

# **Global Maritime Weekly Digest**

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The **Global Maritime Weekly Digest**, based at **Southampton SOLENT University**, provides a regular flow of maritime news and analysis, of significance in a global context. Topics covered include shipping fleets and management, seaborne trade, ports, shipbuilding, ship

recycling, maritime policy and regulations, and seafarers' labour.

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- (5) Container freight market: a step towards global recovery
- (6) New models for port operators and owners
- (7) Ship collisions still happen
- (8) LNG projects and associated shipping activities

#### **Editorial comments**

- A new annual *survey of shipping risk management* has been published by a major consultancy firm (item 1). Among increased risks identified by respondents, cyber security and ballast water management systems regulation are highlighted.
- Updated analysis of *bulk carrier market trends* suggests that recovery may be slower than many people hope, following a reduced focus on restraining fleet growth amid signs of reviving trade and demand for these ships (item 3).
- Fleet growth problems are also having an adverse impact on the global *tanker market,* where a downwards trend in freight rates reflects strong cargo-carrying capacity expansion and subdued tanker demand (item 4).
- Despite too many new ships still being delivered as a consequence of investor's past enthusiasm, continued *subdued ordering from shipbuilders* has been seen this year, although tanker and gas carrier orders have picked up (item 2). Cruise ships remain a popular choice.
- A cautiously upbeat global *container shipping market* appraisal suggests that the imbalance between demand and supply has begun to diminish, and the sector as a whole seems to be moving towards recovery (item 5).
- Despite sophisticated modern technology available *ship collisions* still happen occasionally. Some experts emphasise human error as a major contributory factor (item 7).

Richard Scott MA MCIT FICS editor (email: bulkshipan@aol.com) (1) Moore Stephens, 31 August 2017

## Shipping must beware exposure to changing risk landscape

Our third annual Shipping Risk Survey confirms that the effective management of risk within the industry has improved slightly over the past 12 months. But shipping still needs to up its game in terms of managing its exposure to risk, which is increasing and changing in nature, not least in terms of the threat posed by cyber security.

Respondents to the survey rated the extent to which enterprise and business risk management is contributing to the success of their organisation at an average 6.8 out of a possible score of 10.0. compared to 6.6 last time. Charterers returned the highest rating (8.8) in this regard, followed by owners (6.9) and ship managers (6.8). Brokers returned the lowest rating at 6.3. Geographically, Europe (7.0) was ahead of Asia (6.6), but it was the Middle East which returned the highest figure, at 7.8. Overall, respondents rated the extent to which enterprise and business risk was being managed effectively by their organisations at 7.1 out of 10.0, up from the rating of 7.0 recorded last time and indeed in the inaugural survey in August 2015. Charterers (8.8) expressed the highest level of confidence in this regard, followed by owners (7.3) and managers (6.9). In the previous survey, charterers recorded the lowest rating (6.5) of the main respondent types.

Demand trends were deemed by the greatest number of respondents to pose the highest level of risk, closely followed by competition and the cost and availability of finance. Demand trends were thought to pose the highest level of risk for owners, charterers and brokers, while for managers it was competition that topped the list.

Geographically, demand trends were the number one concern in Europe, Asia and the Middle East, while respondents in Latin America and North America identified competition as posing the highest level of risk. Respondents to the survey felt that the level of risk posed by most of the factors which impacted their business would remain largely unchanged over the next 12 months, with the exception of ballast water management legislation, cyber security, geopolitics, operating costs and other changes to laws and regulations, which were all perceived to have the potential for increased risk.

#### Increased risk

- Ballast water management legislation
- Operating costs
- Other changes to laws and regulations

- Geopolitics Steady risk
- Breaches in health and safety

Cyber security in shipping

- Bunker and fuel costs
- Changes in tax legislation
- Changes to accounting standards
- Competition
- Cost and availability of finance
- Data protection and privacy
- Demand trends

- Fuel emissions
- Insufficient controls over financial reporting
- Piracy
- Port congestion
- Supply of competent crew
- Supply of shore based personnel
- Supply of tonnage

Less risk

Overall, 69% of respondents (unchanged from last time) felt that the senior managers in their organisations had a high degree of involvement in enterprise and business risk management. Meanwhile, 22% (up from 20% previously) said that senior management's involvement was limited to "periodic interest if risks materialise", while 7% (down from 10% last time) noted that senior management "acknowledged but had a limited involvement in" enterprise / risk management. Just 2% (marginally up on the 2016 figure) said that senior management had no involvement whatsoever.

Overall, 30% of respondents (compared to 35 % in the previous survey) confirmed that such risk was managed by means of discussion without formal documentation, while 45% noted that risk was documented by the use of spreadsheets or written reports, compared to 41% previously. Internally developed software was employed by 10% of respondents (17% last time) to manage and document risk, while 14% used third-party software, as opposed to just 5% at the time of the previous survey.

On a scale of 1.0 to 10.0, estimates of claims and provisions (up from 4.2 to 4.3) were deemed the factor most likely to result in a material misstatement in companies' period-end financial statements. Next came impairment involving vessels in use (up from 4.0 to 4.1), changes to legislation (down from 4.2 to 4.1), and reliance on spreadsheets for financial reporting (up from 4.0 to 4.1). Loan covenant non-compliance, meanwhile, was up from 3.8 to 4.0.

A stand-alone survey question addressed only to publicly traded companies revealed that 80% of such organisations had a dedicated audit committee in place. Respondents in two-thirds of those companies, meanwhile, confirmed that their audit committees met on a quarterly basis to discuss risks, while 22% reported that such meetings were held annually.

Michael Simms, Partner, comments: "Embedding proper and effective risk management controls into daily operating procedures is a huge challenge for companies in the shipping sector, where high risk levels are an accepted and fundamental part of the industry. This is particularly the case, as is now, when the industry is ultra-competitive and grappling with an imbalance in tonnage supply and demand, and when wider global economic conditions remain extremely tough.

"In such a scenario, it may be tempting for companies to take their eye off their exposure to risk in pursuit of retaining or securing new business. And although the survey suggests that is not the case, it also reveals that the standard of risk awareness and response capability in many shipping companies is below the required levels".

The good news is that there is greater acknowledgement that sound enterprise and business risk management is contributing to the success of those shipping organisations which responded to our survey. More companies are now formally documenting the way in which such risk is managed, with a healthy level of involvement by senior management. Moreover, there has been a noticeable increase in the deployment of third-party software to manage exposure to risk.

"But the survey results show that there is still room for improvement. There remains a need for companies engaged in the shipping industry to up their game in terms of implementing effective corporate governance systems, monitoring procedures and controls throughout their organisations, because the level of risk is not only increasing but also changing in nature.

"The factors identified by respondents to the survey as being most likely to result in a material misstatement in their accounts were unsurprising – particularly claims estimates and impairment. The same is true of factors posing an increased level of risk to business over the next 12 months, including operating costs, ballast water management legislation, and cyber security.

"There is nothing new about the challenge posed by operating costs, which are as old as shipping itself. Such costs may have fallen over the past four recorded years, but it is unlikely that this will continue, particularly given the need to meet increasingly onerous legislative and regulatory demands, and continually escalating crew costs. But the need to invest heavily in measures to preserve the environment, and to protect against the threat of cyber-attack, are more recent developments which change the risk landscape for the shipping industry.

Source: Moore Stephens

(2) Clarksons Research, 20 August 2017

## **Newbuild Investment: Anything Drawing Attention?**

Newbuild contracting fell to a 30 year low in 2016, but when looking at it in estimated investment value terms, the fall was slightly less sharp. This trend has continued, with contracting in 2017 so far up by

significantly more in investment value terms than in numerical terms. This month's Shipbuilding Focus investigates which sectors are attracting investment and which yards are benefitting from it.

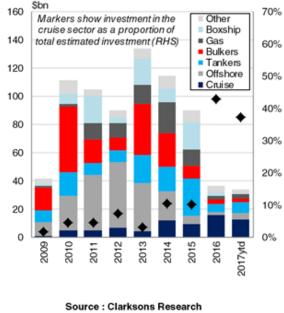
#### **Cruising Ahead**

Though still depressed in historical terms, the value of newbuild contracting investment, which declined by 59% in 2016, stands at \$33.8bn in the year to date, up 58% year-on-year on an annualised basis. This has been driven by investment in high value vessel types such as cruise ships, which experienced record ordering levels last year and accounted for 43% of total investment. Firm cruise ship ordering has continued in 2017 so far, and the 20 cruise ships contracted have an estimated newbuild value of \$12.6bn, up 36% year-on-year on an annualised basis and accounting for 37% of year to date investment. Similarly to in 2016, US owners account for the largest share of year to date cruise investment (82%).

### Graph of the Month

Newbuild Investment 160 By Sector: Looking At The Changes 140

The graph shows the historical annual and year to date value of estimated newbuild contract investment, split by vessel sector. The markers show annual investment in the cruise ship sector as a proportion of total estimated annual investment. Contract values are based on a mixture of reported prices and estimations by Clarksons Research analysts. A wide range of newbuild contract investment value data is available on the Shipping Intelligence Network.



#### Signs Of A Comeback

Most sectors suffered from a depressed contracting environment in 2016, but in 2017 so far some have shown early signs of improvement and estimated investment in tanker and gas carrier units is up by an annualised 133% and 176% respectively year-on-year. Tankers and gas carriers account for 23% and 10% of year to date investment respectively, and the increase in investment has been driven by firmer ordering of larger units such as VLCCs and large LNG carriers. Norwegian owners account for 49% of year to date gas carrier investment, while Greek owners account for 22% of year to date investment in the tanker sector.

#### Still Seeming Sluggish

Containership contracting has remained muted, with only 20 units of an estimated \$0.5bn ordered in 2017 so far, an annualised year-on-year investment decrease of 71%. In contrast, boxships accounted for 22% of 2015 investment, compared to 1% in 2017 so far. Estimated bulkcarrier investment in the year to date is up 15% year-on-year on an annualised basis, but bulkers only account for 7% of estimated 2017 investment compared to 42% in 2010, even if with an improved freight rate environment, ordering could pick up.

#### Which Builders Benefit?

The benefits of higher investment levels have not necessarily reached all yards. While cruise ordering is booming, this is only benefitting a small number of yards, with European yards accounting for 96% of year to date cruise orders in investment terms. Similarly, in the VLCC sector, only eight yards have won orders in 2017 so far, mostly in China and Korea.

So, investment is up this year, with high value orders even more prominent than in 2016. The cruise sector has continued to boom and in the tanker and gas carrier sectors contracting is improving, but other sectors are still struggling. However, while ordering of high value units can have an impact, a recovery is needed across more of the major sectors for investment to return to healthier levels. Source: Clarksons 

(3) BIMCO, 28 August 2017

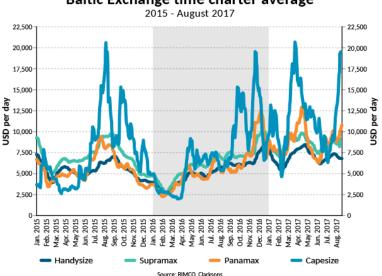
# Dry bulk shipping: strong demand improves market as it exceeds high fleet growth

#### Overview

Since early July, the capesize rates have gone up and up. By mid-August, they had reached a breakeven level to become profitable. BIMCO estimates that a capesize ship on average fleet financing and operational cost levels, turns profitable when rates are above \$15,300 per day.

#### Demand

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#### Baltic Exchange time charter average

But the improvements are unfortunately not seen in any of the other segments. This reflects the development in cargo demand, and highlights the fact that overcapacity remains a challenge.

Iron ore and coal volume growth have both been very high, driven by China. Domestic steel mill margins have risen throughout the first half of the year, ensuring that steel mills are keen to keep up production, and higher steel production means a healthy demand for coking coal too. This happens even with lower steel exports out of China, which is hampered by trade restrictions set up by importers.

For thermal coal imports into China, it is important to watch hydropower electricity production. Hydropower electricity production has been falling on a year-on-year basis every month since December 2016 (source: Commodore Research), due to lower levels of rainfall.

As Chinese electricity demand this year is higher than ever, coal-fired power-plants are bridging the gap. This benefits dry bulk shipping, but watch out for coal prices delivered in northern parts of China. If they go high (above 630 yuan per ton), the authorities tend to intervene and increase domestic production. A pick up in hydropower production would influence demand for thermal coal imports negatively.

<u>As BIMCO reported on 9 August</u>, China has sourced coal all the way from the US East Coast, with a sailing time of 45 days. This adds a lot of tonne-miles to panamax and capesize demand.

Demand for thermal coal has grown solidly across Asia, with Taiwan and South Korea leading the pack. The only exception is India which is using more and more domestically mined thermal coal, importing less for the third year in a row.

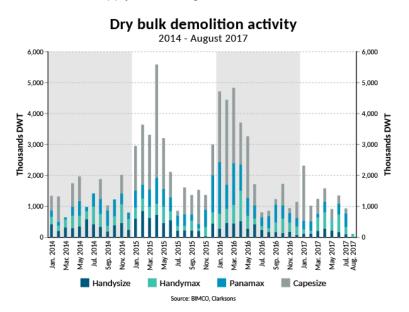
Beyond coal and iron ore, demand growth has been seen across the board. Soybeans set a quarterly alltime high for Q2 and grains are expected to have a strong Q3. (source: SSY)

#### Supply

With improving shipping markets comes faster deliveries of ships from global shipyards. BIMCO sees this in all the main shipping segments that we analyse.

This is to put it simply, how participants in the shipping industry and associated industries react, and is the reason why BIMCO reiterates the view that market recovery will be slower than many would hope. This is because improved demand is always followed by reduced focus on handling the supply side challenges. This means less idling and demolition as well as shorter/fewer postponements of deliveries.

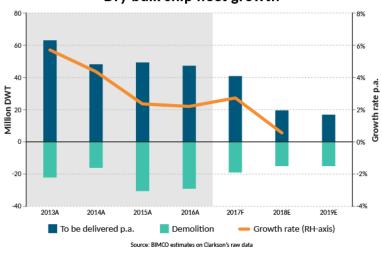
BIMCO expects 40m DWT to be delivered in 2017, offset by 19m DWT of demolished capacity. Year-todate, 30m DWT has been supplied while 9m DWT has left the fleet. We know that a higher BDI often means less demolition, but as the BDI has been lifted solely by the capesizes in recent months, our estimates for supply side changes remain unaltered. The fleet is estimated to grow by 2.7%.



Should demolition fall short by 5m DWT, fleet growth will jump to 3.4%. For the recovery to stay on track, the supply side must be handled extremely carefully as the demand growth is expected to be around 3.5%.

The supply side is made up of three elements: deliveries, demolition and newbuild orders. Thus, with faster deliveries and slower demolitions, it is worrying to note that, what we expected to happen in relation to new orders is now taking place too.

Orders for 9.6m DWT have been placed, with panamax being the popular choice. In the wake of hectic activity in the sales and purchase market during the first four months of the year, second-hand prices went up and back in sync with newbuild prices. This made the ordering of newbuild an attractive alternative again, with April, May and June being particularly busy in this respect. Still, the order book currently stands at 60.4m DWT, which is the lowest in 13 years.



Dry bulk ship fleet growth

A is actual. F is forecast. E is estimate which will change if new orders are placed. The supply growth for 2017-2019 contains existing orders only and is estimated under the assumptions that the scheduled deliveries fall short by 10% due to various reasons and 40% of the remaining vessels on order are delayed/postponed.

The growth of the dry bulk fleet differs significantly in level and pace from handysize to capesize. Handysize fleet growth over the past year has been fairly steady at 2.1%. It has remained constant for handymax/supramax too but at a level of 5.3%. In between, both the panamax and capesize segments have grown at an increasing pace and to higher levels since their recent low-points in 2016.

The monthly year-on-year fleet growth rate for panamax went from -0.4% in October 2016 to 3.1% in July 2017. From January 2015 to January 2016, the capesize fleet became marginally smaller. The first fleet size contraction since 1998/99. Since then 59 capesizes have been delivered, lifting year-on-year growth rates in July 2017 to 3.9%.

#### Outlook

In addition to the Chinese import ban on coal from North Korea - established earlier in the year in accordance with UN sanctions on North Korea in response to its nuclear and missile activities - China has also banned imports of iron ore. Seaborne shipping has seen no effect from the earlier ban, as China has not bought anthracite coal from any other suppliers. As the amount of iron ore imported from North Korea is only a fraction of coal imports, this will not be felt in the market either.

It is comforting that the demand growth this year has been broad, in terms of commodities and importing nations. Nevertheless, China is still the importer that matters but China is changing. Difficult to see if you

only watch the dry bulk market, but several macroeconomic indicators point towards developments that may result in lower investments. Amongst them are Fixed Asset Investments (FAI), such as machinery, infrastructure and housing projects, which are huge drivers of dry bulk imports. Data points to lower and lower growth rates for both public and private investments. It remains to be seen to what extent the Belt and Road Initiative will counter this development positively.

For decades China has been an all-out growth story. But could China stall again, with potentially severe consequences for the dry bulk industry? Not long ago, China cut its import levels compared to a year earlier, for four quarters in a row, from Q3-2014 to Q2-2015. The result was a drop in BDI from 1,500 to 500 from early November to late February. Going forward, we must be aware that it could happen again.

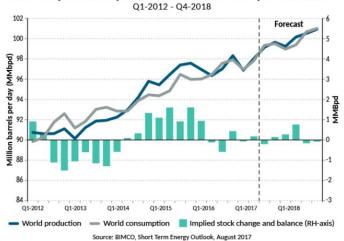
(4) BIMCO, 28 August 2017

# Tanker shipping: All eyes on oil market rebalancing – is it happening or not?

#### Demand

The one key factor to watch is the one thing that's impossible to measure accurately on a global scale – oil stocks. Global stocks for both crude oil and oil products rose significantly following the sharp fall in crude oil prices in the second half of 2014. But while this may seem to be in the past, it is still haunting the oil market and the oil tanker market. Demand in the tanker market is below normal levels and will only increase once the global oil stocks have been reduced. Tanker shipping enjoyed above-normal demand as the stocks were building, but will continue to suffer as long as they remain high. The strong fleet growth in 2016 and 2017 only makes the downturn tougher on owners and operators struggling with stretched balance sheets, as earnings drop.

So, what is the right level of future oil stocks? It's anyone's guess now, but BIMCO believes that it is much lower than the estimates of the 'money managers and bull traders', but not as low as the level seen before the rise in 2014. Global oil demand has grown markedly since then, and it seems fair to strive towards a level equal to a given number of days of supply, rather than a multi-annual absolute average.



#### World liquid fuels production and consumption balance

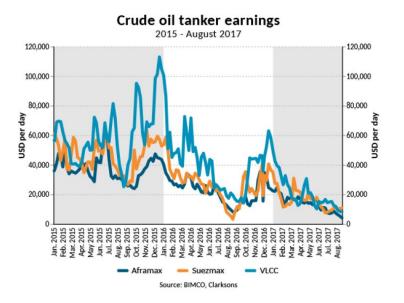
BIMCO believes that some rebalancing has taken place over recent months, but much more is needed. Data regarding OECD-stocks only provides an indication of how the market is developing in one part of the world. Likewise, any draw down on stocks in the US should not be used as a global proxy, as the US only holds 1/6 of OECD stocks. Bearing in mind that if global stocks have a surplus of 180 million barrels,

it will take one whole year to reduce that at the rate of 0.5m barrels per day (bpd). As can be seen from the chart, the EIA (Energy Information Administration) has estimated that global liquid fuel stocks have risen by more than 1m bpd on average for six quarters in a row, that's at least 540 million barrels of stock stored.

#### Seaborne trade

The global tanker industry is directly linked to the global oil industry. Right now, demand for seaborne transport of oil is below normal and fleet growth is high, which means that the fundamental balance is uneven. The result is declining tanker earnings with the main culprit being the fast-growing fleet. We tend to forget however, that demand is not that bad. Looking beyond the regular draw on stocks, other demand factors remain strong. US gross input to petroleum refineries hit an all-time high in the week ending May 26, when 17.7m bpd were refined. Global oil demand as forecasted by IEA (International Energy Agency) may pass the 100m bpd mark for the first time, hitting 100.1m bpd in Q4- 2018, and for 2017, growth has been revised up to 1.5m bpd.

In addition, China is still believed to be increasing its strategic petroleum reserves (SPR) and crude oil imports were up by 13.8% year-on-year in the first half of 2017 hitting 8.55m bdp on average. Earnings for VLCCs in the spot market are as low as \$8,775 per day, a level last seen during the difficult years of 2011-2013. The year-to-date average stands at \$20,489 per day. Based on a set of assumptions, BIMCO estimates that spot trading VLCCs built in 2005 and later are loss making at that level, because of heavy financing costs. For the whole industry, any profits made from older ships do not outweigh the losses of the younger vessels. As earnings very often follow from one segment to the next, suezmax and aframax ships are suffering too.



Earnings for the oil product tanker sector on average appears to have stopped falling, as they dropped steadily throughout 2016, reaching the present level at the end of the year. BIMCO is forecasting that average earnings in this segment will also be loss-making. MRs have made no more than \$10,040 per day, while Handysize have dropped to \$7,658 in 2017 down from \$8,962 in 2016. LR1s have a year-to-date average of \$7,873 and LR2 \$9,235 per day.

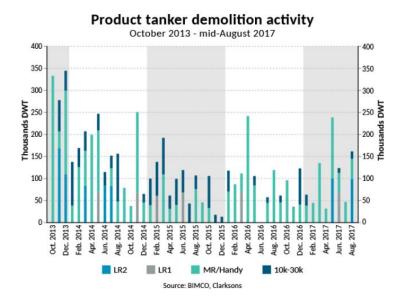
#### Supply

The tanker fleet is growing strongly. By mid-August, the crude oil tanker fleet had grown 4.3% yeartodate, and the oil product tanker fleet had grown by 3.6%. Deliveries into the crude oil tanker fleet, include 36 VLCC, 41 suezmax and 23 aframax plus some panamax and smaller units. The crude oil tanker fleet expansion remains on course for a six-year-high, measured in DWT, however, the fleet growth percentage is down from last years' 5.9%, to 4.7% for the full year of 2017. Meanwhile, 23 LR2, equal to 45% of the total added oil product tanker capacity overshadowed the recent years' favourite: MR, as 'only' 38 new ships were delivered during the first seven and a half months.

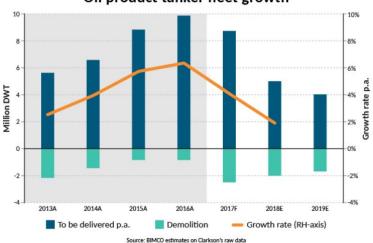
The fast-growing fleets come as no surprise. But the continued low levels of demolition in both tanker segments are a roadblock to changes to the current poor earnings environment in the freight market and

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a possible recovery. The fact that one VLCC was reportedly sold for demolition in April, but was then subsequently sold to a new owner, one month later at a higher price, seems irrational as overcapacity is increasing amongst crude oil tankers in general and VLCC's in particular.



Amongst oil product tankers, just two LR2 left the fleet in 2017, a year that has seen MR, almost exclusively being demolished. BIMCO continues to believe that demolition will pick up during the final five months of 2017, but the actual demolition rate only amounted to one third of forecasted full year levels by mid-August. The ongoing poor freight market conditions will drive demolition. Over the last four months, shipyards have been busy signing new orders for tankers. Amongst them were 14 LR2 and 14 suezmax ordered in June, supplementing the 9 VLCC's ordered in May. In total 32 VLCCs have now been ordered in 2017, up from 12 in the first quarter.



Oil product tanker fleet growth

Assuming 2.5m DWT of oil product tanker capacity will be demolished; fleet growth will hit 4.1% in 2017. Should demolition fall short of that by 1m DWT, the fleet will expand by 4.8%.

#### Outlook

Not a day goes by without a story about global oil stock levels. Many of them trying to be the messenger of positive news for the oil market and the tanker shipping market. However, sometimes business interests and wishful thinking are not supported by facts. Money managers and financial traders run businesses which are very different from the shipping industry.

As OECD compliance with the extended output cut falls to hit 78% in July (IEA), US shale oil production is rising, and Nigeria and Libya have some export potential left. So, oil supply seems to rise alongside oil demand. On the geopolitical scene, Venezuelan exports to the US amounting to 0.8m bpd for the past four years face a low risk. As Venezuela's crude oil is very heavy and sour, it has no obvious substitutes, and is compatible to sophisticated refineries in the US Gulf (including some Venezuelan owned). There may be US sanctions aimed at political targets, but we do not expect oil exports to be hit hard. Following its annual peak in August, the global refinery runs will decline seasonally due to maintenance, by 1.5m bpd during September and October, before throughput picks up again in November for the winter season.

Source: Peter Sand, Chief Shipping Analyst; BIMCO

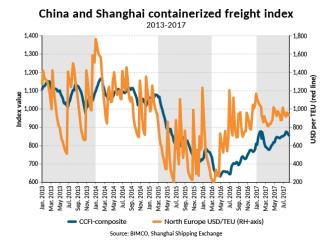
(5) BIMCO, 29 August 2017

# Container shipping: Solid demand growth reduces spot rate volatility

#### Demand

As freight rates are coming back from the abyss, their actual rise seems to be magnified beyond their actual performance. Some container spot freight rates are up more than 100% from the very low levels of last year, but may still be at a loss-making level now and so spot rates are not the best indicator for market profitability.

The broad-scoped China Containerized Freight Index (CCFI) offers a solid and alternative indication. The CCFI composite hit an all-time low at 632.36 on 29 April 2016. By 11 August 2017, it was back at 856.5 and now comparing year-to-date growth, the CCFI is up by 20.7% versus the same period last year. By contrast, the spot rates from Shanghai into Northern Europe are up 64% year-to-date, year-on-year. The spot rates for containers bound for the US have gone up by 45-50% over the same period. It's not only freight rates which have risen this year. Charter rates left the doldrums and went up sharply in the first four months of 2017, only to slide back down, but during June/July most of the slide had been regained.



The extreme volatility of previous years has been reduced for spot rates on the Shanghai-Northern Europe trade lane. A sign of improving demand and better market conditions since Q4-2016. The improved freight rates come on the back of strong demand growth during the first half of 2017. Combined with steady fleet growth of 1.8% the fundamental balance has improved noticeably. Global container shipping demand grew by 5% in H1 2017, over the same period last year (source: CTS).

On both the key long front haul trades out of the Far East into Europe and North America, demand grew rapidly by 5.2% and 10.0% respectively (source: CTS). BIMCO's own data on inbound loaded containers to the US West Coast went up by 5.4% and to the East Coast by 10.6%. The fastest growing import ports on the East Coast were Houston (+26%) and Savannah (+13%). While the main port – Port of New York and New Jersey (PANYNJ) grew by only 5.5%, due to very weak imports in February and March. Growth on the head haul trades is vital, as it pushes utilisation higher where it's most needed, avoiding blank sailings and filling the ships to a larger extent than in recent years. Head haul trades deliver the higher freight rates, whereas back hauls merely reduce the costs of repositioning the ship. Moving forward, PANYNJ, should benefit from the early completion of the Bayonne Bridge navigational clearance project. With the new air draft of 215 feet (65.5m), ships up to 18,000 TEU will now be able to reach the terminal 'behind' the bridge (9,800 TEU was the maximum before the elevation). This will prompt carriers to optimise their networks once again, as most US East Coast ports have upgraded their terminals in recent years to accommodate the Ultra Large Containerships.

2017 is following the trend seen in 2011-2012 and 2014-2015, of US importers increasingly directing cargo towards the US East Coast ports.

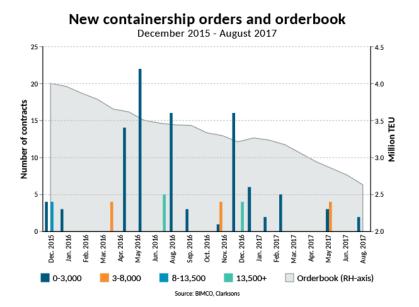
As of 7 August, 182 ships (474,000 TEU) were idled (source: Alphaliner). As the idle fleet hasn't changed much over the previous three months, demand growth has lifted rates instead of reactivating the unemployed ships. This is one of the reasons for the improved conditions – the careful handling of supply.

#### Supply

The significant slowdown in demolition comes as no surprise. The magnitude, however is still striking. Remember that a lot of container shipping companies are still losing money daily. But the simple fact that rates have climbed and managed to stay up, means owners shy away from scrapping their ships. June saw only seven small units sold for demolition (9,639 TEU in total), in comparison to the all-time high level in January where 99,899 TEU (29 units) left the fleet. This is a drop of 90%.

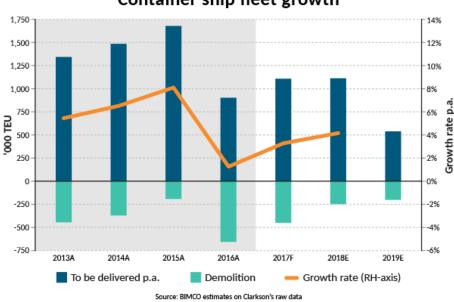
BIMCO forecast a full year demolition of 450,000 TEU, out of which 306,824 TEU had already been demolished by mid-August. This is in line with our forecast that sees the second half of the year with continued fleet growth, low demolition activity and a slower demand growth than was seen in the first half. The final four and a half months will see more Ultra Large Container capacity being launched. The scheduled order book shows 31 units with a capacity higher than 10,000 TEU, out of which 11 are larger than 20,000 TEU. BIMCO estimates that up to 25 of these ships will be delivered.

Fortunately, we still see almost no new orders being placed. Less than 400,000 TEU, have been contracted since December 2015. This is extraordinary. In comparison, July 2015 alone, saw orders for 435,268 TEU placed (50 contracts). In the same period, the orderbook has come down from 4m TEU to 2.6m TEU. The lowest TEU-level since 2003.



#### Please note: this publication is intended for academic use only, not for commercial purposes

BIMCO expects that this low level will be difficult to maintain, as optimism in the market combined with hungry shipyards and shipping companies being eager to be top dog is a toxic cocktail. One year ago, the container shipping fleet surpassed the 20m TEU mark, only to increase demolition and bring it back below this figure. Now we are back above the 20m TEU mark again, this time for good. The fleet now holds capacity of 20,356,656 TEU. Year-to-date, the fleet has grown by 1.8% and BIMCO forecasts that the rate will hit 3.3% for the full year.



#### Container ship fleet growth

A is actual. F is forecast. E is estimate which will change if new orders are placed. The supply growth for 2017-2019 contains existing orders only and is estimated under the assumptions that the scheduled deliveries fall short by 10% due to various reasons and 30% of the remaining vessels on order are delayed/postponed.

665,850 TEU of the new capacity is now active and some 450,000 TEU will be delivered during the remainder of the year. 41 ships with an average size of 14,223 TEU constitute 88% of additional tonnage, ranging from 9,400 TEU to 21,413 TEU. The latter is the OOCL Hong Kong, which will be joined by four sisters from Samsung HI later this year.

Deliveries scheduled for 2018 are equally biased toward the larger sizes, as the upscaling of network capacity and hunt for lower unit costs continues. Currently 77 ships with a capacity of 9,400 TEU and an average size of 15,578 TEU will amount to 82% of the new influx. However, it is anticipated that postponements and delays are likely to impact this schedule.

#### Outlook

Since BIMCO's last report in mid-April, the consolidation amongst carriers has continued. First, the three Japanese conglomerates merged their container lines into ONE (Ocean Network Express), then there was COSCO's takeover of OOCL and in August we saw the formation of the Korea Shipping Partnership (KSP).

Whereas ONE is a merger of business units, at least according to the US Federal Maritime Commission, that had to give a final decision – rejection or approval – to the US Department of Justice; KSP is not. At least not yet. It remains to be seen whether KSP can reap the benefits from the partnership which is needed to counter the pressure from harsh competition on its main intra-Asian trade lanes.

BIMCO sees 2015/2016 as the real low point of the present crisis and 2017 is a step in the right direction for the industry. Demand growth will most likely outstrip supply growth for the second year in a row. The last time we saw that, was in 2010-2011.

Source: Peter Sand, Chief Shipping Analyst; BIMCO

(6) Hellenic Shipping News, 23 August 2017/ Port Strategy

### Sharing's caring

There is a lot of excitement about the so-called "sharing economy". Its simplicity is its genius: money is made by intelligently mutualising assets. The advantage for companies: there is less need for investments in assets. The oft-given example of a sharing economy is Uber.

Shipping is not usually associated with such cool things. At almost every shipping conference, people talk about the mysterious Uber of shipping that will come and disrupt nearly everything. Many of us seem to be waiting for the sexy sharing economy to finally meet the rusty shipping industry.

Yet, container shipping is already a sharing economy. Almost all global carriers share slots via vessel sharing agreements, also called alliances. Just three alliances have a 95% market share on the important East-West container trades. With its extremely high entry barriers, container shipping's vessel sharing agreements might be the closest that sector will get to a sharing economy. However, this is disruptive enough and will have radical consequences for the way ports are governed.

#### Landlord losses

Over the last decades, most countries have moved towards a landlord port model. In this model cargo handling operations are left to private operators that invest in cranes, equipment and hire port workers, leaving the public port authority as the landlord, giving out concessions, and determining the rules and investments in common infrastructures. However, times have changed and the landlord port model is much less logical in a world of strong alliances and the mega ships.

Why? Mega ships bring large cargo peaks that require the deployment of many cranes, equipment and workers – more than would be needed for smaller ships, even if the cargo amounts remain the same. So, there is less return on investment. Also, as there are only three major alliances, losing one or two alliances to a neighbouring terminal becomes a matter of life and death. Thus, terminals might feel forced to make investments that do not make financial sense for them, as the alternative would be to lose a third, half or all of their cargo, equating to huge losses.

It is an impossible dilemma, but here the sharing economy offers a solution. Mutualising the assets of terminals in the same port could be a way out of the dilemma. A common pool of cranes, yard equipment, yard space and labour in every port could be used by the terminals only at the moment of need, ie the peak and not at other times. Such asset sharing agreements could help to better utilise port terminal assets, just like vessel sharing agreements help shipping companies to better utilise their ships. This shared terminal assets model would arguably work best in terminals with adjacent quay lines and yards, so that mutualisation is possible at no other cost than taking out the fence between the terminals, allowing a free flow of gantry cranes and yard equipment. In cases where the sharing of equipment is problematic the mutualisation of other assets, such as joint container depots and a labour pool, could help the utilisation of terminals.

The logical outcome of such a development could be the emergence of a new port governance model, some sort of a private tool-port, in which a joint organisation of the port terminal operators can plan the deployment of common tools (equipment, labour, yard space) in that port. There is still competition, but there is also co-operation – to the benefit of all.

We will need a test case, to show that this can work. Ideally a port where all terminal leases expire at around the same period and where mutualisation of assets is physically possible. Did I hear someone say Buenos Aires?

Ultimately the feasibility of the new model depends on whether regulators will be willing to loosen antitrust legislation for port terminals. Such exemptions exist for liner shipping, so why not for the terminal business? Policy coherence would require that both lines and terminal operators have such an exemption, or neither of them. Allowing the sharing economy in container shipping but not in container terminals is untenable and deserves revision. Source: Port Strategy

(7) Hellenic Shipping News, 24 August 2017/ BBC

## Why it's not surprising that ship collisions still happen

The ocean may be huge, and navigation technology may be advanced – but the conditions are still in place for ocean collisions like the one between a tanker and US navy destroyer this week. What can be done to prevent future disasters?

It happened in the middle of the night, off the coast of Malaysia. A large tanker filled with nearly 12,000 tonnes of oil smashed into the side of US Navy destroyer the John S McCain, named after the father and grandfather of US senator John McCain.

Ten sailors from the McCain are missing but the vessel is now at Changi Naval Base in Singapore. It's an extraordinary and tragic collision, but all the more-so because a remarkably similar accident happened just two months ago. The USS Fitzgerald was struck by a large container ship off the coast of Japan. Seven US sailors died.

The ships involved in these recent incidents are large and well-fitted with radar and navigation systems. There are also GPS tracking, automatic identification systems (AIS) and radio communications. How could such collisions have happened? And what can be done to prevent them happening again?

"Provided you are keeping a radar watch and a visual lookout, then collisions are avoidable," says Peter Roberts, directory of military sciences at the Royal United Services Institute (RUSI).

We don't know the details of the latest collision, but sometimes it is left to the instruments to warn of impending collision, rather than members of the crew.

Roberts says he has travelled on commercial ships where sometimes there is no-one on the bridge at all. "An alarm is going off on the radar and they're reliant on that alarm waking whoever is on watch," he says. Still, two major accidents involving navy ships in as many months is extraordinary, he adds. "It's very, very rare," he says.

It could, of course, just be a deeply unfortunate coincidence. But some are asking whether foul-play or sabotage was involved – were navigation systems hacked to increase the likelihood of a collision, for instance?

There has been at least one report of potential GPS position spoofing affecting ships in the Black Sea in recent months, which has led to concern among a few observers that some nation states may be hacking ships in an effort to throw them off course.

There is no evidence yet for this being a factor in the USS Fitzgerald or John S McCain cases – despite the conspiracy theories floating around the web. But Roberts says that the scenario is worth considering. "You've got to keep every possibility open at the moment," he says.

It's important to remember that large ships do get involved in accidents from time to time, even though the cases are not always newsworthy enough to attract coverage. Just a day or two before the McCain accident, for example, two cargo ships collided off the coast of Fujian in China and there are reports of seafarers having been killed as a result.

When such accidents occur, investigators often find that human error was the ultimate cause rather than anything more nefarious, says Henrik Uth at Danish firm Survey Association, a maritime surveyor contracted by insurers of ships. He adds that his firm's own investigations have found many instances in which the crew has actually helped to avoid dangerous near-misses.

"It's easy to blame the captain for when it goes wrong, but we tend to forget to compliment him for all the times he saved the vessel from imminent danger," says Uth.

It's not just collisions that threaten ships and their crew, either. Right now, a British ship, the MV Cheshire – loaded with many thousands of tonnes of fertiliser – is on fire and has been drifting in seas near the Canary Islands for days. The crew had to be airlifted to safety.

The seas are becoming more and more crowded, and the global number of commercial ships continues to grow. According to the UK government, there were around 58,000 vessels in the world trading fleet at the end of 2016. The size of the fleet, if measured by weight, has doubled since 2004.

#### How to save a ship

What a crew must do after a collision

In the immediate aftermath of a collision that has breached a ship's hull, the crew must act fast.

As well as pumping out huge volumes of water, the vessel will need to be temporarily braced, explains Peter Roberts at RUSI.

"The walls, ceilings and floors will be under tremendous strain of weight of water and they'll have to put additional supports in and around those – they'll have to make those on board themselves," he says. In the case of the USS John S McCain, which collided with a tanker this week, it will likely have received extra pumps and specialist personnel thanks to helicopter support from a nearby American aircraft carrier, says Roberts.

Once at port, plates may be welded to the side of the ship to seal its hull again.

So are collisions only going to become more frequent?

Uth suggests that since the financial crisis of 2008, many shipping companies have faced tighter margins and may have underinvested in crews as a result. "They need to find the right crew and retain them," he explains. "The crew has to get to know the vessel because it is a sophisticated piece of hardware." And on any large ship, a typical crew often comprises a mix of different languages, nationalities and safety cultures, he adds, making the job of keeping the vessel safe all the trickier.

One rising worry is modern sailors' reliance on technology, says former navigator Aron Soerensen, head of maritime technology and regulation at the Baltic and International Maritime Council (Bimco).

"Instead of looking at the instruments, you have to look out the window to see how the situation actually evolves," he explains. "Maybe today there's a bit of a fixation on instruments."

Maybe today there's a bit of a fixation on instruments instead of looking out the window – Aron Soerensen, navigator

But he points out that maritime organisations have tried to come up with ways of reducing the likelihood of collisions happening. One idea he mentions is the separation of traffic – neatly co-ordinating streams of vessels travelling through a busy strait, for example, by moving them into distinct lanes heading in the same direction.

The first such "traffic separation scheme" was set up in the Dover Strait in 1967 and there are now around 100 worldwide.

It's in everyone's interests to avoid a collision. Not least because under international regulations, both parties share liability for such accidents. In other words, captains are obligated to avoid colliding with another vessel even if their own ship has every right to be at its current position.

While the recent accidents are troubling, there is good news from the industry too, Uth says. He points out that the number of total losses – for example when a ship sinks – has been falling year-on-year recently.

According to data from insurance firm Allianz, there were 85 total losses of large ships recorded in 2016, a fall of 16% on the previous year. Of all 85, just one total loss was the result of a collision.

There's no doubt that technology has in many ways contributed to safety in the shipping industry – but life as a seafarer remains dangerous. As more and more large vessels plough the world's seas, the need to captain these behemoths has not evaporated, rather, it has grown ever more pressing. Source: BBC

(8) Clarksons Research, 21 August 2017

# A Rich Tapestry: LNG Projects And The LNG Carrier Fleet

The development of the global merchant fleet is affected by a very broad range of interwoven supply and demand factors, including shipping and commodity cycles, investor sentiment, regulatory concerns, yard capacity and so on. Another factor is shore-side infrastructure projects, which can be tricky to disentangle from the wider web, though this influence is a little clearer on, for example, the LNG carrier sector...

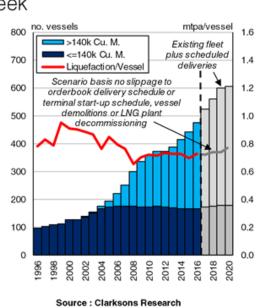
#### Spinning A Yarn?

When looking at supply and demand factors in shipping, the old adage about the chicken, the egg and their relative pedigree often springs to mind. In the case of LNG though, it could be argued that things are really quite LNG supply-led, as LNG carriers are often ordered to meet the requirements of specific

liquefaction terminal projects. In fact, a commonplace claim is that each mtpa of new liquefaction capacity corresponds to requirement for an additional LNG carrier. But is this rule of thumb borne out by the data?

# Graph of the Week LNG Liquefaction And The LNG Carrier Fleet 700

The graph shows the development of the LNG carrier fleet to end 2016 and potential further development of the fleet to 2020 on the basis of the current orderbook delivery schedule (and no demolition). The line shows the ratio of total global LNG nameplate liquefaction capacity (including FLNG) to the number of units in the LNG carrier fleet, including a 2017-20 scenario where all plants under construction start up on schedule. A wide range of data on the LNG carrier sector is available on the Shipping Intelligence Network and in LNG Trade & Transport 2017.



Well, at first glance, some relationship of this sort does seem to hold. In 2017, seaborne LNG trade is projected to grow by almost 10% y-o-y to top 294 million tonnes, with cargoes conveyed by a fleet of (at present) almost 500 LNG carriers. Similarly, total global nameplate liquefaction capacity is scheduled to increase by over 9%. The LNG carrier fleet is also set to expand rapidly, by over 14% in unit terms in full year 2017.

#### **Following The Thread**

Looking back, a relationship is also apparent; LNG terminal capacity grew at a CAGR of just under 9% in the decade to 2007, and the LNG carrier fleet grew at a comparable 9%. Indeed, the graph shows that the annual ratio of nameplate liquefaction capacity to the fleet was generally 0.8-1.0 mtpa/vessel in the period. Vessel contracting was strongly project driven.

But in following years, the ratio slid down into the 0.7-0.8 mtpa/vessel range, as fleet growth outpaced liquefaction capacity expansion from 2007 to 2016, with a CAGR of 8% versus less than 7%. Two main factors seem to have been behind the disparity: speculative ordering amplified by Japan's 2011 Fukushima nuclear disaster, which saw LNG carrier charter rates surge, and start-up slippage at projects such as Angola LNG (5.2 mtpa) and Gorgon LNG (15.6 mtpa). Combined with outages (e.g. in the Yemen), the result has been LNG carrier oversupply and challenged markets in recent years. **Weaving New Webs** 

# On the basis of the orderbook and the portfolio of LNG projects under construction, the mtpa/vessel ratio looks like it could still be slightly below 0.8 by 2020, possibly a worrying indicator for the fleet, though emerging US LNG export trade is likely to provide some tonne-mile upside. But LNG project slippage is common. If, for example, 30% of the 113 mtpa due onstream by 2020 were to slip past 2020, the ratio would drop back down to 0.72.

So there is a relationship between liquefaction capacity and the LNG carrier fleet, though it is not specifically one-to-one. And while there are clearly many relevant factors, looking at supply-side ratios such as mtpa/vessel can be a useful high-level approach. In a sense, LNG projects constitute one more thread in the rich shipping tapestry. Have a nice day. Source: Clarksons