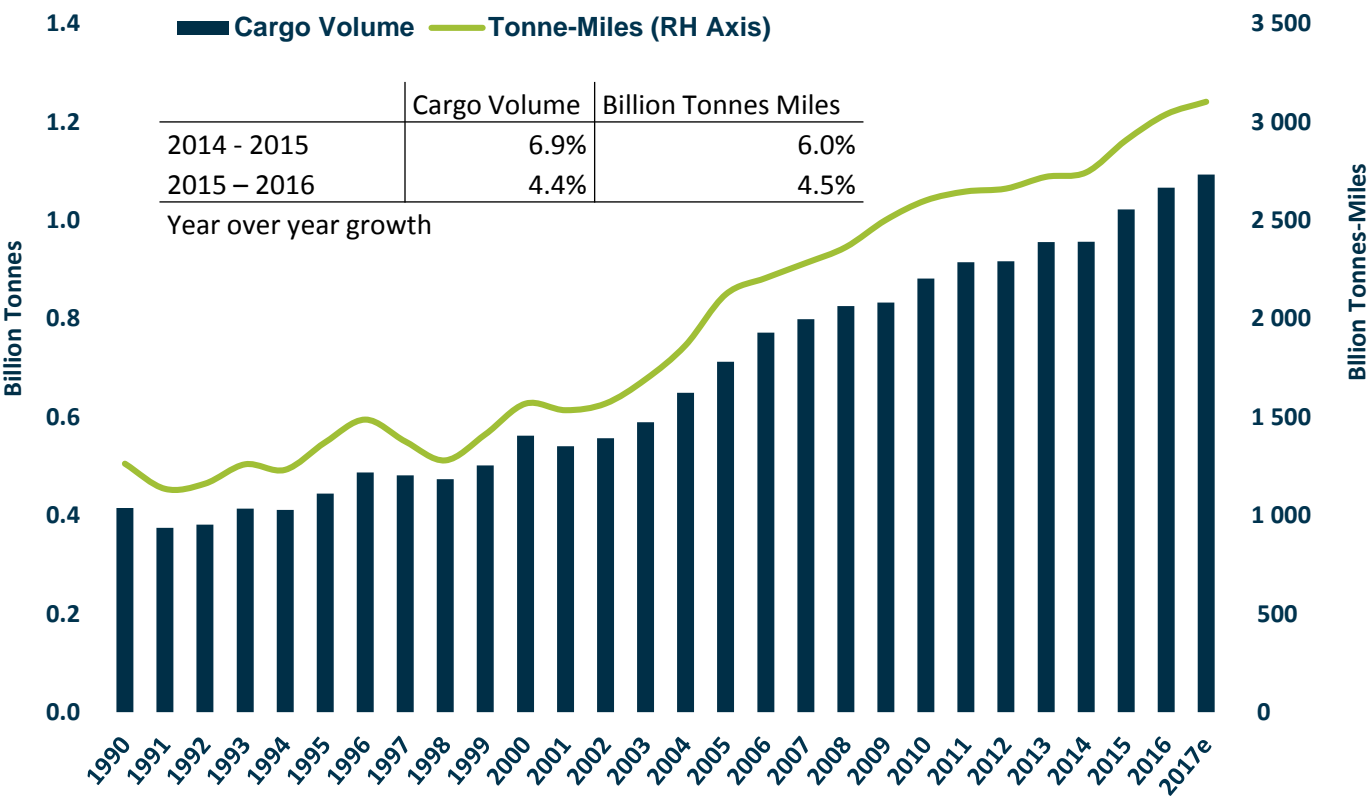
Chemical tanker operators

Summary

Positive Demand Trends

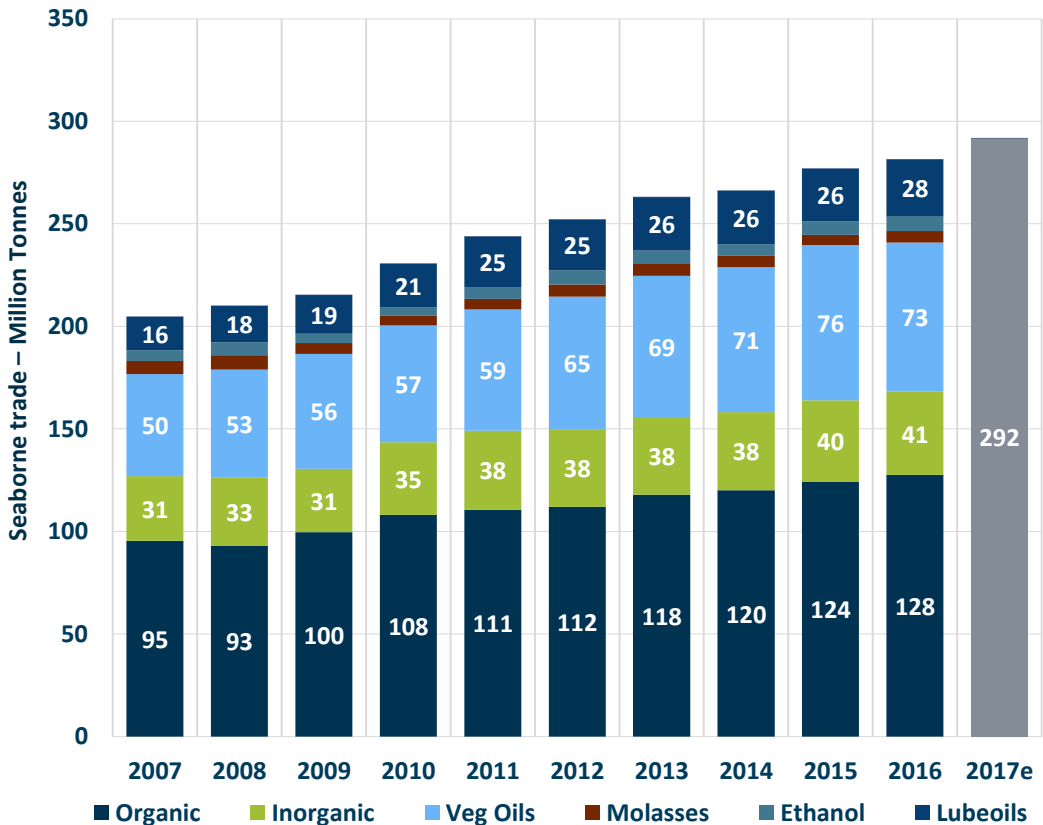
Demand for both refined petroleum products and specialty chemicals continues to show robust growth.

World Seaborne Oil Products Trade



Source: Clarksons Platou

Seaborne Trade Growth by Sub-Group

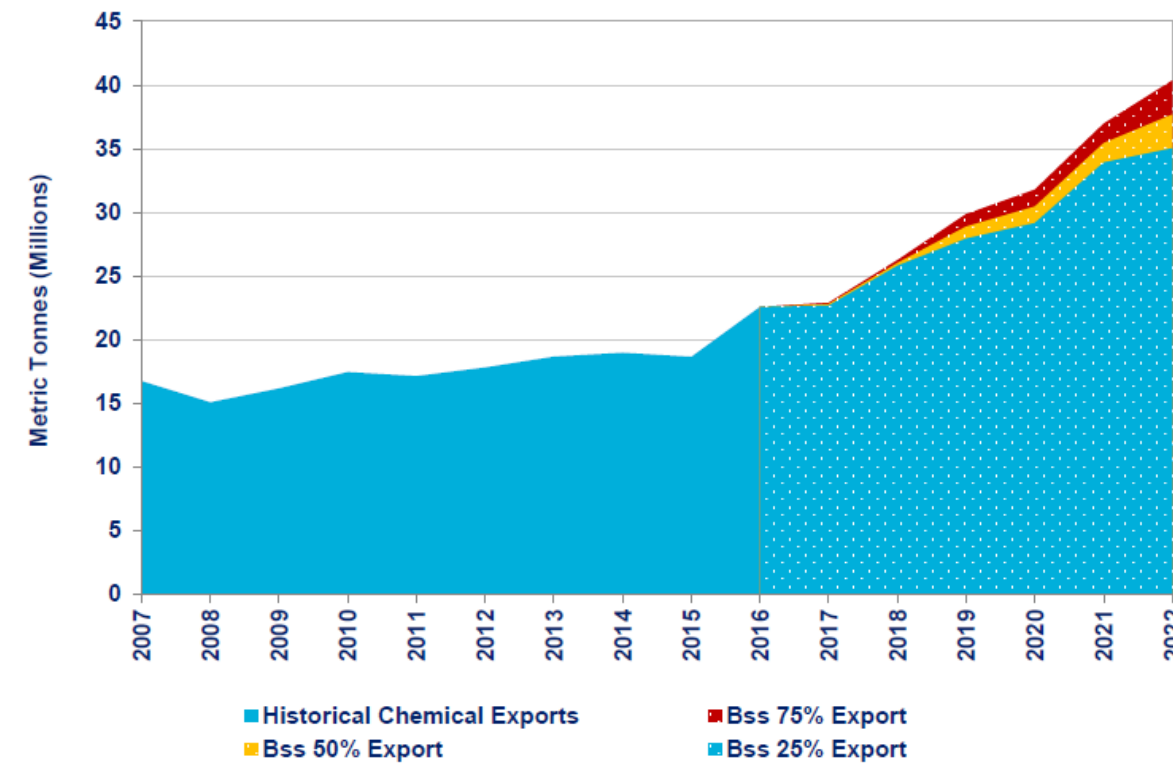


Source: Clarksons Platou

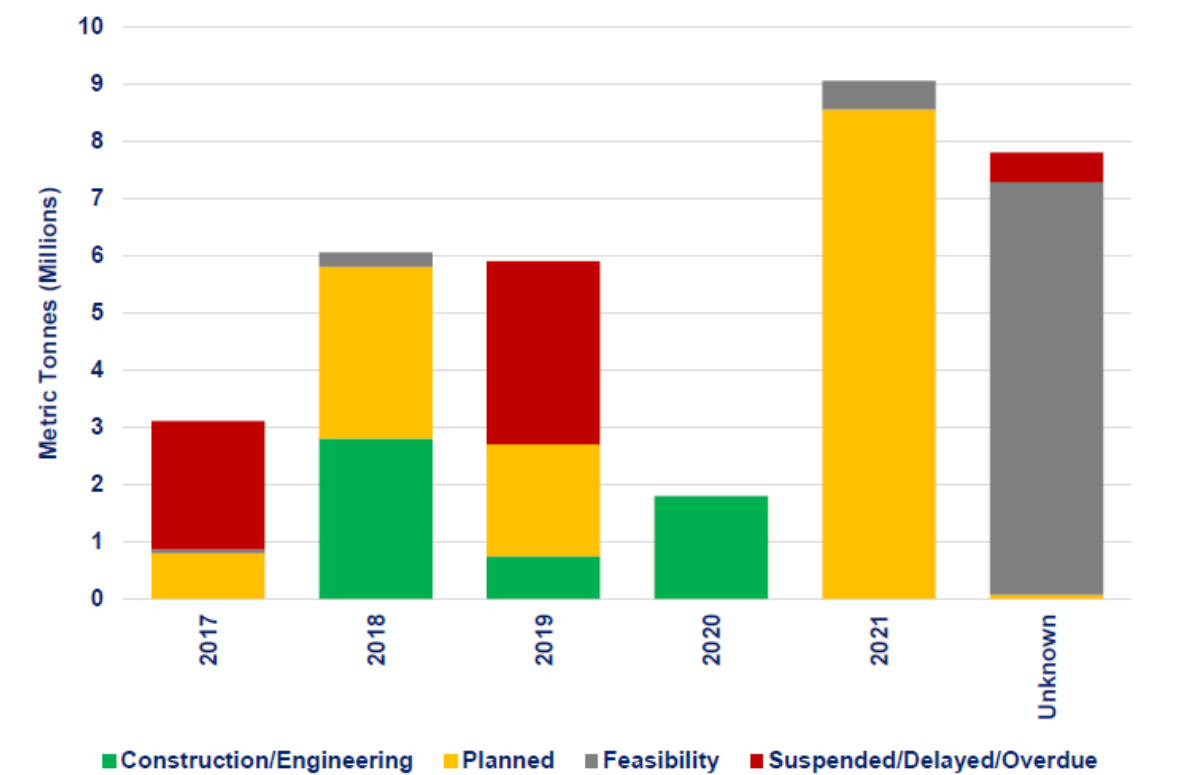
Market | U.S. shale gas – a paradigm shift for the chemical tanker industry

Low relative cost chemical plant inputs in the US Gulf region will drive significant expansion of capacity.

Even the 'Low Case' Would Result in Significant Export Growth



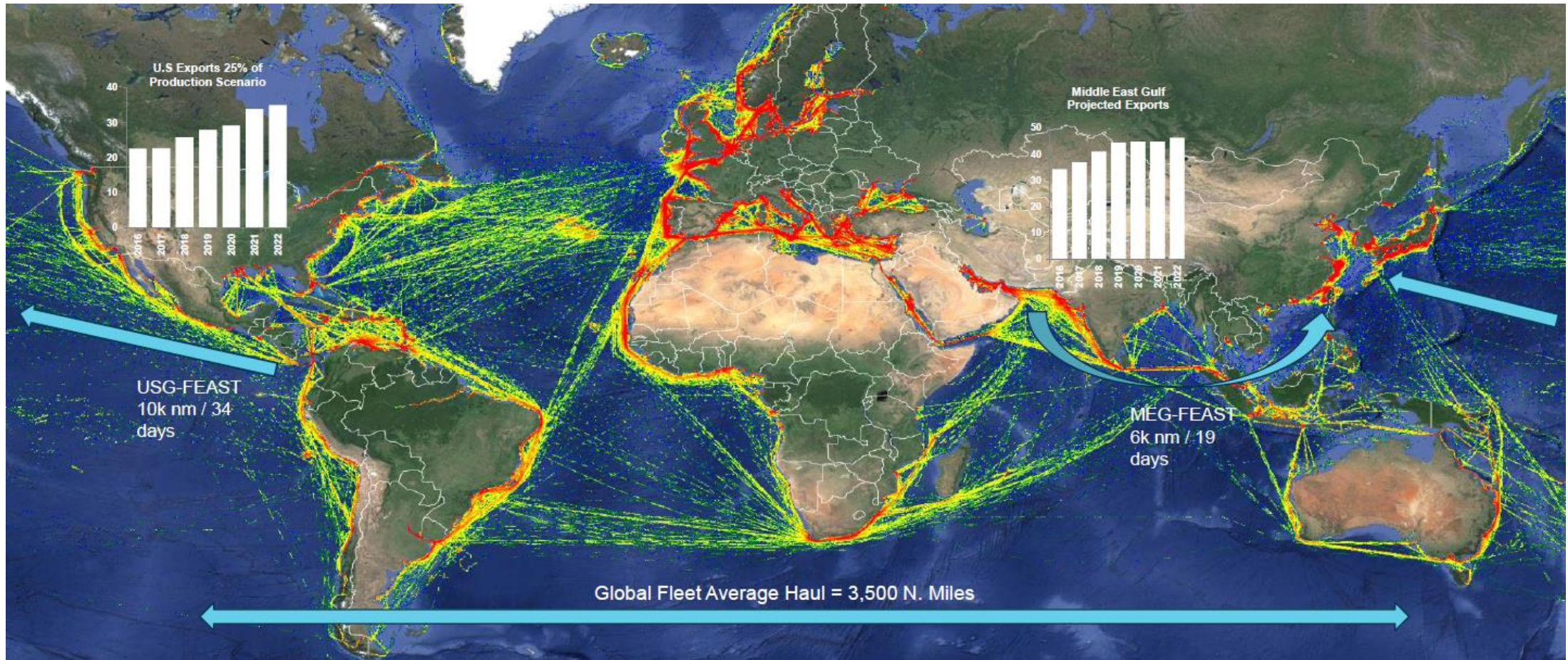
Numerous World Scale Projects Set to Come On-stream



Source: Clarksons Platou

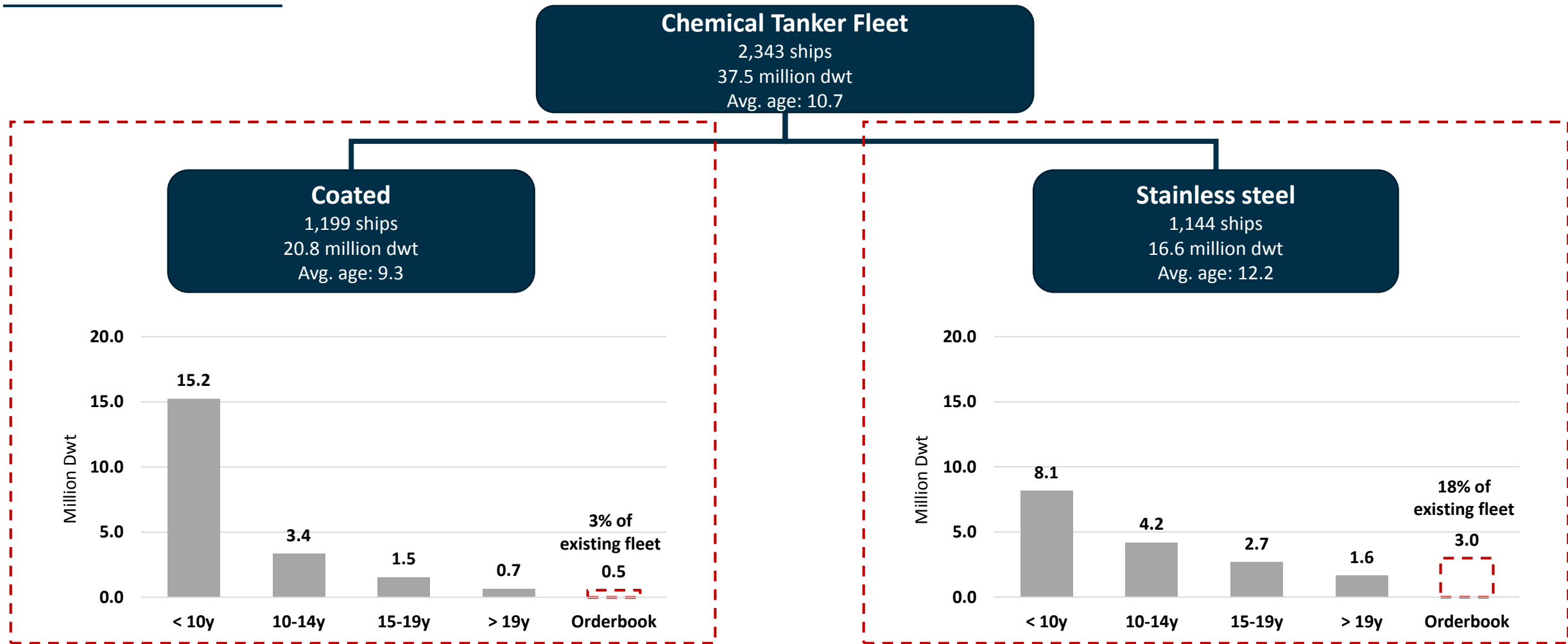
Market | Average haul of chemical fleet set to increase

Burgeoning U.S. exports will drive real dwt demand for tonnage



Source: Clarksons Platou

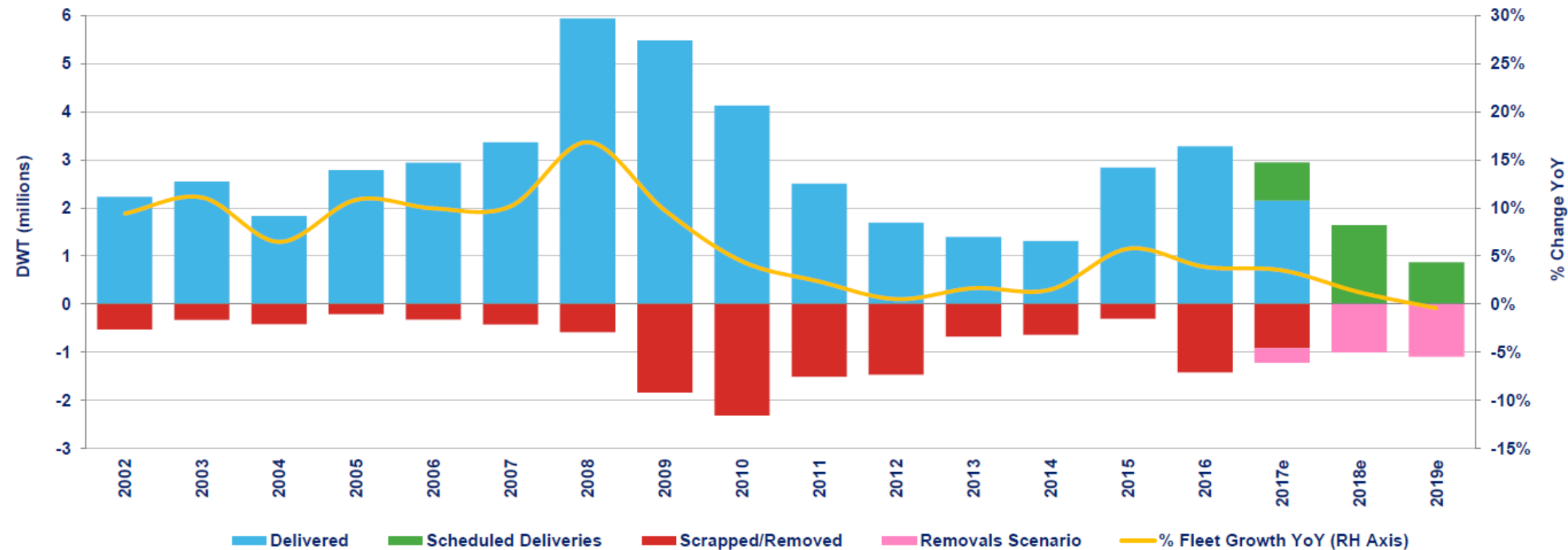
Market | Chemical tanker segments



Source: KTR Drewry, Team. Note: Vessels above 54k Dwt are excluded.

Market | Chemical tanker fleet development and outlook

Fleet growth falling to ~3% in 2017, before contracting significantly in the medium-term



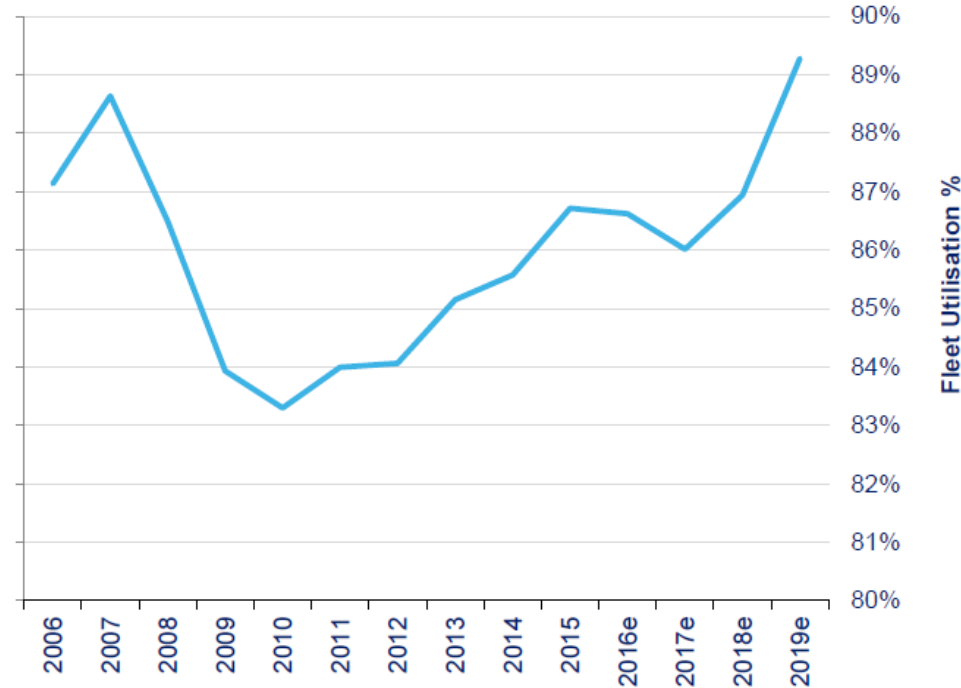
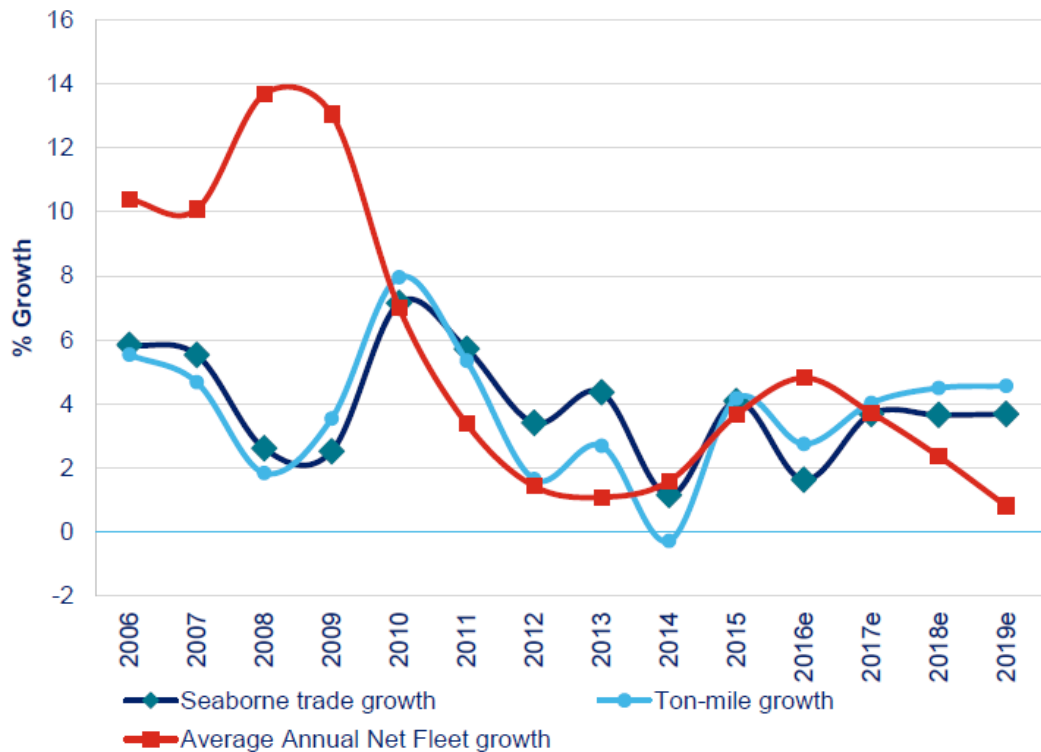
Source: Clarksons Platou

Market | Chemical tanker supply and demand outlook

Positive intermediate term outlook for chemical tankers.

Fleet Growth Should be Well Below Demand Growth 2018 on...

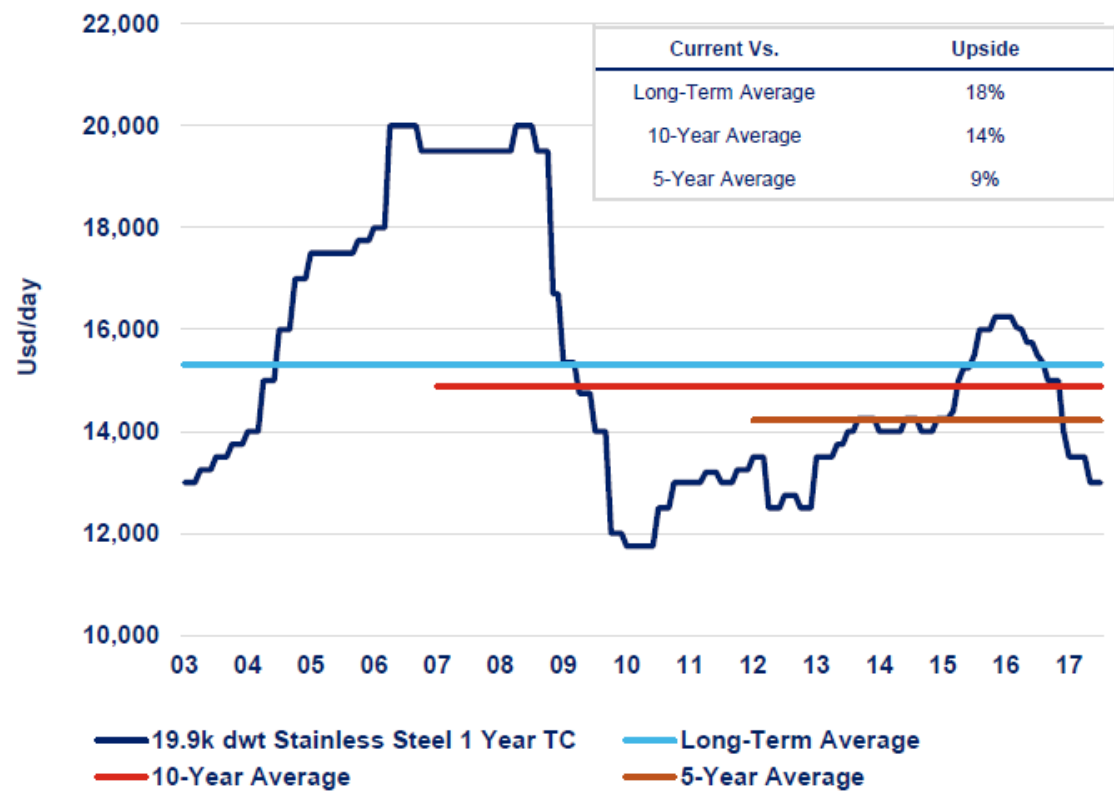
...with Expectation of Improving Utilisation/Rates 2018-2019



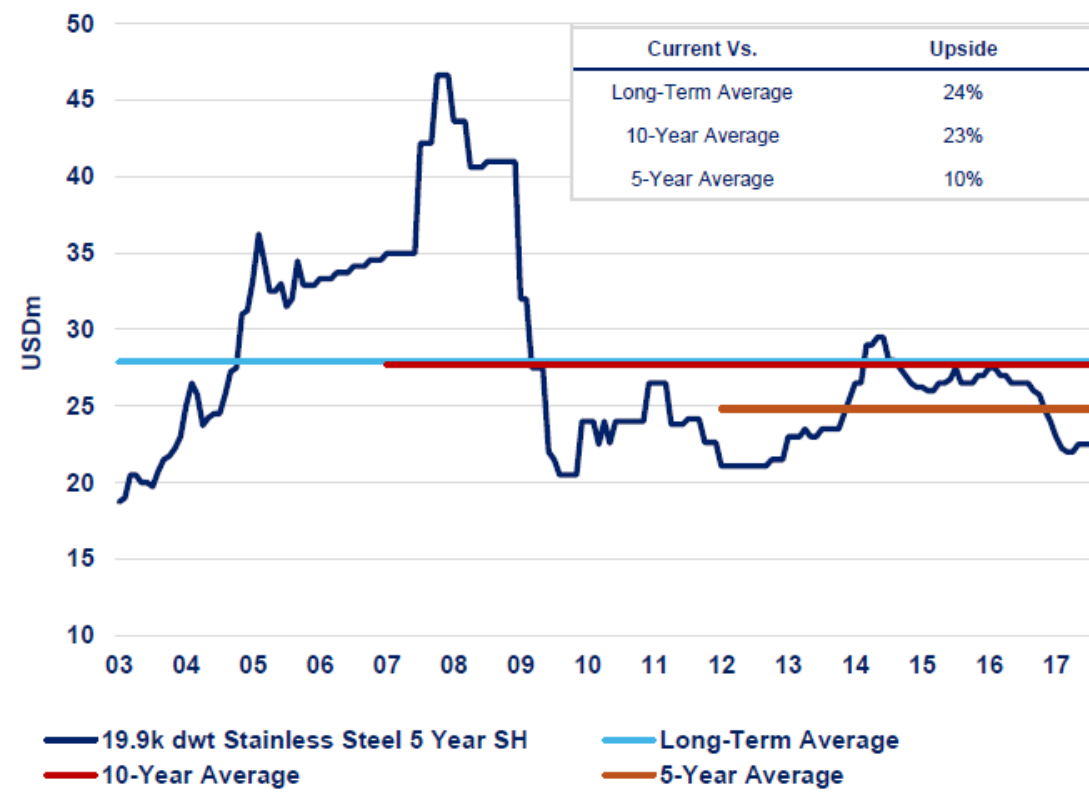
Source: Clarksons

Market | Historical rates and asset values

Historical Chemical Tanker Freight Rates



Historical Chemical Tanker Asset Values



Source: Clarksons Platou

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Chemical tanker operators | Private equity investments

Private equity investors have backed several companies within the chemical tanker market.

Company	Sponsor(s)	Ships
Team Tankers International	Solus, AG, KKR, Cerberus	40
Chembulk Tankers	KKR	29
Navig8 Chemical Tankers	Oaktree	32
Nordic Tankers	Triton	64
Chemical Transportation Group (CTG)	Anchorage	5
Greathorse Chemical	Tiger	12
Total		183

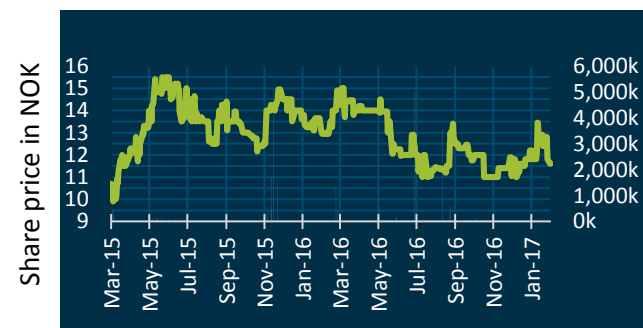
Chemical tanker operators | Publicly traded

Limited options for institutional public equity investors.

Team Tankers

Listed: 9 March 2015
Market cap: \$261 mill

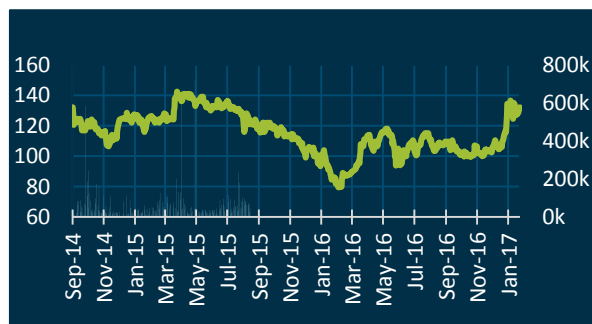
Avg. daily volume: 54,337
Avg. daily value: \$86,051



Stolt Nielsen

Listed: 7 March 2001
Market cap: \$926 mill

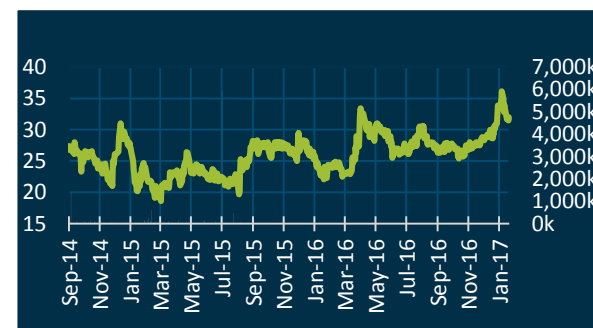
Avg. daily volume: 45,492
Avg. daily value: \$672,945



Odfjell

Listed: 5 May 1986
Market cap: \$292 mill

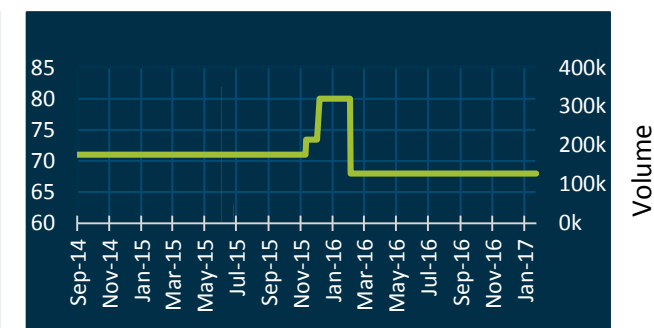
Avg. daily volume: 53,187
Avg. daily value: \$186,564



Navig8

Listed: 11 August 2014
Market cap: \$333 mill

Avg. daily volume: 591
Avg. daily value: \$5,539



Note: Market cap per 20 September 2017 basis USDNOK 7.860. Avg. daily volume and value last three years.

Chemical tanker operators | Consolidation

There is a clear need for consolidation in the chemical tanker market

- The chemical tanker market recognizes the need for consolidation and there are signs that more owners realize that their size limits interest from the capital markets.
- Barriers to entry also create real economies of scale when combining platforms.

Hans Feringa, Shippingwatch 2017

"The market is clearly in need of consolidation, as there are too many small companies. The signs of this happening are there. Some tankers have been divested, and we've seen chemical transport groups merge."

Hans Feringa, Q3 2016 results

"With very low leverage, Team is well-positioned to capitalize on strategic opportunities that will drive further consolidation of the chemical tanker industry."

Hans Feringa, TradeWinds 2016

"We are certainly looking at potential consolidation ourselves, and we are in discussion with various parties to look at that."

"We'd like to add a significant number of ships"

Hans Feringa, Q4 2016 results

"Despite a weaker than expected freight environment, Team Tankers has maintained an industry-leading balance sheet and has the flexibility to pursue a variety of strategic opportunities in the chemical tanker market."

Chemical tanker operators | Consolidation hypothetical

What if all of the private equity backed companies combined?

- TeamNordicBulkHorseCT8
- Largest chemical tanker owner/operator in the world.
- 183 operated vessels covering all major chemical tanker markets and trade lanes.
- Pure play, focused chemical tanker owner operator.
- Combine the value creating elements from 6 leading platforms.
- Total vessel assets of approximately \$2 billion*.
- With conservative leverage, public equity market capitalization in excess of \$1 billion.

* Team estimate.

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Summary | Chemical Tanker Industry

- Value-added, differentiated ocean transportation service
- Higher barriers to entry relative to standard bulk trades
- Continued, consistent demand growth – both ton mile and total ton demand
- Supply side under control and fleet growth reversing
- Attractive cyclical entry point on asset values
- Industry needs to create scale, investable entities

Team Tankers International

