Tanker Market Insight

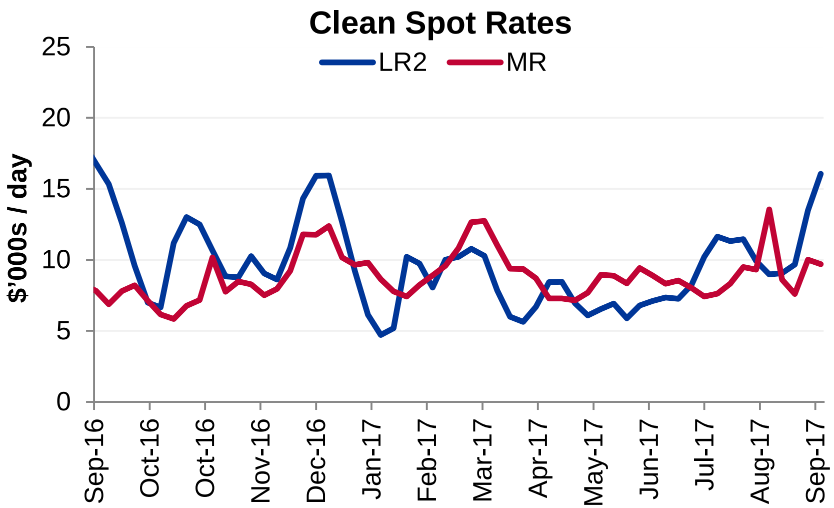
October 2017

Research Department, Strategic Development

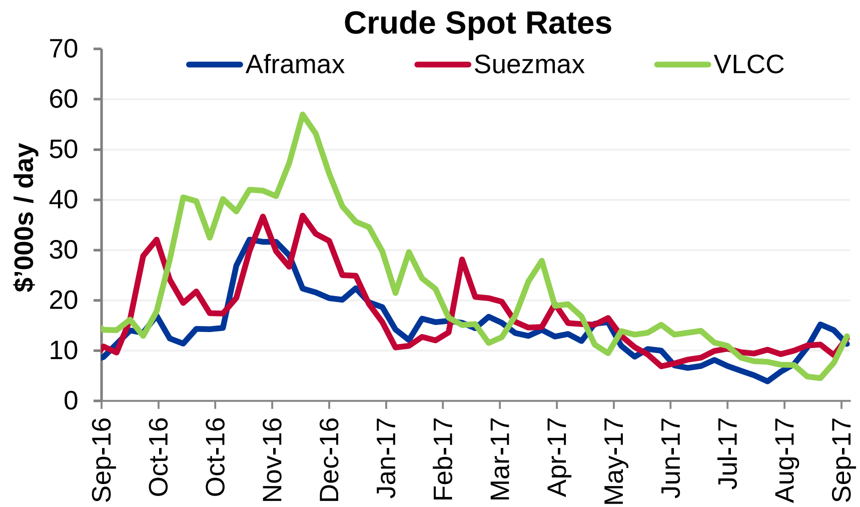
August review: Mid-size tanker rates found support during September from Hurricane Harvey related weather delays in the Atlantic basin, ullage delays in the Pacific, and strong demand from refineries in both Europe and Asia due to high refining margins. VLCC rates sank to a 4-year low at the start of the month, but had recovered by month-end and look set to rise further in October on the back of an increase in long-haul crude exports from the Atlantic to Asia. LR2 rates spiked to the highest level in almost a year during September due to the impact of Hurricane Harvey, an increase in gasoil floating storage and higher naphtha demand in the Far East.

September outlook: Some of the heat may be taken out of the mid-size tanker markets as US Gulf vessel and refining operations return to normal after Hurricane Harvey. However, an increase in Asian crude demand due to strong refining margins should drive more long-haul exports from the Atlantic to Pacific, which is positive for overall ton-mile demand. An increase in refinery throughput as refineries exit seasonal maintenance should also support demand. LR2 rates should remain firm in the short-term, though competition from LR1s could start to impact on rates later in the month.

Wild cards: The Atlantic storm season has been very active so far, with the potential for further storms to form in October and November. Additional storms could cause further disruption to shipping / refining activity in the US Gulf. Turkey has threatened to cut off supplies from the Kurdistan region of Northern Iraq to the port of Ceyhan in response to the Kurdish independence referendum vote last week. ~0.6 mb/d of crude currently flows from Northern Iraq to Ceyhan.



Source: 90% of Clarksons

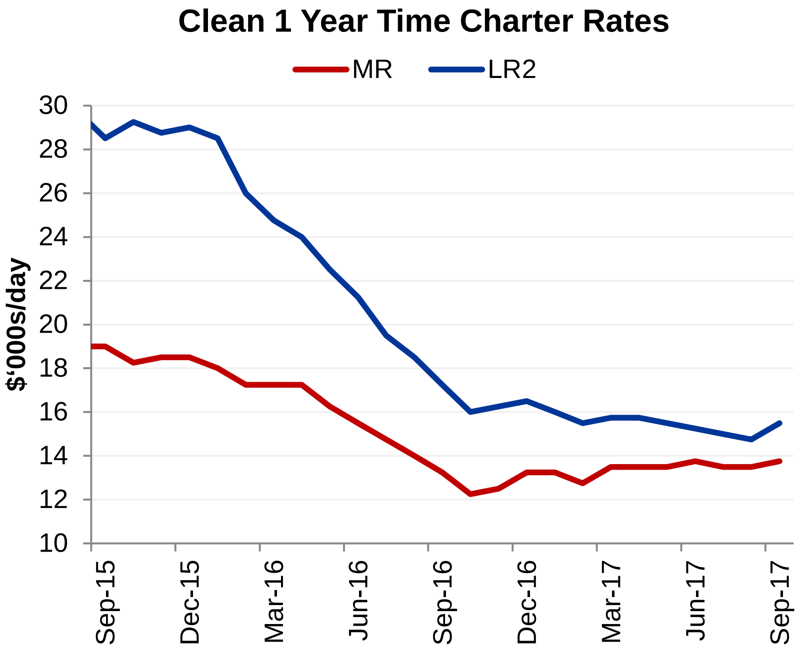


Source: 90% of Clarksons

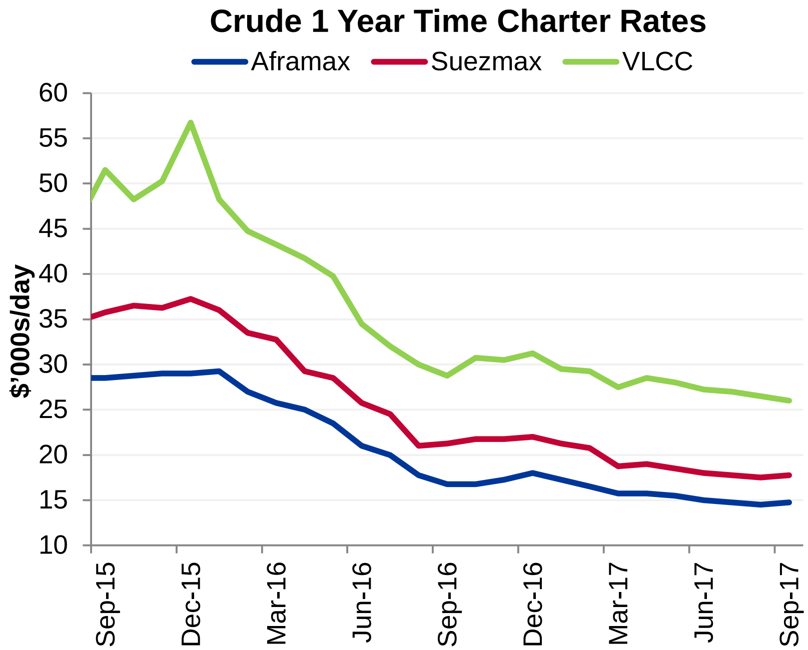
Mid-size tanker rates found support in September after a disappointing Q3

Segment	Aug'17	Sept'17	September Review	October Outlook
	Spot Rates ($/day) Source: 90% Clarksons			
VLCC	7,850	7,400	VLCC rates hit a fresh 4-year low at the beginning of September as Middle East OPEC supply cuts and seasonally weaker demand put pressure on rates. However, rates staged a recovery towards the end of the month and look set to improve as we move into Q4.	Strong Asian refining margins look set to draw in more long-haul barrels from the Atlantic basin to Asia over the coming weeks, which should be positive for long-haul tanker demand. A wide WTI / Brent spread is also encouraging more exports of US crude (currently at a record 2 mb/d).
Suezmax	9,650	10,800	Suezmax rates increased during September in tandem with a gradual uptick in West African loadings and firm European demand due to strong refining margins. However, an ample supply of tonnage kept a lid on rates during the month.	An increase in European refinery throughput could continue to provide demand for Suezmaxes from West Africa; however, this could be offset by a reported 0.3-0.4 mb/d reduction in West African exports for September loading.
Aframax (Pacific)	7,175	10,900	The Pacific Aframax market firmed to its highest level since May'17 due to a combination of ullage delays, weather-related delays, and an increase in ballasters to the West in order to take advantage of firmer rates there.	Strong Asian refining margins should continue to support regional Aframax demand as we move into the fourth quarter, though this may be offset somewhat by the release of crude from storage due to the backwardation in oil prices.
Aframax (Atlantic)	4,600	11,175	Atlantic Aframax rates saw a boost from the after-effects of Hurricane Harvey as ships in the USG region faced severe delays. The MED / Black Sea market also saw some support from higher Russian exports and as North Sea fields returned from summer maintenance programs.	Rates in the USG / Caribs region are expected to come off as vessel operations return to normal. Med / Black Sea rates could find some support from higher Russian and Libyan volumes, though Turkey's threat to cut off ~0.6 mb/d of supply from Northern Iraq to Ceyhan is a downside risk.
LR2	11,050	11,450	LR2 rates started the month on a weak note, but increased significantly later in the month due to the impact of Hurricane Harvey (reduced supply of MRs / LR1s in the Far East as vessels moved to the Atlantic basin), an increase in gasoil floating storage and greater Asian demand for naphtha.	LR2 rates look set to remain firm in the short-term as many of the positive factors that we saw in September remain in place; however, the LR1 market is losing steam, which could lead charterers to shift their focus to the smaller ships and thereby put pressure on LR2 rates later in the month.

Rates starting to improve on the back of seasonality and weather



Source: Average of Clarksons, Braemar ACM, and Poten



Source: Average of Clarksons, Braemar ACM, and Poten

Broker Assessed Time Charter Rates

	1 year time charter rates ($/day)		3 year time charter rates ($/day)	
	Aug'17	Sept'17	Aug'17	Sept'17
VLCC	26,500	⬇ 26,000	28,750	28,750
Suezmax	17,500	⬆ 17,750	20,250	⬆ 21,250
Aframax	14,500	⬆ 14,750	16,500	⬆ 17,000
LR2	14,750	⬆ 15,500	16,750	⬆ 17,250
MR	13,500	⬆ 13,750	14,250	⬆ 14,500

Source: Average of Clarksons, Braemar ACM, and Poten

Slight increase in TC rate ideas as we exit the Q3 doldrums

S&P Activity

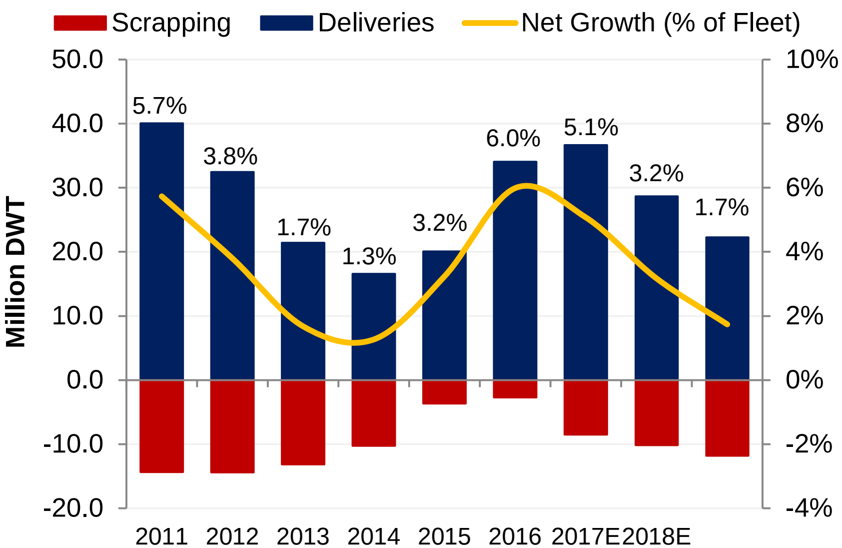
- Asset prices remain stable for modern tonnage (<5 years old) but older assets (15+ years) face downward pressure and a floor has formed at scrap level.
- The Aframax *Nissos Serifos* (Samsung/2012) was sold for $30.5M to a Danish Fund and bare boated back to the Sellers (Kyklades, Greece). The sale price is similar to last done levels.
- At the other end of the age scale, the Aframax *Neptune Voyager* (Samsung/2003) was sold to Spring Marine (Greece) for $9.8M. Shortly after, the same Sellers sold the sister vessel *Stellar Voyager* for the same price, likely to New Shipping (Greece). The price is a lower compared to the ex-*Gener8 Pericles* (Sumitomo/2003) which sold in Aug-2017 for $11M.
- The VLCC *Isuzugawa* (Universal/2004) was sold to Minerva (Greece) for 25.5M, which is 15% lower than last done.
- Scorpio sold 5x 2012 HMD built MRs to BOCOMM for $27.5M each and leased back the vessels at a bareboat rate of $9,025/day for 7 years. Broker assessed values of a 2012 built MR is $24M and the high BB rate could explain the premium on price.

Asset Values (USD million)

	VLCC	Suezmax	Aframax	LR2	MR
NB	81.0	54.0	43.0	45.0	33.5
0	81.0 (-1.0)	54.0 (-1.0)	43.0 (-1.0)	45.5 (-1.0)	34.0 (+1.0)
5yr	61.0 (-1.0)	39.0 (-1.0)	30.0	32.0	24.0 (+0.5)
10yr	37.0 (-2.0)	24.0 (-1.0)	20.0	20.0	16.3 (+0.3)
15yr	21.0 (-0.5)	14.0	12.0	12.0	9.0

Source: Clarksons
Note: values in brackets indicates change from last month

Total Tanker Fleet Growth



Source: Clarksons, internal estimates

Fleet Statistics

- The tanker fleet has grown by 24.5 mdwt, or 4.4%, since the start of the year. Tanker fleet growth has slowed down considerably in recent weeks due to an uptick in scrapping, and also as we have passed the peak for new tanker deliveries (fleet growth of 0.8% in Q3-17 was the lowest for a third quarter since 2014).
- We have updated our fleet growth forecast to account for higher than expected scrapping, and now project 5.1% fleet growth in 2017 followed by 3.2% in 2018 and 1.7% in 2019.

Forecasted Fleet Growth by Size Range

	VLCC	Suezmax	Aframax	LR2	Panamax	MR
2017	5.2%	8.2%	2.3%	8.6%	4.3%	3.0%
2018	3.2%	3.7%	3.7%	3.5%	3.3%	2.0%

Source: Clarksons, internal estimates

Tanker fleet growth is slowing on a pick-up in scrapping activity

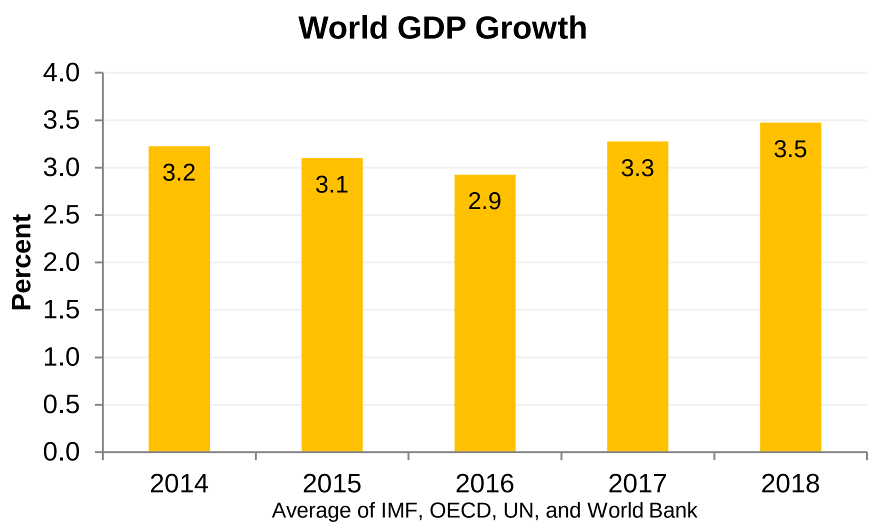
Economy Outlook

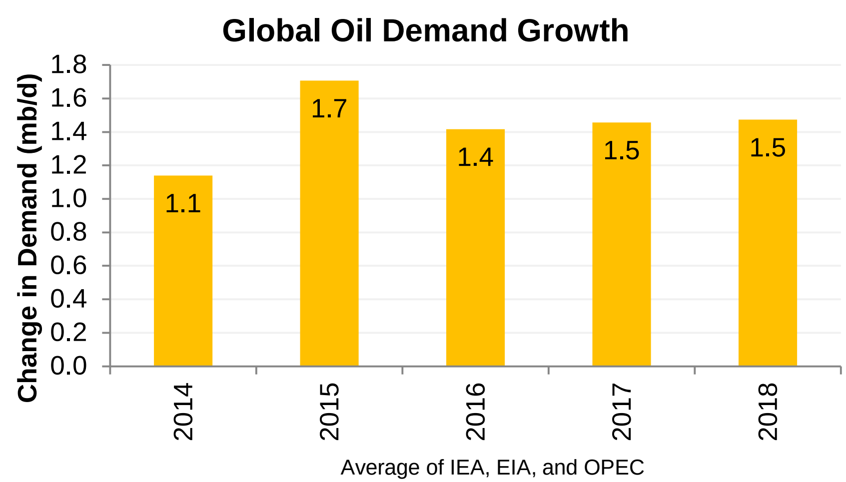
- The OECD released their newest forecast, emphasizing that short-term economic strength is becoming more global with an upturn seen across major economies. As a result, the OECD has maintained their GDP growth forecast for 2017 at 3.5% and has slightly increased their 2018 forecast to 3.7%. However, the OECD also warns that sustained medium-term economic growth is far from certain due to ongoing below-average wage growth, inflation, and rates of private investment.
- The IMF will release their newest forecast this month, and expects improving economic trends to continue.

USA	After recovering in 2017, GDP growth is expected to improve further to 2.4% in 2018.
Europe	The OECD says economic performance has improved more than expected, with expected growth of ~2% in 2017 – 2018
Japan	Moderately strong (for Japan) GDP growth of 1.6% is expected for 2017 as a whole, before slowing again in 2018.
China	Based on the recent OECD forecast, GDP growth is expected to maintain a gradual decline towards 6.6% in 2018.

Oil Demand Outlook

- The IEA and OPEC forecast oil demand growth of ~1.4 mb/d in 2018. However, the US EIA remains more bullish, and have now raised their forecast for 2018 global oil demand growth to almost 1.7 mb/d.
- Brent oil prices hit a two-year high of $59 per barrel in late September on signs that global oil inventories are drawing down, before falling slightly again to $56 as of early October.

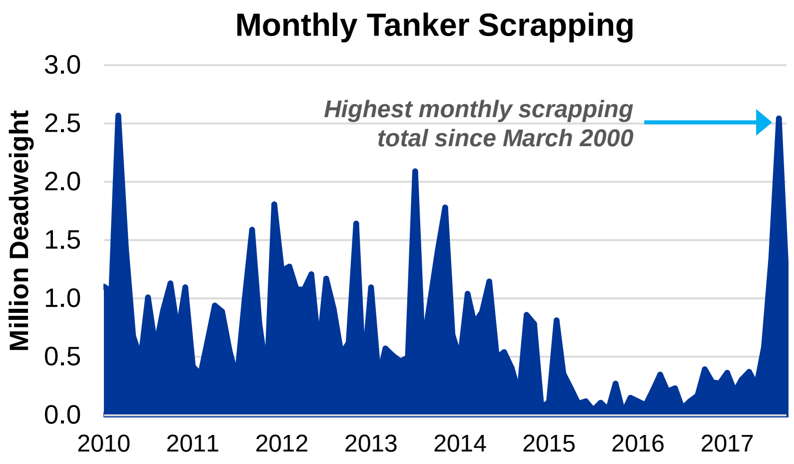




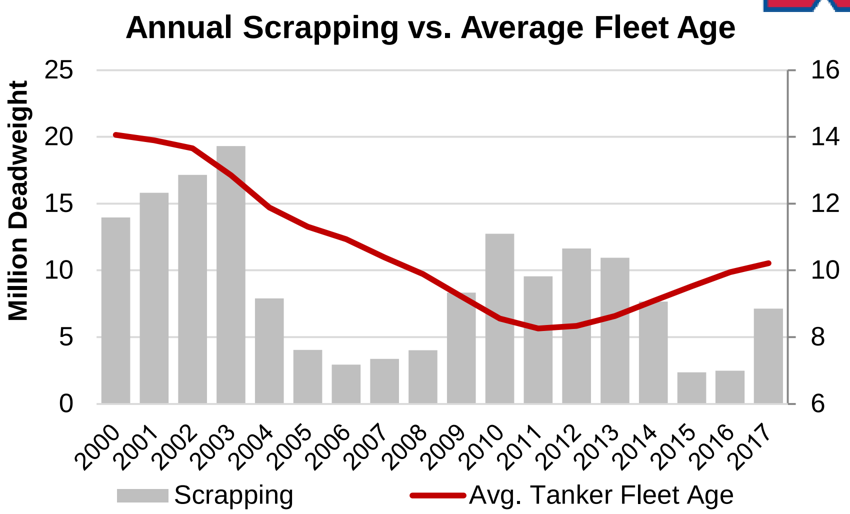
Small increases to GDP and oil demand forecasts; oil prices hit 2-year high

One of the main contributors to the low tanker rates experienced during 2017 has been high fleet growth, particularly in the large crude tanker sectors. This is partly due to a heavy delivery schedule as a result of orders placed in 2015, but it also due to very low levels of tanker scrapping. However, it appears as though the tide my be turning.

Tanker scrapping was virtually non-existent in 2015 and 2016 with around 2.5 mdwt of tankers scrapped in each year. To put this into context, these were the lowest years of scrapping since 1989, when the tanker fleet was less than half the size it is today. This low level of scrapping was partly due to the stronger rate environment during those years, but was also a reflection of the very young fleet age profile that had emerged after some very heavy scrapping years in 2009-14. Put simply, there just weren't many scrap candidates, and in a firm rate environment this led to very low scrapping levels.



Source: Clarksons



Fast forward to 2017, and the environment now is much different. For a start, freight rates are at their lowest point since the 2011-13 downturn, and there is much uncertainty with regards to the outlook for 2018. Secondly, the fleet is starting to age again, with the average age of the tanker fleet breaching 10 years for the first time since 2007. Thirdly, upcoming regulations on ballast water and low sulphur fuel could encourage owners to scrap rather than pay for costly upgrades on top of normal dry docking costs. And finally, scrap prices are relatively attractive at over $400 / ldt.

As a result of the above, tanker scrapping has started to rise again with 2.5 mdwt scrapped in August – the most in a calendar month since March 2000. If this pace of scrapping continues it will help to offset the impact of new vessel deliveries and will put the market in a much healthier position as we move into 2018 and beyond.

Higher scrapping is offering some welcome relief to an over-supplied tanker market