

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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Editorial comments

- Among *technical innovations unfolding in shipping*, many seem likely to have a big impact eventually, but not yet and maybe not for a number of years. Others are perhaps much closer to having immediate large effects, and one in particular data availability, understanding it and using it for valuable purposes is discussed in item 3.
- Envisaged trends could promote a *further strengthening of the bulk carrier market* through 2018 (item 2). But restaining and reducing growth in the world fleet of bulk carriers is seen as an essential contribution, especially as demand for these vessels, based on this view and that of some other analysts, is unlikely to increase as vigorously as seen in the past twelve months.
- Within the sector comprised of **specialist ship management companies** there are multiple drivers, and M&A (merger and acquisition) activity has been noteworthy. Key features of the services provided and characteristics of the companies are reviewed briefly in item 4.
- Uncertainty about *regulatory issues facing the shipping industry* has been prominent for some time but it is argued that a clearer picture of the main elements is now emerging. Item 7 discusses ballast water management, SOX, NOX, the Energy Efficiency Design Index, C02 and energy efficiency, and also new regulations for passenger ships.
- A complete record of all *ships recycled last year* is available from an independent pressure group (item 5). The commentary maintains the well-established stance of this organisation, heavily criticising shipowners for not using more environmentally-friendly or safer facilities.

Richard Scott MA MCIT FICS editor (email: bulkshipan@aol.com) +++++++++++++ (1) BIMCO, 19 February 2018

Tanker Shipping: Markets Under Massive Pressure From Low Demand Growth

The future of oil demand and subsequently of tanker demand is very much policy driven. It has been so in the past to some extent, but in coming years this will be more apparent.

Demand

BIMCO was surprised by the barely seen seasonality in tanker shipping where freight rates peak during the colder months in the Northern Hemisphere – from November to January. Loss-making freight rates across the board highlight the issues that the tanker industry is currently battling. Overcapacity, weak "trading demand" and weak OPEC output have depressed the conditions that usually boost long hauls.



Oil product tanker earnings

As illustrated by the very weak rates for oil product transports during most parts of 2017, the hardship extended losses into 2018.

For VLCC spot earnings, 2017 was the worst year since 1994. Average earnings of just USD 17,800 per day meant money was lost every day. Suezmax earnings averaged at USD 15,829 per day and Aframax at USD 13,873. The fact that China increased its importance in the oil market at the same time, generating a lot of tanker demand growth as it became the largest importer in 2017 (exceeding the US in April), freight rates remained dismally low.

China grew its imports by 10% (volume) in 2017, from the year before, and much of it was long haul imports. However, this boost to demand wasn't enough for the overall market to improve.

This brings our attention back to the rebalancing of the global oil stocks, and to the question of what is the future "right level" of global crude oil and oil product stocks going forward? Where's the goal line? A return to the absolute stock levels of 1 July 2014, does not seem to be the target. Consumption rose from 93.9m bpd in mid-2014 to reach 99.3m bpd by December 2017. As consumption rise, stocks are likely to follow suit.

Stock levels are often measured by "days of supply" – giving an indication that accumulated stocks equal to +1m bpd maybe one target point to watch out for.

According to the U.S. Energy Information Administration (EIA), the implied stock changes to the world liquid fuel balance in Q1-2018 show a drawdown of stocks, for the fifth consecutive quarter. Overall, stocks have piled up to an equivalent of 2.9m bpd since mid-2014, when crude oil prices started to decline rapidly. For 2018 and 2019, EIA forecast modest inventory (stocks) build up.

The drawdown of stocks is measured as a 'flow', i.e. the difference between oil production and oil consumption in million barrels per day (m bpd) and not as an absolute in million tonnes.



warms per day (m pop), and not as an absolute in million tonnes. The accumulated stock building tally in the upper part of the graph, is measured over six months. It accounted to 2.9m bdp going into H1-2018. A complete drawdown of stocks to the level seen on 1 July 2014, requires that oil consumption outstrips oil production by 2.9 million barrels every day during the 181 days of the first six months of 2018.

Since November 2016, when OPEC and non-OPEC producers agreed for the first time ever, to deliver a co-ordinated cut in oil supply, global stocks have declined. Despite that effort, stocks remain significantly above the level they were before oil prices started to drop, inspiring large-scale stockpiling during Q4-2014 to Q1-2016. The deal to cut oil output runs until the end of 2018.

So why is it that global stocks do not continue their decline? The short answer is because the US oil producers, who are not party to the supply cut agreement, are increasing their output from 9.3m bpd in 2017 to a forecast 10.3m bpd in 2018. Output reached 10m bpd in November 2017. From an oil tanker perspective, the uncertainty surrounding global oil supply adds another layer of unpredictability to the market.

Regardless of the talk about alternative sources of energy – oil demand continues to grow. The International Energy Agency (IEA) forecasts global oil demand to grow by 1.3m bpd in 2018. Potentially breaking the 100m bpd barrier during Q4 2018.

Supply

A four-year high for demolition was not enough to prevent the freight market from stagnating, as the crude oil tanker fleet grew by 5.1% and the oil product tanker fleet grew by 4.2% in 2017. For 2018, BIMCO expects the amount of capacity leaving the fleet for demolition to go down slightly. This is due to a lower level of newbuilt deliveries and expectations of slightly improved demand growth in the second half of 2018.

For 2018, BIMCO expects slightly higher fleet growth, on the back of the factors mentioned. We are now expecting the crude oil tanker fleet, as well as the oil product tanker fleet, to grow by 2.5%.

Fleet growth estimates are quite sensitive to demolition forecasts – which in turn are very sensitive to freight rate developments. 2018 has already seen 0.5m DWT of oil product tankers tonnage and 1.1m DWT of crude oil tanker tonnage being demolished (including two VLCCs). As the year progresses the pace is expected to slow down.

In terms of new tanker orders, 2018 is off to a slow start. It seems as if the recovery of the dry bulk sector meant that most orders placed in January were for dry bulk ships. One VLCC, two LR1s, five MRs and six handysize is it – for now.

For deliveries in 2018, the VLCC sector (with 734 ships at the end of 2017) will see some 30 units launched. In the product tanker sector, the MR fleet (with 1,387 ships at the end of 2017) will see up to 40 MR-workhorses entering the fleet in 2018.



A is actual. F is forecast. E is estimate which will change if new orders are placed. The supply growth for 2018-2020 contains existi 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.

Outlook

One of the volatility factors to watch out for in the crude oil tanker market is the amount of capacity being used for floating storage. Depending on the amount of newbuildings delivered, a huge increase in the use of oil tankers for floating storage could deliver a "virtual" decline in the operating fleet size. This in turn affects the freight market balance in a positive way - at least temporarily. Even though gross delivery of crude oil tankers in 2018 will be lower than last year - the level of floating storage will be lower as well. According to McQuilling Services, less than 20 VLCC are currently being used for floating storage. This is due to the oil market backwardation (future price of oil being below the spot price) which does not encourage anyone to store oil, at sea or on land, until contango (future price of oil being above the spot price) returns on a more permanent basis. Floating storage at current level has no impact on the freight market.



The future of oil demand and subsequently of tanker demand is very much policy driven. It has been so in the past to some extent, but in coming years this will be more apparent.

The impact of policy can be seen in many forms. Such as:

- 1. The building of strategic petroleum reserves in the US, China and India to mention a few that can afford it.
- 2. The resumption of crude oil exports from the US in early 2016 and
- 3. Rapidly increasing refinery capacity in the Middle East.

These are all major market policy events that have impacted the tanker market and its trading lanes. Next in the line of policy driven changes with a potentially widespread impact, particularly on the oil market and oil tanker market comes from the industry itself. The 2020 marine fuel sulphur cap is a huge issue, not just in terms of the uncertainties surrounding fuel availability and compliance, but also in terms of the positive knock-on-effect on shipping demand but also the negative and inevitable higher cost of bunkers.

More questions are raised by the day, with only very few absolute replies to any of them. Will there be a sufficient amount of compliant low sulphur marine fuel available from 1 January 2020? Even if there is, how much of this compliant fuel will require largescale redistribution from its production area to the purchase place of the bunkers? Will there be a requirement to refine and stockpile compliant fuel ahead of 1 January 2020, if yes how much?

What is apparent is that shipping demand will be positively impacted – mainly, in the short term with the building of local stocks, but possibly also in the longer term if the compliant marine fuels from the refineries continue to be produced remotely to the bunker refueling hubs. Last but not least, what will the refining industry do with the high sulphur residuals previously "disposed of" through the shipping industry? They will need to find new markets to ship to.

Source: Peter Sand, Chief Shipping Analyst; BIMCO

(2) BIMCO, 20 February 2018

Dry Bulk Shipping: Q1 Requires Careful Handling As Seasonal Cargo Demand Drops

Demand

The first quarter of any year always represents a challenge for the shipping industry, with fewer cargoes being tendered and Chinese New Year in February creating recurring business issues. In terms of freight rates, the positive development that characterised most of the second half of 2017 came to a sudden end on 12 December 2017, once capesize earnings peaked at USD 30,475 per day. On 29 January 2018, average capesize earnings were quoted at just USD 14,065 per day. By the end of January, the freight rates for all sizes of dry bulk carriers were at break-even levels – covering both OPEX and CAPEX – but not turning profitable. Chinese New Year celebrated on 16 February 2018, marks the beginning of the year of the dog. For dry bulk shipping it marks volatility, and a fall in demand round the festive days.

Compared to the same time at the end of January 2017, freight rates are higher in 2018 – illustrating that 2017 did deliver significant improvements to the fundamental balance.

The dry bulk market has benefitted from stronger industrial production almost everywhere in the world, illustrating the synchronised recovery mentioned so often these days by the world's leading economists. Another trend that sets 2017 apart from previous years, was the massive substitution of Chinese-origin iron ore, favouring imported higher quality ore from Brazil and Australia instead. China's political initiatives to improve energy-efficiency and to provide cleaner air for the population led to the use of higher quality imports to limit the energy needed and emissions generated in the production process. This trend is something that we expect will continue to support the shipping industry in years to come. Indian iron ore exports fell victim to this trend as the quality of Indian iron ore is inferior to both Brazil and Australia.

On the upside in Q1, we see Brazilian soya exports picking up – heading towards the pinnacle in Q2. However, this will only slightly offset the decline in sova exports in Q1 from the US Gulf, continuing to do so in Q2. In 2018, 161 million tonnes of soybean are expected to be transported.



Supply

As always, January sees plenty of ship deliveries coming onto the water. January 2018 reached a tenmonth high at 4.8m DWT, while 0.7m DWT were demolished. In short, the fleet is already expanding briskly, and the only comfort is the fact that the first half of any year is always busier in terms of newbuildings being launched, than the second half.



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 2018-2020 contains existing orders only and is estimated under the assumptions that the scheduled deliveries fall short by 10% due to various reasons and 35% of the remaining vessels on order are delayed/postponed.

As we pointed out previously, 2018 is the year of opportunity. The fleet is growing at the slowest pace since 1999, and solid growth in demand means that the dry bulk shipping industry should be facing another year of improvement to the fundamental balance.

The flip side of that optimistic outlook is of course that more new orders are being placed at Far Eastern shipyards by global shipowners and investors. Following 15 months of almost no orders, renewed interest in newbuilding re-emerged mid-2017, as parity for newbuilding's with the second-hand market prices was restored, and the Baltic Dry Index (BDI) broke the 1,000-index value mark.



By early February 2018, the orderbook consisted of 720 ships with a combined capacity of 81m DWT – before taking cancellations into account. The orderbook reached its highpoint in November 2008, when it consisted of 4,056 ships with a combined capacity of 332m DWT.

During January 5.6m DWT was ordered –including as much as 20 very large ore carriers (VLOCs) set for delivery in 2020 and 2021. Six of those are ordered against a multi-year Contract of Affreightment (COA) deal with Brazilian miner Vale. Quite a few deals of that kind were done in 2017. While this is a sign of the times, it's also clear that industrial shipping on the main trading lanes limits the spot market for international owners and operators.

Another sign of optimism is that the average age of demolished ships has been going up in 2017. Following three years of difficult market conditions that saw younger and younger vessels sold for scrap in the wake of the false dawn of 2013 – demolished ships in 2017 had an average age of 25 years. In 2016 the average age was 24 years.

In absolute numbers and cargo carrying capacity, deliveries in 2018 will be minor. But in terms of average ship size, 2018 is heading for a record. The launch of 18 valemax and 31 VLOCs (200,000-300,000 DWT) makes all the difference. For the first time ever, the average newbuilt bulker will exceed 90,000 DWT, at an average of 92,255 DWT. Looking to the future, 2019 will beat that record, currently set for an average size of 115,000 DWT.

Outlook

In 2017, the overall tonne miles demand grew by 5.1% (source: CRSL), powered by a massive lift in Chinese imports once again. Imports saw seaborne iron ore demand go up by 4.7%, and seaborne coal imports lifted by 12%.

Will that strong demand be repeated in 2018? BIMCO doesn't think so – 2017 was extraordinary. Our forecast for overall demand growth in 2018 is around 2-3%, with plenty of uncertainty surrounding that. Not just in terms of volume, but most likely also in terms of sailing distances. Longer hauls for key minor bulk commodities and grains have lifted shipping demand way above volume demand since 2014. A reversal of this trend, due to traditional exporters regaining market share, will hurt demand. Seen against a fleet growth of 1.4%, we are still looking at an improved market.

One of the minor bulks that may see a rebound in 2018 is cement. Following a decline in 2017, 110m tonnes of bulk cement and cement clinkers are expected to be shipped in 2018, growing by 3% (source: CRSL).

China remains all-important in 2018 – by any standard. A few striking numbers to highlight this are: global seaborne iron imports grew by 58m tonnes in 2017 – out of which Chinese imports grew by 50m tonnes. Seaborne steam coal transport increased by 52m tonnes in 2017 – China's imports grew by 11m tonnes.

Finally, seaborne coking coal transport increased by 10m tonnes in 2017 – while China's imports of the same grew by 7m tonnes.

Separating import data between seaborne and non-seaborne trades is vital if you want a more accurate outlook of trade developments impacting the shipping industry. An example of this being Chinese coal imports that grew by 12% in seaborne terms whereas the all modality coal trades only grew by 5%. Source: Peter Sand, Chief Shipping Analyst; BIMCO

(3) Hellenic Shipping News, 19 February 2018/ Nautilus Labs

Maritime Trends That Matter In 2018

For anyone who grew up watching the Jetsons, it's clear that future of flying cars and robot butlers hasn't quite arrived as quickly as hoped. As so often happens with technology, what has been achieved isn't what was expected – while those developments that once seemed so close, actually have taken much longer to arrive, and others developed much faster than people saw them coming.

In much the same way, it's easy for us to get distracted by tech forecasts in the maritime industry. We hear that autonomous ships are right around the corner, that all shipping transactions will be executed in blockchain and that the spread of computer power will make every object a part of the "Internet of Things". But are these innovations really going to change our lives in shipping?

More than likely. But not in 2018.

Realistically, we're years away from fully autonomous vessels carrying cargo across oceans without human intervention. While blockchain is establishing itself as an efficient way to record transactions, the systems are new, untrusted, and lack a critical mass of users. And it's true that we now have the ability to put computers within most ordinary objects, but we don't yet have the infrastructure to transmit, analyze, and act on this volume of data in real-time from ship-to-shore.

We will see all of this technology come into full use in shipping in the future – but not this year. And probably not for a few years – but most likely before I can Uber request that flying car.

So, what actually matters in 2018 tech trends? Based on the conversations we're having at Nautilus Labs, the answer is still quite simple — data.

Capturing it. Making sense of it. Acting on it.

That's the big shift that's going to change the way technology is used across our industry, and it's one that we see more owners and operators embracing than ever before.

And the reason is really quite simple: for an industry that is driven by commodity markets and where everyone is focused on major asset plays, more shipping companies are realizing that they're not generating a return on their biggest underused asset: vessel data. And it's not just to improve engine performance or predict when to get a hull cleaned, but to actually compete more effectively in the market and beat their competition.

At Nautilus Labs, we believe that the tech trends that will matter most in 2018 are about capturing, sharing, and acting on vessel data. While autonomy, blockchain, and IoT make for sexier headlines, maritime businesses are actually focused on more fundamental technology adoption: 1. Capturing data anywhere, in the cloud

The days of servers, USB sticks, and CD-ROMs has passed. Data doesn't need to reside in any one place for it to be secure, accessible, and reliable. As with our smartphones and email, maritime businesses now trust modern software to host data in the cloud and deliver it anywhere. For shipping, 2018 is the year to fully embrace cloud software.

Forward-thinking owner-operators are aggressively pursuing cloud-based solutions to collect data for their entire organization from anywhere, allowing information to be viewed at any time, from any internetconnected device. This means low-to-no capital investment required to get vessel data back to shore. Perhaps more importantly, it means finally having all your fleet data available to you in one place – always. And for businesses that are becoming increasingly distributed around the world, the cloud provides an unparalleled ease of adoption and agility everywhere the business operates.

2. Collaborating based on data to enrich insight

Data is only as useful as who has it and how accessible it is. Wikipedia is useful because it makes information that used to be housed in a book, on some shelf, in a library, accessible everywhere. But

more importantly, with user collaboration and refined search capabilities, it allows everyone to build insight collectively, and for each user to tap into precisely that area of insight they need at any given time. Having your vessel data all in one place is great – but not if it's on that proverbial dusty shelf in your library where only one person can slowly search through it at a time. Owner-operators are looking for ways for their teams to engage around data, share insights more effectively with each other (enough with the emails!), and inject their learned know-how into key datasets. Adopting tools that allow global teams to interact with each other around data and add their own input to it – while getting precisely the insights they need – is the biggest focus for organizations that traditionally face siloed information and teams. 3. Taking smarter actions with machine learning and data science

At the end of the day though, our ability as humans to understand vast troves of data is limited by our cognitive abilities and memories. Software can now be taught to become increasingly intelligent – to the point where it can synthesize analysis at a speed and depth that would have been unthinkable even a few years ago.

Every owner-operator we speak to knows that their biggest asset is their people. They also know that they can make their teams smarter by leveraging technology that can help them make better decisions. Machine learning software makes this achievable quickly, by consistently improving recommendations and refining predictions, so that each subsequent decision every team makes is stronger than the last. Ultimately, these Innovations around data will be creating value in the maritime industry for owners and operators in 2018. While the future of an IoT-enabled autonomous ship being seamlessly traded on the spot market via blockchain is one we support and hope to contribute to, the trends that matter are those that will help owners win today.

Companies that embrace better vessel data capture (relative to the manual processes in place now with noon reporting), collaboration and action in 2018 will be optimally prepared for 2019, 2020 and beyond. And who knows, maybe those flying cars are closer than we think too.

(4) Moore Stephens, 21 February 2018

Making waves within the ship management sector – M&A value drivers

The ship management sector is broadly split in two, between independent ship managers such as industry leading V.Group and in-house managers such as Mediterranean Shipping Company. Our research indicates that approximately 10% of the world merchant fleet greater than 5,000 GRT and built after 1991 are independently managed by the top 20 independent ship management companies. Favourable economic and market factors are encouraging M&A consolidation activity. Independent ship managers in particular, the larger businesses, are bolstering their respective position to generate greater economies of scale, whilst the smaller regional players look to compete on price, quality and regional or sector expertise.

Recent transactions include:

- Marlow and Columbia Ship Management September 2017
- V.Group's acquisition of Graig Ship Management August 2017
- Advent International's acquisition of V.Group December 2016
- V.Group's acquisition of Selandia Group November 2016
- V.Group's acquisition of Bibby Ship Management March 2016
- Anglo-Eastern and Univan merger August 2015

Services

Ship management companies tend to provide either, or all of the following services:

- commercial management arranging employment for the ship (chartering);
- technical management maintaining the ship and regulatory compliance;
- crewing managing and arranging the crew for the ship;

• other marine services – other relate services which impact the ship owners' income statement.

So what should you consider when performing due diligence on ship management businesses and what are some of the key value drivers?

Sector strengths – the smaller independent managers usually rely on serving specific sectors, as each vessel type e.g. tankers, bulkers or container ships will be subject to different management requirements and expertise.

Customer dependencies – ship managers can suffer from customer dependency, is the ship manager overly reliant on a single owner or vessel type? Is the ship manager part of a larger shipping group that uses a separate company to manage both its own vessels and third party vessels?

Vessel churn – linked to customer dependency is vessel churn. An acquirer should consider the vessel churn rate, and take into account whether or not they are contracted with reliable longstanding owners. Claims – the level of claims against a manager can be indicative of quality of service.

Joint venture arrangements – complex and unwritten agreements are relatively common in the sector, so mutual understanding between parties can be difficult to capture and analyse through due diligence. Client vs company cash – it is industry practice for the ship manager to hold client funds, so this should be reflected in in the cash adjustment for completion purposes, meaning there should be a clear distinction between client funds and company funds.

Supplier rebates – ship managers typically benefit from supplier discounts due to volume purchases (global rebates). It is important to consider these rebates as they have significant impacts on cash and valuation.

In addition to the above, there are many other issues to consider including: operating margin analysis, foreign exchange risk, international taxation structuring and assessment of normalised working capital. If you are considering a transaction within the ship management or marine services industries we would be happy to help. Our experienced advisors can give you the support and guidance you need in dealing with the issues above and many others.

Source: Moore Stephens

(5) Hellenic Shipping News, 21 February 2018/ NGO Shipbreaking Platform

Platform publishes list of ships dismantled worldwide in 2017

According to new data released today by the NGO Shipbreaking Platform, 835 large ocean-going commercial vessels were sold to the scrap yards in 2017. 543 were broken down – by hand – on the tidal beaches of Bangladesh, India and Pakistan: amounting to 80,3% of all tonnage dismantled globally. "The figures of 2017 are a sad testimony of the shipping industry's unwillingness to act responsibly. The reality is that yards with infrastructure fit for the heavy and hazardous industry that ship recycling is, and that can ensure safe working conditions and containment of pollutants, are not being used by ship owners", says Ingvild Jenssen, Founder and Director of the NGO Shipbreaking Platform. "It is particularly shameful that so many European shipping companies scrap their vessels on beaches. Their obvious lack of interest to ensure that shipbreaking workers around the world enjoy best available technologies, and that the environment is equally protected everywhere, clearly calls for additional pressure from authorities, shipping clients and financers", she adds.

The negative consequences of shipbreaking are real and felt by many. On the one hand, workers – often exploited migrants and some of them children – lose their life, suffer from injuries caused by fires, falling steel plates and the general unsafe working conditions, as well as from occupational diseases due to exposure to toxic fumes and materials. On the other hand, coastal ecosystems, and the local communities depending on them, are devastated by toxic spills and various pollutants leaking into the environment as a result of breaking vessels on beaches.

Despite the terrible accident that shook the international shipbreaking community in 2016, no lesson has been learned in Pakistan. In 2017, at least 10 workers lost their lives at the shipbreaking yards on the beach of Gadani. The Platform documented 15 deaths in the Bangladeshi yards last year, where also at least another 22 workers were seriously injured. Whilst international and local NGOs were repeatedly denied access to the Indian shipbreaking yards, the Platform was informed of at least eight fatal accidents in Alang in 2017.



DUMPERS 2017 – Worst practices

As in 2016, GERMANY and GREECE top the list of country dumpers in 2017. German owners, including banks and ship funds, beached 50 vessels out of a total of 53 sold for demolition. Greek owners were responsible for the highest absolute number of ships sold to South Asian shipbreaking yards in 2017: 51 ships in total. Since the Platform's first compilation of data in 2009, Greek shipping companies have unceasingly topped the list of owners that opt for dirty and dangerous shipbreaking.

Despite increased pressure for safe and clean ship recycling from Norwegian investors and authorities, in 2017, the number of Norwegian-owned ships scrapped on the beach was on the rise: 18 ended up in Alang, Gadani and Chittagong. The attempted illegal export of the TIDE CARRIER to Pakistan was stopped by Norwegian authorities following an alert by the Platform.

"In light of increased pressure from Scandinavian banks and investors, including Norwegian pension funds KLP and NBIM, and ongoing criminal investigations against the owners of TIDE CARRIER, Norwegian ship owners will have to ask themselves whether dirty profits are worth the reputational and financial risk that using beaching facilities now entails. Also, Danish container-giant Maersk will have an increasingly hard time justifying its U-turn back to the beach in Alang, as the yards there will not make it on the EU list of approved ship recycling facilities [1]", comments Ingvild Jenssen.

The worst corporate dumper prize goes to Continental Investment Holdings (CIH), the Singaporeheadquartered shipowning arm of Myanmar shipowner Captain U Ko Ko Htoo and parent company of Continental Shipping Line. The company, which is currently changing the composition of its fleet, sold 9 ships for breaking on the beaches in 2017. Four vessels ended up in Bangladesh, where in late December, during the demolition of CIH's TAUNG GYI STAR, a worker died hit by a falling iron plate. Ranked at second place, the container shipping giant Mediterranean Shipping Company (MSC) sold 7 vessels to Indian breakers. In the last nine years, MSC has profited from the sale of more than seventy ships for dirty and dangerous scrapping in Alang.

The Japanese owner Mitsui OSK Lines and the UK-based Zodiac Group follow closely with respectively 6 and 5 ships sold to South Asian yards. Zodiac received the worst dumper award in 2016 and sold 4 vessels to the yards in Chittagong despite being under scrutiny after a Bangladeshi worker sought compensation from the company for injuries incurred when breaking the EURUS LONDON. Other known companies that in 2017 opted for substandard yards, rather than recycling their ships in a safe and clean manner, include: Hanjin Shipping, Hansa Mare Reederei, Peter Dohle Schiffahrts, Rickmers Reederei, Hansa Treuhand, Berge Bulk, Costamare, Quantum Pacific Group and Teekay. Teekay had promised to never sell to beaching yards again after a worker died breaking the ASPIRE in 2014 in Chittagong. That Berge Bulk was under the spotlight in December 2016, when it was feared that the Berge Stahl would end up on a beach, did not prevent the company from selling another 5 ships for dirty and dangerous breaking in 2017.

With the oil and gas sector seeing a downturn in the last couple of years, the Platform has documented an increase in offshore units that have gone for scrap. Out of the 91 units which have been identified as demolished in the last three years combined, 41 of them ended up on the beaches of South Asia after

being towed for thousands of kilometers across the globe. Three floating platforms cold-stacked in Scotland that were sold by Diamond Offshore for scrap in 2017, allegedly to cash buyer GMS, were stopped from leaving following an alert by the Platform on their highly likely illegal export. "Fixed platforms cannot easily escape decommissioning rules, whereas we have seen that nearly half of all floating units slip under the radar and end up on beaches – this double standard has to stop", states Francesca Carlsson, Corporate Liaison and Policy Officer of the NGO Shipbreaking Platform.

All vessels sold to the beaching yards pass through the hands of scrap dealers known as cash buyers. In this way, ship owners attempt to shield themselves from responsibility, and are paid upfront the highest market price in cash for their end-of-life vessels by the dealers. To reduce costs and to exploit the loopholes in international legislation, cash buyers will change a vessel's flag to one of the typical lastvoyage flags of convenience, such as Comoros, Palau and St Kitts and Nevis. Cash buyers will also register the vessel under a new name and a new post box company, rendering it very difficult for authorities to trace and hold cash buyers and ship owners accountable for illicit business practices. "Ship-owning companies that stand by their corporate social responsibility directly sign contracts with ship recycling facilities they have inspected and found adequate. Choosing to sell a ship to a facility which is on the EU list of approved yards is the easiest way for a ship owner to be assured that there has been a guality check. Fortunately, it is becoming increasingly difficult for ship owners to simply blame the cash buyer: investors and authorities are expecting ship owners to control the choice of the recycling yard, and expect that choice to be a vard that does not endanger workers and the environment [2]", says Carlsson. * The data gathered by the NGO Shipbreaking Platform is sourced from different outlets and stakeholders, and is cross-checked whenever possible. The data upon which this information is based is correct to the best of the Platform's knowledge, and the Platform takes no responsibility for the accuracy

of the information provided. The Platform will correct or complete data if any inaccuracy is signaled. All data which has been provided is publicly available and does not reveal any confidential business information.

2017List of all ships scrapped worldwide -Facts and Figures [PDF] List of all ships dismantled worldwide in 2017 [XLSX file]

NOTES

[1] In 2018, the EU will publish a list of ship recycling facilities around the world that comply with high standards for environmental protection and workers' safety. The list will be the first of its kind and an important reference point for sustainable ship recycling.

[2] The many scandals involving European shipping companies are also a driver behind the strong interest that various financial institutions have started to show in ship recycling: to ensure responsible business practices, some are now setting criteria for shipping companies they finance, while looking at the EU Ship Recycling Regulation for guidance.

(6) Clarksons Research, 16 February 2018

Box Shipping Still Feeding The 5,000...

One of the great stories of the Bible's New Testament centres on the feeding of a multitude of 5,000 with just five loaves and two small fish. Shipping also has a notable 5,000 to feed in the form of the containership fleet. In this case, the feat has not only been continually finding enough cargo for the fleet to carry but also generating more capacity across a similar number of ships as time has gone by. **5,000 Strong**

Today the containership fleet stands at 5,192 units, a pretty impressive number considering that it stood just 2,617-strong at the start of the millennium. It passed the 4,000 vessel mark during 2007 and the 5,000 vessel barrier soon after in 2011. However the containership fleet has been stuck around 5,000 units for some time now. 2017 saw just 8 vessels added in net terms to the fleet. In fact, compared to the boxship fleet at the start of 2012, the fleet today is only 109 vessels larger, even though an overall total of 5.6 million TEU (nominal) capacity has been added to the fleet over the same period. During that time, vessel numbers have grown by 2% whilst capacity has grown by 37%.

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A Maior Feat

Of course, even if the numbers haven't grown much, the 5,000 ships still need to be fed with plenty of cargo. A global trade volume that totalled 67m TEU back in 2000 hit 192m TEU in 2017 (a CAGR of 6.4% in that period) and has grown guickly enough to allow the fleet to get that large. Meanwhile, in recent years, 'The 5,000' has pulled off the trick of moving more and more cargo each year. The 5,083 ships at start 2012 moved 155m TEU that year but then, in 2017, a figure of 5,159 ships moved a global volume 24% larger. That's an impressive feat. Of course, it couldn't happen without an increase in capacity; that's crucial. Capacity, if not the actual number of ships, has grown rapidly, and the constancy of 'The 5,000' is of course in part illusory. Within the fleet there have been major dynamics with bigger new ships (as large as c.21,000 TEU) joining the fleet and older, smaller ships exiting.

How It Was Done

This dynamic has become extremely pronounced in recent years with deliveries over 1m TEU in 9 of the last 10 years (average size in 2017: 7,731 TEU) and record levels of recycling in 2016 followed by 0.4m TEU in 2017 (average size: 2.822 TEU). Despite a static fleet in unit terms, that's where the capacity has come from, along with the 'fungibility' of boxships allowing the 'cascade' of larger ships down onto trades previously served by smaller vessels in many cases.

More To Go Around?

In the near-term, box shipping might be able to repeat the trick. There are 383 units (2.7m TEU) on order and in the last two years 335 were recycled, so ship numbers might not change too much, even as capacity grows further. The wider debate surrounds the future of the current big ship-led model; new trades have opened up to larger ships but maybe the next big efficiency gains in liner shipping (especially considering 3D printing and potential changes in manufacturing locations) might necessitate a network that has to rethink the role of smaller ships too. Time for another modern miracle? Source: Clarksons

(7) Hellenic Shipping News, 23 February 2018/ DNV GL

Clear view on the regulation front

The regulatory wheel keeps turning, so it is important to understand the developments when addressing compliance and making strategic business decisions. DNV GL gives owners and operators a heads-up. 2017 has been a significant year for environmental regulations. Important decisions have been made, regulations finalized, and we now have a clearer picture of the regulatory landscape than a year ago. **Ballast water management**

The Ballast Water Management (BWM) Convention entered into force on 8 September 2017. After complex discussions, with numerous twists and turns, MEPC also agreed a revised and extended implementation schedule at its 71st meeting in July this year. Briefly put, every ship in international trade will be obliged to comply sometime between 8 September 2017 and 8 September 2024. For ships of 400 gross tonnes (GT) and above the compliance date is linked to the renewal of the International Oil Pollution Prevention certificate through a set of somewhat intricate provisions, whereas ships below 400 GT must comply by 8 September 2024.

While the regulation in principle describes a ballast water discharging standard, the reality is that ships will be required to have an IMO-approved treatment system installed by the ship-specific compliance date at the latest. In practical terms this means the entire world fleet is to be compliant within 2024. There are presently more than 50 IMO-approved systems on the market.

In the US the domestic ballast water management regulations entered into force in 2013. New ships must comply upon delivery, existing ships by the first scheduled dry-docking after 1 January 2014 or 2016, depending on ballast water capacity. USCG type approval is required for the ballast water treatment systems; six have been granted over the past year. The USCG has revised its liberal extension policy of granting deferred installation dates to more than 12,300 ships in the absence of approved systems now that type approvals have been granted. DNV GL expects the new, restrictive USCG policy on extensions to tighten further. Operators should now plan their installation dates based on the compliance dates in the regulation.

SOX regulations

At MEPC 70 the IMO members agreed that the 0.50% global sulphur cap will be implemented from 1 January 2020. The decision has provided certainty to the maritime and bunker industries, but has also provoked an intense, ongoing discussion at the MEPC on the practicalities of implementation, and ways of ensuring robust enforcement and a level playing field. Supporting measures are being discussed, but full clarity is not expected before MEPC 74 in Q2 2019. A possible carriage ban for non-compatible fuels, if agreed, is the only measure likely to have a major impact.

Ship operators will need to decide about their preferred compliance strategy, and this decision will have significant operational and financial implications. There is no one-size-fits-all solution on the table; scrubbers, LNG and "hybrid" fuels are all realistic options, but the vast majority of vessels are expected to default to MGO. Local availability issues and price volatility are expected as consequences of a dramatically changed fuel demand situation as of 1 January 2020. A significant number of non-compliance cases are likely to occur in a transitional period. Once supply and demand reach a new equilibrium, the situation should ease, but the transition will be a bumpy ride nevertheless. Enforcement remains a critical concern, in particular on the high seas where flag states are in charge, as opposed to exclusive economic zones (EEZ) where enforcement is a port state matter. Reasonable questions are being asked about the readiness of all flag states to ensure uniform and robust enforcement, and thereby a globally level playing field. For reasons of international law the IMO cannot be expected to come up with effective enforcement measures.

NOX regulations

NOX Tier III requirements have entered into force in the North American emission control area (ECA) for ships constructed on or after 1 January 2016. In essence anyone constructing a ship today needs to consider whether the vessel will — or might at some point — operate in the North American ECA. If so, NOX control technology will be needed for that ship.

Additionally, MEPC 71 adopted the MEPC 70 agreement to apply NOX Tier III requirements to ships operating in the North Sea and Baltic Sea ECAs. This will apply to ships constructed on or after 1 January 2021.

Energy Efficiency Design Index

MEPC 71 agreed to continue its EEDI discussions through a review set to conclude in 2019. The review will consider both the reduction levels and the timing of the implementation phases. Phase three may be brought forward, and a new phase four may be agreed commencing in 2025.

The MEPC also agreed to address the EEDI issues the ro-ro industry has been facing. After it was shown that the phase two reduction levels cannot be achieved for technical reasons, the MEPC decided to ease the ro-ro requirements for phase two by 20 per cent, and to remove a key barrier for large ro-ro vessels by applying a size threshold to the requirement curve. Nevertheless, while solving the problems for phase two it is not at all clear that this fix will also take care of phase three. The issue is therefore likely to result in a renewed discussion a few years down the road.

CO2 and energy efficiency

Climate change remains the driving political force behind CO2 and energy efficiency regulations. In the EU, regulations for monitoring, reporting and verification (MRV) of CO2 emissions have entered into force

for all vessels above 5,000 GT sailing to or from European ports. Ships must also report cargo data and average energy efficiency. The EU will make the data publicly available on an annual basis. Monitoring plans were due to be submitted to verifiers by 31 August 2017, with 2018 being the first year of reporting. The first data sets will be published by the EU in mid-2019.

By now all practical details have been defined and published. The final piece of the puzzle, a software system for voluntary use which will facilitate the information flow between the parties involved, is under development at EMSA.

Part of the purpose behind the EU MRV regulations was to encourage the IMO to work on a similar mechanism with global rather than regional coverage. The EU regulation itself contains a provision calling for its alignment with a newly developed international system once it is available.

It is therefore of great significance that MEPC 69 did agree on a global mechanism for mandatory monitoring, reporting and verification of fuel consumption data for all ships of 5,000 GT and above. The scheme, known as the IMO Fuel Consumption Data Collection System (IMO DCS), was adopted at MEPC 70, with 2019 as its first year of implementation. MEPC 71 put the final touches on the mechanism by agreeing on verification guidelines.

Importantly, the IMO DCS differs from the EU MRV in several significant aspects, including confidentiality of data, calculation of efficiency metrics, and requirements for data verification. While these are all issues where the EU has a strong preference for the requirements of its own system, the European Commission has nevertheless initiated a formal review process aimed at potentially aligning the EU MRV with the IMO DCS. A stakeholder consultation process was run in late 2017, where stakeholders could provide their feedback to the EC.

Despite encouraging signs of a legislative proposal possibly being made public in May 2018, a word of caution is in order. In view of the political complexities of CO2-related negotiations in Brussels, it will be a challenging and likely time-consuming process for the Commission, the Parliament and the Council to come to an agreement. Therefore the industry should be prepared to accommodate two different but overlapping reporting regimes for at least some years.

The IMO is also seeing a reinvigorated discussion on long-term CO2 emission goals and the shipping industry's contribution to emission reductions in response to the Paris global climate accord of 2015. Accordingly IMO has, in addition to establishing the DCS, also conceded that it needs to develop an IMO strategy on GHG emission reductions. The work is in progress and intended to result in an initial strategy at MEPC 72 next year, with a review in 2023. This could be of great significance to the maritime industry: not only will such a strategy have implications for future design and operational energy efficiency requirements, it may also lay the foundation for a carbon pricing scheme.

DNV GL believes that unless the IMO can build on its achievements so far and make significant progress on GHG matters, there is a real risk of other non-shipping bodies attempting to step in and regulate the shipping sector. This would not be a desirable outcome, least of all for the maritime industry itself.

New regulations – damage stability of passenger ships

By adoption of the amended SOLAS Ch.II-1, new rules are coming into effect for passenger ships contracted on or after 1 January 2020 or, in the absence of a building contract, vessels with a keel-laying date on or after 1 July 2020 or delivery on or after 1 January 2024. Major changes included new, stricter requirements regarding damage stability standards as expressed by the required subdivision index "R", which is now only a function of the total number of persons on board. Lifeboat capacity and the length of the ship are no longer part of the formula. Furthermore, R is kept constant for up to 400 persons on board, then increases as that number rises.

The legacy version of Ch.II-1 included an option to permit certain watertight doors to remain open during navigation. This has been removed entirely. The new version also makes damage control drills mandatory for all passenger ships.

The new rules have various consequences for the design of new ships. For example, in the case of the new required subdivision index R it may be necessary to increase the ship's freeboard or breadth, or provide improved internal watertight subdivisions compared with current designs. The stricter regulation regarding watertight doors may also affect the internal subdivision arrangement and operations on board. Source: DNV GL