

MARITIME

# TREND REPORT JULY 2017

CRUDE OIL & PRODUCT TANKERS .....	3
BULK CARRIERS .....	7
CONTAINERSHIPS .....	10
MULTI PURPOSE VESSELS .....	13
OFFSHORE .....	16
LNG.....	19
CRUISE VESSELS .....	21
TIME TO SAY GOODBYE.....	23

## INTRODUCTION | GLOBAL SHIPBUILDING CAPACITY



Since global shipbuilding capacity peaked in 2011 with approximately 63 mCGT, it has declined by almost 30% and currently stands at a level of around 46 mCGT. During the last years, the capacity was reduced by such a significant volume primarily due to two factors. One is that the number of shipyards has significantly decreased and the other is that shipyards themselves have downsized their workforce and facilities. 2016 was a year of historically low contracting, the orderbook melted by 23 %. Only 133 yards were able to secure at least one contract for vessels above 1,000 GT, compared to 244 and 323 the years before. As of Clarksons, the number of active shipyards dropped since early 2016 by more than a hundred to now 378 active shipyards worldwide (931 active yards in 2009). So far in 2017 the orderbook further declined by 9% and another 163 shipyards are about to complete their current orderbook this year, meaning running out of work soon.

Looking further down the road, Clarksons Research forecast an additional decline on capacity by another 20% down to a level of 36 mCGT in 2019. By then it is said to have reached rock bottom and will increase slightly afterwards, both in production capacity (up to some 40 mCGT until 2022) and also in the yards's utilisation. So, building a new shipyard in such an environment requires sufficient funding, a vision and some strategic thinking. It seems to be in place for the King Salman shipyard in Ras Al Khair.

On May 31st, Saudi state-run oil firm Saudi Aramco announced it had signed a shareholder agreement with three companies to build the Gulf's largest shipyard. Together with National Shipping Company of Saudi Arabia (Bahri), a state-controlled firm which ships oil for Aramco, London-listed UAE engineering firm Lamprell Plc, and South Korea's Hyundai Heavy Industries they are about to invest 5.2 bnUSD for the new 4.3 square kilometer shipyard in Ras Al Khair. Major production is expected to start in 2019 with the yard hitting full capacity by 2022. The yard will reportedly have the capacity to construct four offshore rigs and 40 vessels (including 3 VLCCs) per year. Does this fit into the global newbuilding capacity scenario? Well, yes, it does for certain reasons. Low oil prices have drastically slowed Saudi Arabia's economy so the country is trying to create manufacturing jobs and produce goods and services which traditionally it has imported. The project aims to integrate essential links in Saudi Aramco's supply chain related to offshore drilling and shipping activities. The government will cover about 3.5 bnUSD of the total cost, with the remainder funded by the joint venture. For a share of 10% Hyundai HI will invest 70mUSD and will provide its shipbuilding and shipyard operating expertise.

## CRUDE OIL & PRODUCT TANKERS



Without a shadow of a doubt, the collapse of oil prices back in 2014 was great news for oil tankers. After years of stagnation, the crude oil seaborne trade started to grow by over 4% per annum. An increased demand for transportation considerably improved ships earnings, which resulted in a wave of newbuilding contracts, as is normal in the shipping world. Almost three years down the line, those ships start to get delivered in rather alarming quantities. Despite moderately optimistic oil consumption forecasts, in terms of tonnes, the 2017 seaborne trade is not estimated to increase substantially, thus the gradual softening of freight rates seems inevitable. High tonnage supply, coinciding with weakening demand is a typical shift of the cycle, which normally results with reduced contracting of the new tonnage. This time around, however, we seem to be observing an entirely different behaviour.

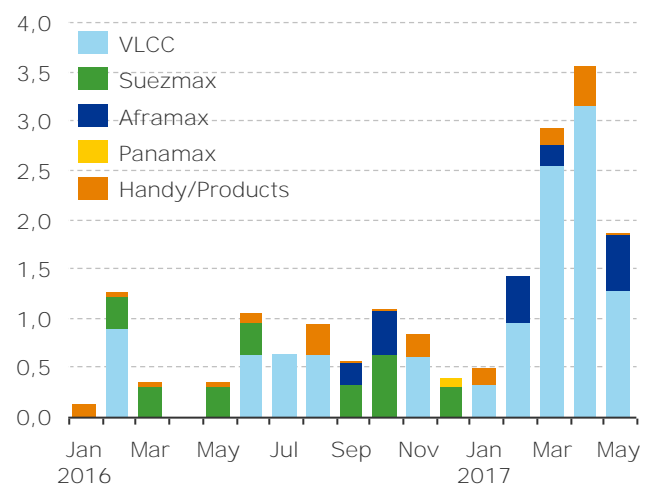
### Tempting prices, too low to say no?

One may say, that after almost no ordering in 2016, any new contract placed in the shipyard may look like an improvement, but the current pace of ordering is more than unusual. According to IHS Markit data, only in the VLCC segment, there have been 26 ships ordered in the first 5 months of the year. Compared to only three such contracts placed during the same period in 2016, an increase of activity is more than visible. At the same time, there were 47 VLCCs and 26 Suezmaxes delivered last year and another 52 and 65 are expected to hit the water in 2017, allowing the fleet

to grow by 6% and 8% respectively. Even with continued strong imports to China and India and increased tonnage demand for the US exports, such pace of expansion offers no slack for the earnings, which will continue to soften. Since this is a well-known conclusion, why are so many new contracts being announced nowadays?

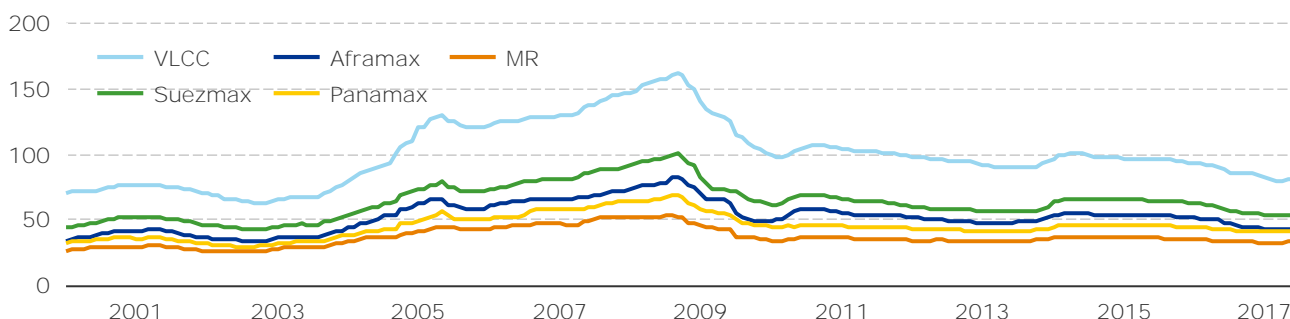
The answer is simple - they are cheap! With 80 mUSD for a VLCC and 53 mUSD for a Suezmax, you need to travel some 25 years back in time to see similar prices (including inflation in the equation). One simply does not say "no" to such bargains; a theory well supported by the current level of contracting.

### NEWBUILDING CONTRACTING DEVELOPMENT [mDWT]



## CRUDE OIL & PRODUCT TANKERS | LOW NEWBUILDING PRICES

### NEWBUILDING PRICE DEVELOPMENT [mUSD]



Shipyards are in a tough negotiation spot and their exhausted orderbooks leave them no choice, but to accept what owners are prepared to offer. The NB price for a VLCC, currently represents what owners had to pay for a 5-year-old ship just 16 months ago! It means that the ships contracted nowadays will have a considerable competitive advantage in terms of their break-even rates, compared to their peers contracted earlier. In addition, the up-coming environmental regulations introduce additional costs for the ship owners.

Whether we talk about ballast water treatment systems or for example scrubbers, the cost is substantial and hard to justify, particularly when the differential between second-hand and scrap prices is narrow. In consequence, we may see some ships sold for scrapping earlier than previously assumed. By the year 2020, there will be some 100 VLCC and 80 Suezmax tankers being over 20 years old, which means that now would be the time to think about replacing them.

#### The cycle continues

Low oil prices also have consequences for trade patterns, particularly in and out of the US. Due to increased shale oil production, we observe lower imports across the Atlantic, particularly from West Africa. Those barrels however, are being re-routed to the Far East, which offers higher fleet utilisation due to increased distances. In addition, ever since the US has lifted the crude oil export ban, we see increased exports of the American crude, often bound for the Far East importers. In such trade, it is possible to use Aframaxes and partially laden Suezmaxes going via the Panama Canal, however the best economies of scale can be achieved by using VLCCs going around the Cape of Good Hope.

The problem is that it is impossible to load the American crude on a VLCC due to lack of infrastructure. For the time being it is done via ship-to-ship operations, however it is reasonable to assume that in the future there will be terminals big enough to accept VLCCs.

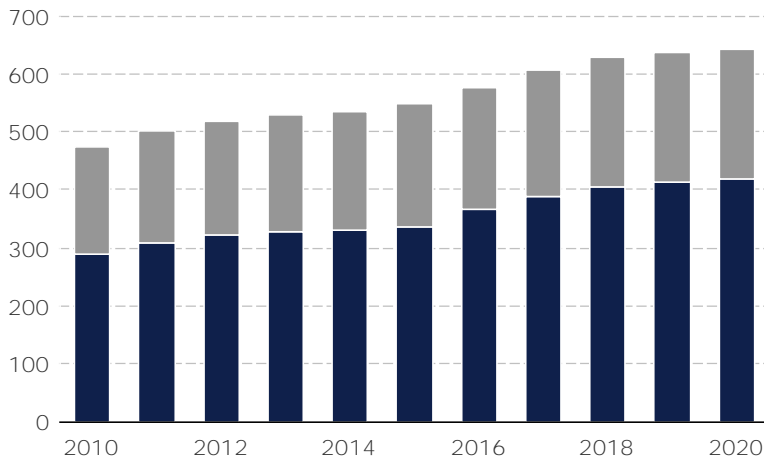
So, there you have it. There are quite a few legitimate reasons for the current levels of contracting. The super-low NB prices however, should be treated as an enabler for all other assumptions. There is of course a growing concern that the opportunistic contracting will result in a prolonged period of depressed earnings. It is indeed a concern, especially in light of possible further oil production cuts from the OPEC countries, which may reduce the amount of seaborne crude in the future. But then again, would anyone argue that this is the first time the market has dealt with an oversupply?

#### Owners rationale

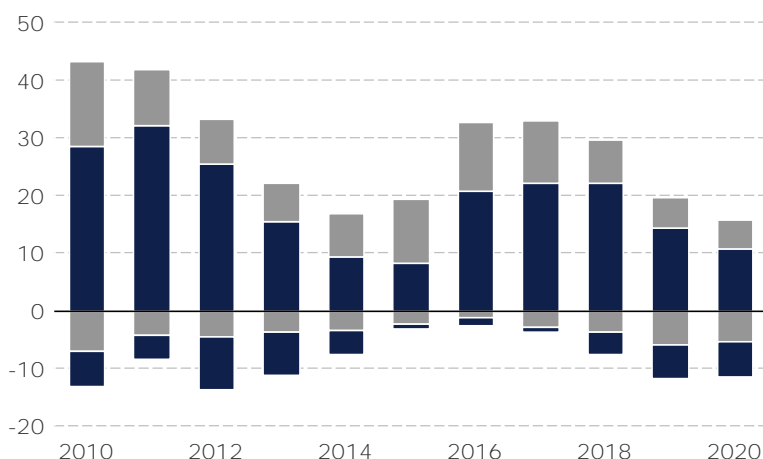
Although falling earnings are the reality these days, owners are not that concerned about the future. Low oil prices stimulate the consumption growth, which triggers off increased demand for tonnage. For as long as oil prices remain within 40-60USD /bbl the consumption is likely to grow strongly (particularly in non-OECD countries). After years of quantitative easing inflated commodity prices, two years ago they started to fall. Many people have taken long positions on oil and are desperate to see oil prices growing back up again. In light of growing US shale oil production, Libyan and Nigerian capacity coming back on stream prices however, are unlikely to recover any time soon. Low oil prices stimulate more trade which not only puts more barrels in the market but also (for US exports) adds miles, which absorbs more tonnage.

## CRUDE OIL & PRODUCT TANKERS | BIGGER IS BETTER

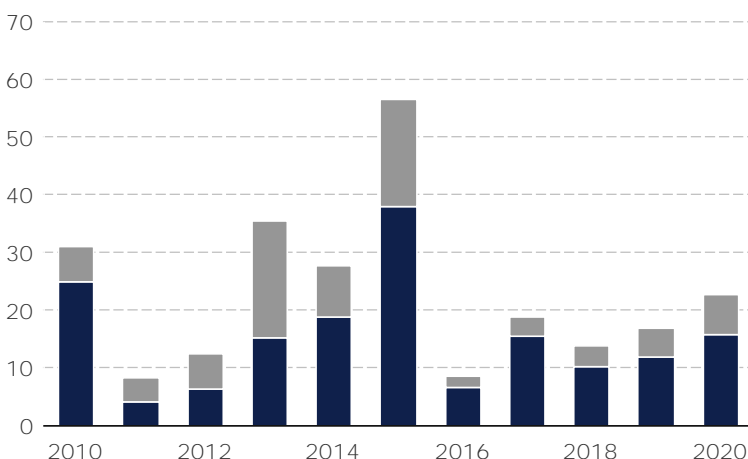
**FLEET DEVELOPMENT [mDWT]**



**EXPECTED DELIVERIES & REMOVALS [mDWT]**



**EXPECTED NEWBUILDING CONTRACTING [mDWT]**



■ Crude Oil Tankers ■ Oil Product Tankers

The VLCC fleet is estimated to have grown by 14% by the end of the year unless there is more scrapping in the second half of 2017. Quoting Paddy Rogers, "Illness is the cure". Low freight rates will eventually trigger off more scrapping. There is a need to replace up to 100 VLCCs by 2020, so the current orderbook does not seem to be too big at all. In addition, the new regulations will eventually make some people to throw a towel earlier, sending older and non-compliant ships for scrapping.

### Bigger is better

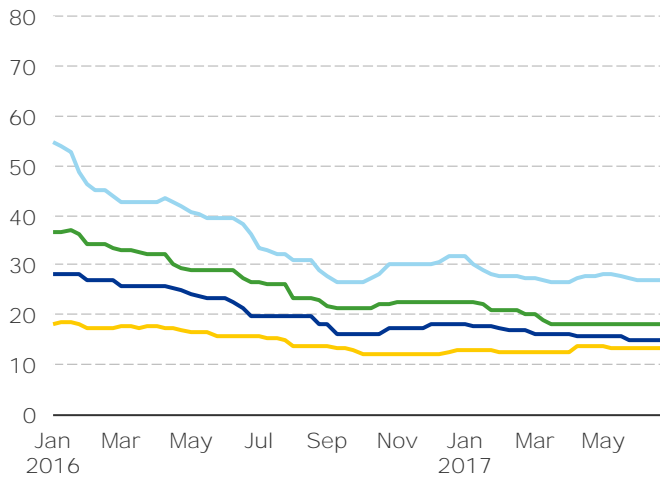
Consolidations is a must. Not only the owners echo the same message, but they have already put the wheels of consolidation into motion. Stolt-Nilsen with Jo Tankers, DHT with BW, BW with Aurora, Teekay with TI and Scorpio with Navig8 are the prime examples of consolidations in the tanker market. Frontline has been trying inorganic growth by trying to acquire first DHT and later Gener8. Although both attempts proved to be unsuccessful, it is almost certain we will see further expansion of Mr Fredriksen's fleet either through NB or SH contracts.

Pooling ships together and further consolidation is visible not only on the crude, but also on the clean product side. Oil majors are mostly interested in working with larger fleets, which not only offer higher capacity, but also provide a great deal of flexibility, which is particularly important in the clean trades, often driven by arbitrage.

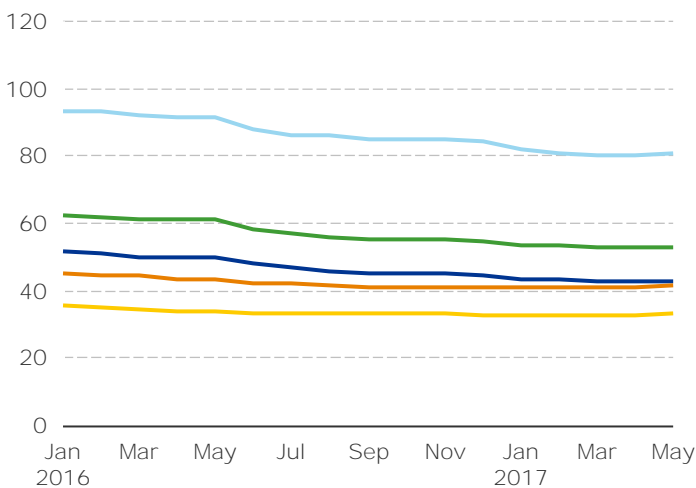
Larger players have also an advantage of being able to access alternative sources of finance, which play increasingly more important role in the ship finance. Capital is raised through bonds, IPOs, follow-ons or sale-lease back mechanisms. In addition there are also traces of PE carefully returning to shipping, particularly product tankers.

# CRUDE OIL & PRODUCT TANKERS | KEY MARKET INDICATORS

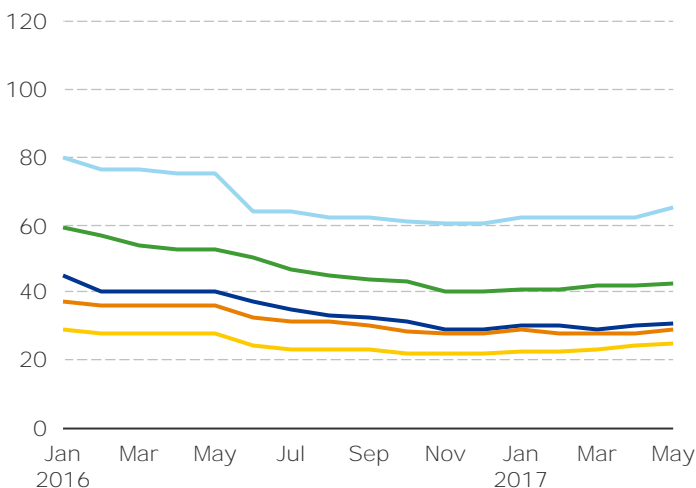
**1 YEAR TIMECHARTER [ x1,000 USD/DAY]**



**NEWBUILDING PRICES [mUSD]**



**5 YEAR OLD SECOND HAND PRICES [mUSD]**



— VLCC     — Aframax     — MR2  
— Suezmax     — LR1

Except for the winter peak season rates have been softening across all segments since the beginning of 2016. On the crude side, weaker earnings are mainly caused by increased deliveries of the new tonnage, particularly in the VL and Suezmax segment. High clean product inventories and corresponding lack of arbitrage are to be blamed for the softer product tankers market.

Earnings are unlikely to recover in the short term horizon, however the long term fundamentals remain strong for both clean and dirty tankers. Further tightening of OPEC policy as well as storage draw are the major threats to the market .

Newbuilding prices remain under pressure, despite the recent wave of contracting. Currently NB prices hover around 81 mUSD for VL, 54 mUSD for Suezmax and 43 mUSD for Aframax. An MR tanker will cost around 33.5 mUSD. Since most yards have exhausted orderbooks, their forward contract cover is very short, in many cases less than 12 months. It makes it very difficult for the yards to be able to raise prices. There is plenty of capacity still available, which suggests that prices are unlikely to recover substantially in the coming months

Second hand market has lost its momentum. Asset values deteriorated. Together with the overall weakness of earnings. The second-hand tanker index has deteriorated 25% since its recent peak in January 2016. A 5 years old VL currently costs 65 mUSD, Suezmax 44 mUSD, Aframax 31 mUSD and an MR product tanker trades for 25 mUSD. The re-sale prices remain around 5% above the newbuilding prices.

Public companies trade below their net asset values, which theoretically creates opportunities for the buyers. Most companies however hold on to their assets as they realise that the current valuations underappreciate their real market values.

## BULKER CARRIERS



### Tangible improvements so far in 2017

So far in 2017, the dry bulk market has shown signs of improvement. Average bulker earnings are above the 2016 average of 6,218 USD/day and more in line with the 10,765USD/day average during the post financial downturn period of 2010-2016. Asset prices have also increased since the end of 2016 with secondhand prices on average increasing by 30%. Robust Chinese dry bulk imports coupled with conservative fleet growth in 2017 have helped market fundamentals. Whilst the slowly growing optimism in the sector is gaining pace, there is still a substantial oversupply of ships and it is hard to expect a major upswing in the market. However, average earnings are still expected to outperform levels seen in the last two years and we are finally starting to see signals of an upturn.

### Healthier market fundamentals

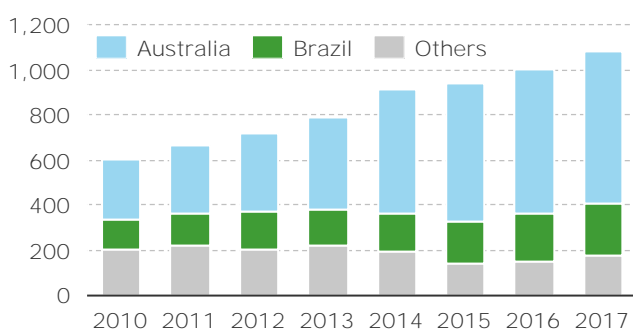
Growth in seaborne dry bulk trade is projected to improve in 2017 to 3.3%. This is faster than the growth recorded last year (around +1%), but still

moderate compared to historical values.

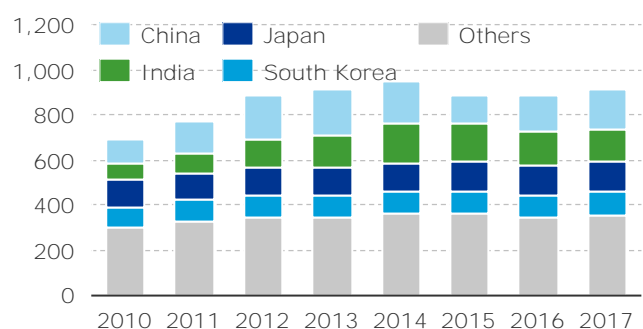
Global seaborne iron ore trade is projected to rise by 5% to 1.5 billion tonnes. This growth is expected to be driven by a continued rise in Chinese demand and increasing availability of high quality and low cost iron ore from Australia and Brazil. Global seaborne steam coal imports are projected to increase by around 3% to reach approximately 915 million tonnes. This is expected to be largely driven by a 9% rise in shipments into China. Chinese steam coal imports are anticipated to remain highly sensitive to Beijing's policy decisions, given the significant coal volumes mined domestically.

On the supply side, the pace of fleet growth is anticipated to remain subdued. Bulker demolition eased further in May with 8 mDWT scrapped in the first 5 months, down 62% year-on-year. Deliveries have also slowed with 23 million DWT delivered so far (down 6.2% year-on-year). The fleet is now expected to grow by around 3% in 2017, compared to an average of 5% per annum in 2012-2016.

**CHINESE SEABORNE IRON ORE IMPORTS [mTonnes]**

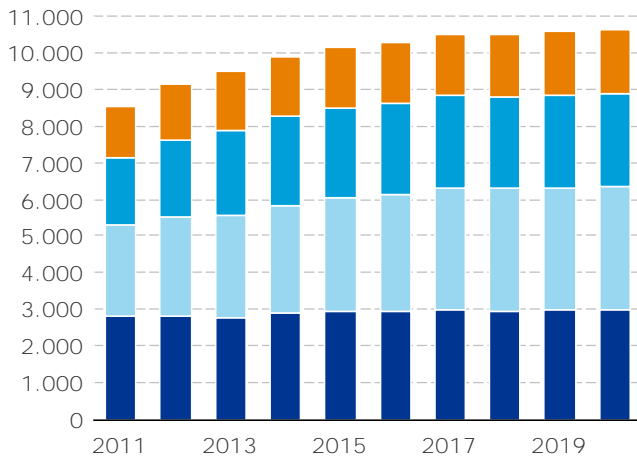


**THERMAL COAL SEABORNE IMPORTS [mTonnes]**

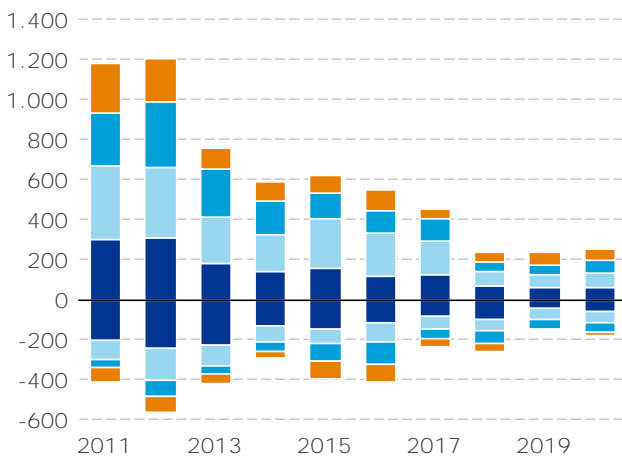


## BULKER CARRIERS | FLEET GROWTH TO REMAIN SUBDUED

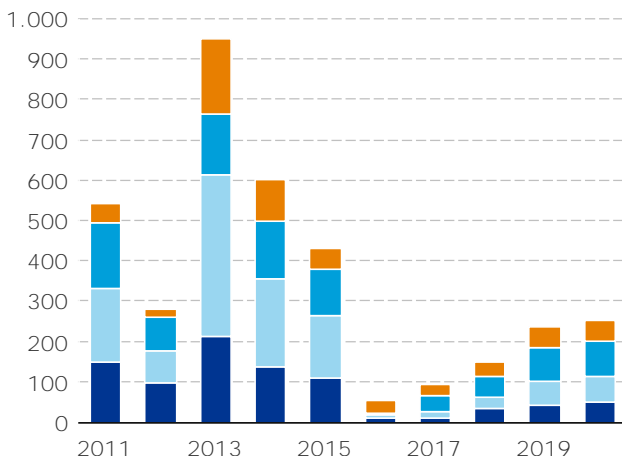
**FLEET DEVELOPMENT [vessels]**



**EXPECTED DELIVERIES & REMOVALS [vessels]**



**EXPECTED NEWBUILDING CONTRACTING [vessels]**



■ Capesize and VLBC    ■ Handymax  
■ Panamax    ■ Handysize

### Market performance still reliant on China

Following robust activity in 2016, Chinese dry bulk import demand has continued to grow in 2017. The rise of Chinese imports is driven by the availability of highly competitively priced iron ore from Australia and Brazil replacing some domestic output as well as high demand for coal to compensate for the losses from domestic production cuts. Iron ore stockpiles at Chinese ports reached a record 139 million tonnes in the middle of May as domestic production was replaced by cheaper imports.

Since lending to the real estate sector in China was reported to have eased, questions have been raised about the country's level of steel production going forward, which may start to limit iron ore imports.

Chinese seaborne steam coal imports rose 35% year-on-year to 40 million tonnes during the first quarter. Looking forward, Chinese steam coal import growth is expected to ease due to expectations of a crack-down on low quality imported coal designed to support domestic coal prices and sub-sequently the country's coal miners. Latest projections for 2017 indicate a 9% increase in Chinese steam coal imports.

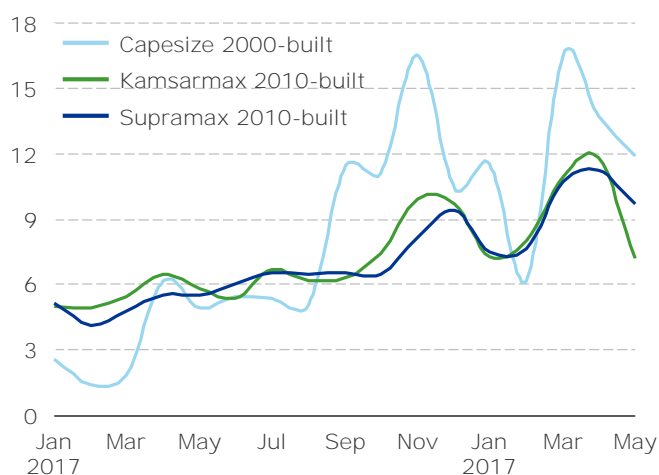
### Pace of fleet growth is expected to remain subdued

The pick-up in demand for dry bulk transportation has provided shipowners with better returns so far this year despite the decline in demolitions. During the first 5 months of the year around 8 million DWT have been scrapped (20.8 million DWT last year during the same period). This represents a total of 116 ships, including 38 handymaxes, 34 handysizes, 19 panamaxes, 14 capesizes, 6 VLBC and 5 small bulkers below 10K DWT. The average scrapping age so far this year is 24.7, which is similar to the first half of 2016 average. The current pace of scrapping is considered disappointing and the full year expectation has been revised to much lower than last year when total scrapping reached 29 million DWT, the third highest total on record. However, we still expect scrapping to increase in the next few years due to upcoming regulations. From an investment point of view, the installation of compliant technologies might not be an economical solution, especially for owners of old tonnage.

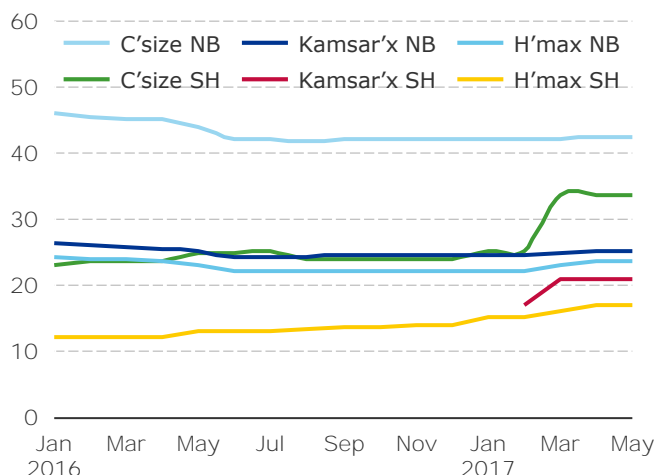


## BULKER CARRIERS | TIER II TONNAGE FOUND BARGAIN HUNTERS

**AVERAGE EARNINGS [ x1,000 USD/Day]**



**NEWBUILDING & SECONDHAND PRICES [mUSD]**



A total of 271 bulkers have been delivered year-to-date representing 23 million DWT. 32 VLBC already entered the fleet which is twice as many than in the first 5 months of 2016. The pace of capesize deliveries slowed with a total of 15 units of a combined 2.5 million DWT delivered compared to 41 last year and 22 in 2015 for the same period. Panamax deliveries totalled 68 units which is in line with the pace of deliveries throughout 2016. For the handysize/handymax segment, year to date 151 ships have entered the fleet compared to 172 for the first 5 months of 2016.

Ordering activity is picking up and according to latest statistics a total of 48 orders have been placed so far this year. 14 vessels were reported ordered in May alone followed by 7 so far in June. However, it is worthwhile to mention that many of the declared orders this year are actually Tier II orders with a keel laying date prior 1st of January 2016. We estimate that around 30 among the 48 orders are Tier II. This year's orders have seen cash-rich, private buyers taking advantages of the low prices as yards try to attract new business. But there are now signs that yards, and in particular those that are state-owned, are becoming reluctant to take below cost contracts and especially in relation to the use of a regulatory loophole to build cheaper Tier II ships. Instead some yards are now insisting on new designs both to avoid financial risks of skirting new regulatory requirements and to accelerate the price rise that Tier III designs will bring.

### Prices and freight rates

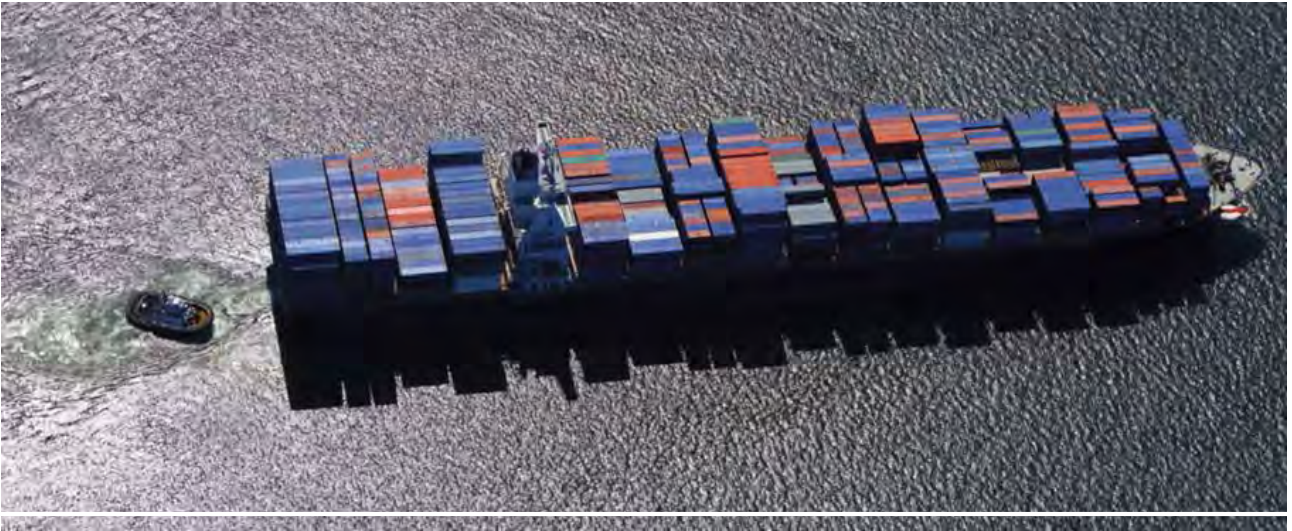
Chinese Newbuilding Dry Price Index stood at 769 points in May, up 0.4% on the month. That compares with growth rates of 1.3% in April and 1.2% in March.

The guide price for a 38,800 DWT handysize was 20 mill. USD in May, up 0.5% compared to April. A 64,000 DWT ultramax rose 0.5% to 22.8 mill. USD; while prices for an 82,000 DWT Kamsarmax moved up 0.5% to 24.3 mill. USD, and the price for a 181,000 DWT capesize increased 0.4% to 42,3 mill. USD.

Second-Hand prices have risen as well and recorded firm gains year-to-date. A five-year-old 82K DWT Kamsarmax can be purchased for 21 million US dollars which is 4 million USD above price indication in February. Price indication for a five-year-old capesize is 33.5 million US dollars which is almost 9 mill. USD more than a year ago.

With the overall dry bulk demand firming, average bulkers earnings reached 11,126 USD/day in March and April before sliding down to 9,288 USD/day in May. The BDI stood at 1,141 points in March this year compared to 383 points in March 2016 but went down to 973 in May.

## CONTAINERSHIPS



### 2017 YTD review

In the containership sector, it is all about the balancing act between demand and supply. Liner companies need to think twice how to keep vessel deployment in line with trade growth on the various routes around the world.

Taking the development of the Shanghai Containerized Freight Index (SCFI) as a reference, the balancing act worked well in 2016. Liner operators combined a restrictive expansion in vessel deployment (+1%) with an increase of the inactive fleet. As a result, the SCFI jumped by 50% to reach the 840 mark at the end of the 2016.

In 2017, the SCFI has been hovering between the 800-1,000 level, and is not showing a lot of movement. This is indeed surprising, considering the 6% TEU-capacity expansion by liner companies and the strong decrease of the idle fleet. Containerized cargo volume growth in the first months of the year had to be considerable.

Port throughput figures in 2017 confirm this picture, with major container ports announcing a significant increase in TEU throughput. Shanghai port recorded an increase of almost 9% compared to last year and Ningbo-Zhoushan port noted an increase of 9% as well.

The reduction of the idle containership fleet was remarkable in the year to date (0.8 million TEU). In April this year, the new setup of the alliances was finished, and liner operators started operations in the new structure. In this process of route setup,

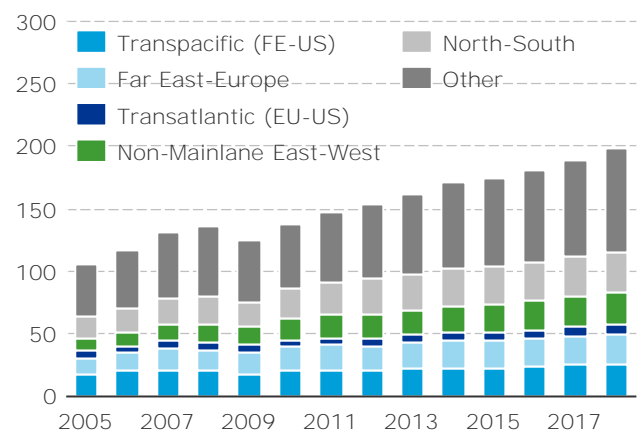
many containerships were reactivated.

At the same time, rising bunker prices are making life difficult for liner companies and are starting to impact on their bottom line results. Bunker prices started their increase from the start of 2016, leading to a doubling of the average 380cst price within one and a half year.

### Consolidation

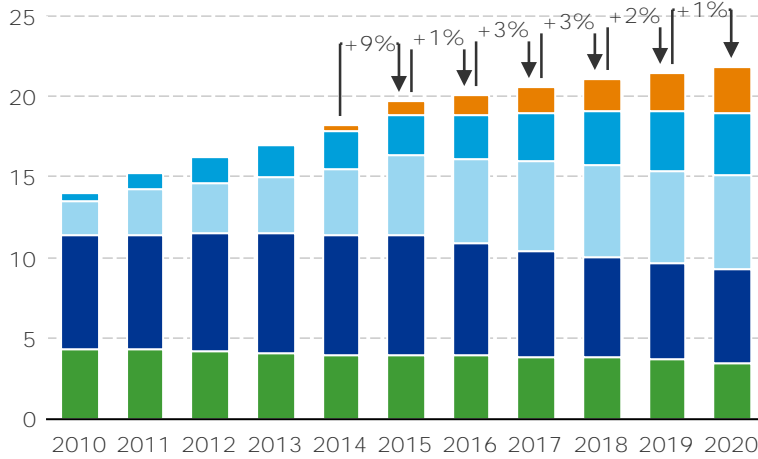
Last year, a total of nine liner companies merged their activities into four new conglomerates. Could merger activities also continue in 2017? Looking at possible remaining candidates, OOCL and Pacific International Lines (PIL) are high on the list. Apparently, COSCO has shown interest in buying OOCL, a logical choice considering they are both in the same alliance. Growing container liner PIL is not fixed to any of the alliances, and could, in theory, be an interesting candidate for all liners.

### GLOBAL CONTAINERISED TRADE [mTEU]

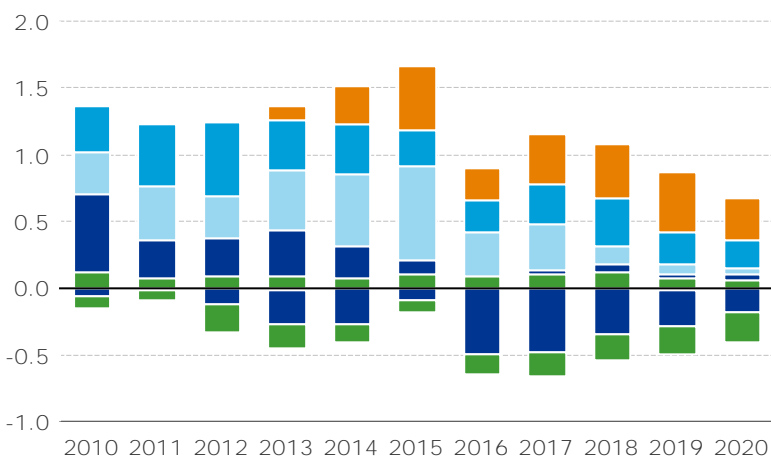


# CONTAINERSHIPS | FLEET GROWTH EXPECTED TO REACH 2.5%

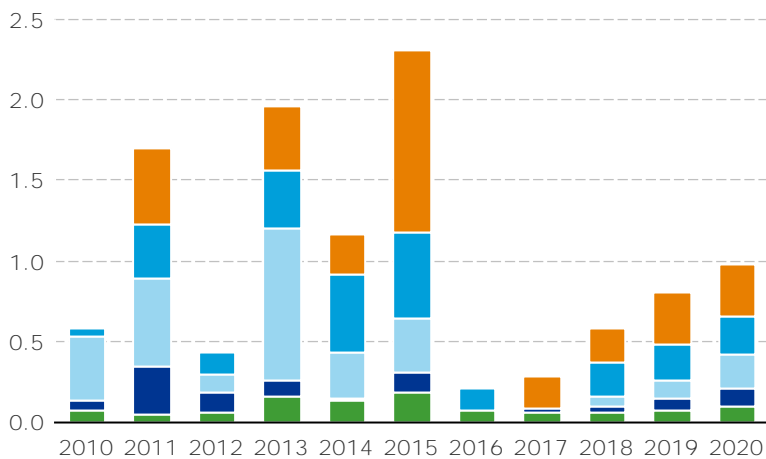
**FLEET DEVELOPMENT [mTEU]**



**EXPECTED DELIVERIES & REMOVALS [mTEU]**



**EXPECTED NEWBUILDING CONTRACTING [mTEU]**



■ >16K TEU   
 ■ 8-12k TEU   
 ■ <3k TEU  
■ 12K-16K TEU   
 ■ 3-8k TEU

**Demand**

In 2017, global containerized trade is expected to grow by 4.5%, which compares favorably to the growth seen last year (+3.8%). In 2018, global seaborne box trade is projected to grow by 4.7%.

In 2017, expected expansion in the mainlane trades could reach 3.6%. Intra-Asian trade is also projected to be a key driver of box trade growth, expected to rise by 6.6% in 2017. According to latest CTS data, container volumes on the westbound Asia-EU trade expanded by 5% year-on-year in the first quarter of 2017. On the peak leg Trans-pacific trade, container volumes were up by 13% year-on-year in the first quarter.

On the westbound Transatlantic trade, container volumes increased 8% year-on-year in the first quarter. Meanwhile on the eastbound Transatlantic trade, container volumes in the first quarter remained relatively steady compared to Q1 2016.

**Supply**

Full year containership fleet growth is expected to reach 2.5% based on TEU capacity, after a growth rate of 1.3% in 2016. A similar TEU-capacity expansion is also expected for 2018, after which the expansion could return to lower rates of 1.5% per year for the 2019-2020 period.

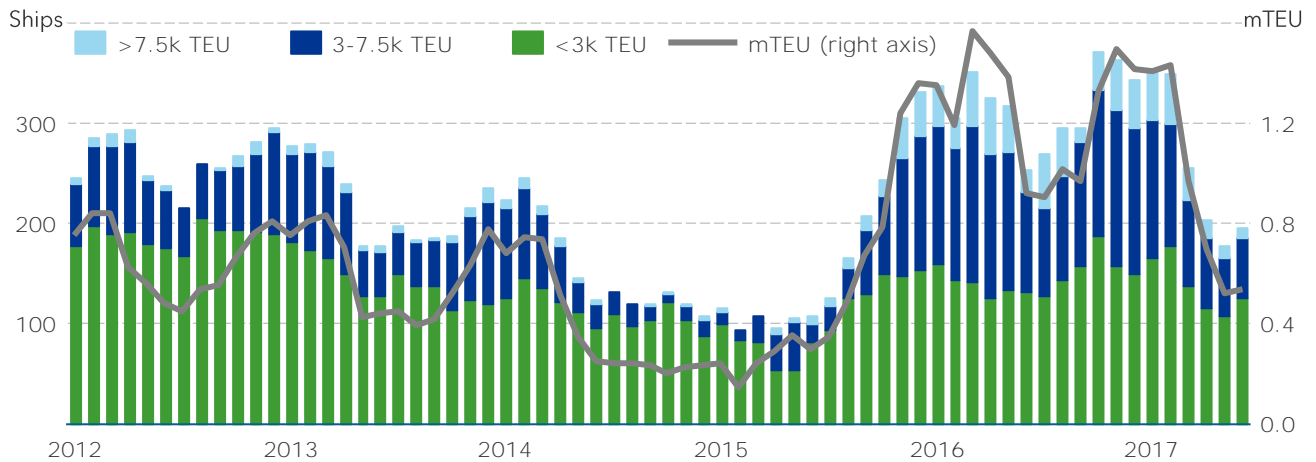
However, looking at the containership sector in number of vessels, the fleet is actually decreasing. We expect this to be the case also for the years to come, as a result of the upsizing trend.

Based on number of vessels, the containership fleet will be reduced by 1% per year during the 2016-2020 period.

The decrease in fleet numbers takes place exclusively in the below 8,000 TEU segment, due to heavy scrappings and few deliveries.

# CONTAINERSHIPS | INACTIVE FLEET DROPPING SHARPLY

## THE GLOBAL INACTIVE CONTAINER SHIP FLEET



Most of the ships that were scrapped from this segment were between 1,000-3,000 TEU and 4,000-5,000 TEU, with an average age at scrap of 18 years.

We expect the scrapping volume for this year to reach 650,000 TEU, a similar level as seen in 2016. Scrappings will be dominated by vessels below 8,000 TEU for the 2017-2020 period.

Containership newbuilding contracting in the year-to-date remains very low (22 vessels). More than half of the orders were placed in the 2,000-2,500 TEU segment. For the full year, we expect newbuilding contracting to reach around 60 vessels with 285,000 TEU.

### The inactive part of the fleet

The strong reduction of the idle containership fleet, which started in March 2017, has come to an end.

In May/June 2017, the idle fleet increased again slightly and now forms 2.6% of the global containerships.

Globally, containership capacity of 538,000 TEU is waiting for employment. The increase of inactive vessels happened in the smallest size segment (below 3,000 TEU), which increased to 125 inactive vessels.

Besides these, there are nine vessels in the 8,000-10,000 TEU size group inactive. This includes five ships, formerly operated by Hanjin Shipping, which have yet to find new employment.

### Prices and freight rates

For the smaller containership sizes, newbuilding prices seem to have reached bottom level, and are now more stable or somewhat increasing. In the second quarter of 2017, newbuilding prices for a 2,500 TEU or a 4,800 TEU vessel increased by 7% and 2% respectively. Larger vessels did not show changes regarding newbuilding prices.

Second hand prices for containerships started increasing since the start of 2017, and this continued also in the second quarter. The average increase for 5-year old vessels reached +10%, after an jump of 11% in the first quarter.

The Shanghai Containerized Freight Index (SCFI) started strong around the 1,000 mark at the start of 2017. Since then, it has been stable between 800-1,000. In 2016, the SCFI reached a low of 400 in March, after which it climbed back to the 850 level at the end of the year.

Overall containership earnings according to the Clarksons index reached 7,700 USD/day in the second quarter, an increase of 45% since the start of the year. Containership charter-rate assessments either remained steady or recorded slight improvements.

## MPV



### Review

There is no doubt that the MPV sector has had a tough year in 2016. Unfortunately, market conditions are not expected to be significantly different in the current year as well, and it will be characterised by weak rates, very low investment, consolidation among market players and a pressing need to cut costs for both shippers and carriers.

For the medium term, the demand/supply situation looks a bit better, due to a combination of very low fleet expansion and positive trade growth expectations. Furthermore, the upcoming Ballast Water Management convention could give the demolition of older MPVs a boost.

In the longer term, the MPV sector could benefit from global investments, resulting from the "One Belt One Road" projects and an increase of the oil price.

### Global trade expectation are more optimistic

Multi purpose vessels operate in the trades for bulk-, container- and project cargoes. Main commodities are steel products, steel scrap, forest products, construction materials, fertilizers, agricultural commodities, containerized cargoes and project cargoes. In order to estimate the outlook for MPV demand, we have to take a closer look at all the relevant sectors.

Last year, seaborne trade of commodities relevant for MPVs increased by 2.4% (measured in bn tonne miles). This came after a disappointing growth of 1.1% in 2015. However, despite the trade growth,

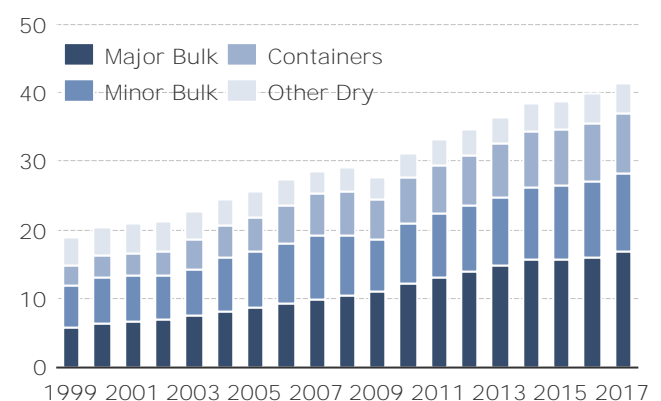
the MPV sector did not show any signs of improvement in 2016. As a result of the weak market conditions in the containership- and bulk carrier sectors, MPVs lost many battles with these shiptypes, in a relentless competition for cargoes.

In 2017, trade growth could reach 3.6%, and if this comes true, it would mean a significant increase compared to last year. But the extent to which the MPV sector could benefit from this depends on a number of factors.

First of all, there is the competition for cargoes from containerships and bulk carriers. The competitive position of MPVs will only become more favourable when market conditions for bulk and container start to improve. However, we assume that this will not be the case for the current year.

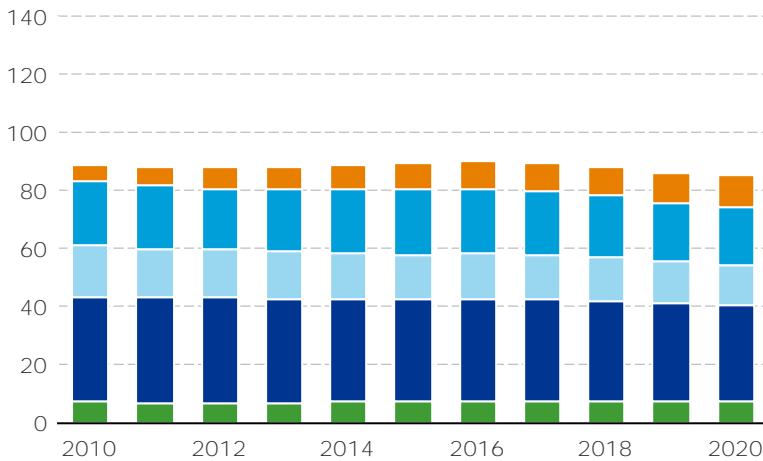
Secondly, there is the ongoing trend towards containerization of cargoes affecting MPVs.

### Development of Dry Cargo Demand [billion Tonne Miles]

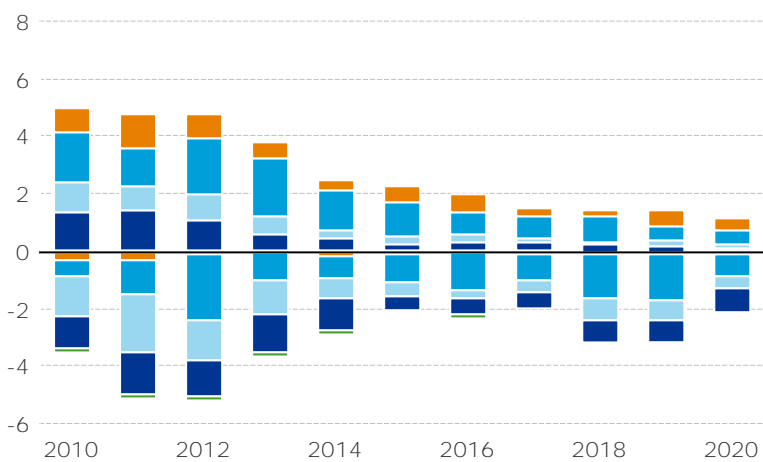


# MPV | FLEET CAPACITY EXPECTED TO CONTRACT 1% PER YEAR

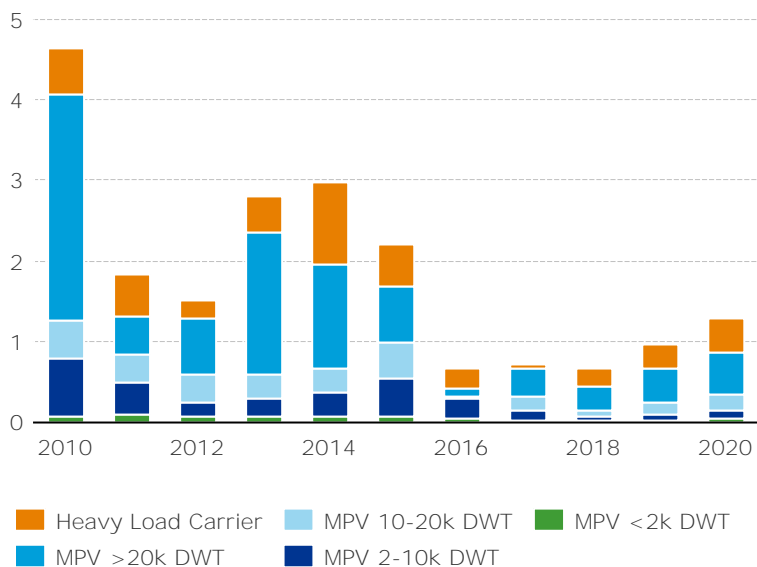
**FLEET DEVELOPMENT [end of year, mDWT]**



**EXPECTED DELIVERIES & REMOVALS [mDWT]**



**EXPECTED NEWBUILDING CONTRACTING [mDWT]**



As long as more and more cargoes are being containerized, this will remain a threat for the recovery of the MPV sector.

For the all important project cargoes, global GDP growth and the oil price development play a major role. GDP forecast for the 2017-2021 period are slightly higher than the previous five years, so that looks promising. The remaining question is when the oil price will reach a level, justifying renewed investments in oil and gas projects.

## Supply

The MPV fleet is expected to decrease by 0.5% based on DWT for the full year 2017. Last year, the fleet practically did not change either, with a minimal expansion of 0.6% in 2016.

The developments for the 2018-2020 period are based on the assumptions that newbuilding contracting will remain relatively low and demolition activity will increase.

The slow but steady reduction of the fleet capacity is expected to continue for the 2018-2020 period, with on average 1.7% per year based on DWT-capacity. The subtype mainly causing the decrease of fleet capacity is the segment between 10,000-20,000 DWT.

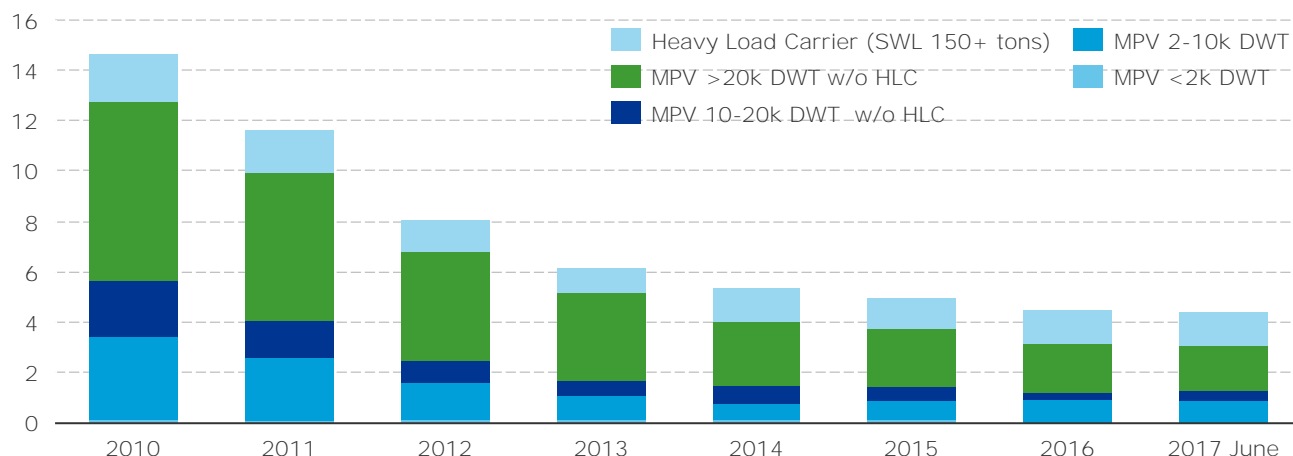
The only segment that will grow throughout the period is the heavy load carrier segment. In the year-to-date, already nine heavy load carriers were delivered, and five more are expected in the remaining months of 2017.

Vessel demolition is expected to pick up in the 2018-2019 period, due to weak market conditions but also resulting from the Ballast Water Management Convention (BWM).

According to Drewry, fitting a BWM system on a medium sized MPV could cost between USD 250,000-USD300,000.

## MPV | THE DECLINE OF THE ORDERBOOK CONTINUES

### THE GLOBAL MPV ORDERBOOK [mDWT]



Considering the very weak market conditions, it could be the case that this investment is not justifiable for older vessels trading in international waters.

We assume that MPVs older than 30 years and above 5,000 DWT would be possible demolition candidates. The potential scrapping volume under these assumptions add up to 620 vessel with 6.25 mDWT.

#### Newbuilding Contracting

In the first five months of this year, a total of 35 MPVs with 0.56 mDWT were contracted worldwide. A third of the new contract so far consist of vessels between 3,000-6,000 DWT (around 100 mLOA), contracted by Dutch, German and Singaporean shipowners.

In addition, South Korean shipping company Pan Ocean has contracted five 62,000 DWT open-hatch wood chip carriers (165 mLOA) from Chinese yard Jiangsu New Yangzijiang Shipyard. The vessels will be used for a 15-year-long shipping contract with Brazil-based pulp and paper producer Fibria.

Furthermore, Dutch company Spliethoff has contracted six 18,000 DWT ice-class multipurpose vessels at China's Zhejiang Ouhua Shipbuilding. The vessels have Polar Code and are designed to operate in remote areas such as the Arctic. Their hold length is over 100 metres and the vessels will have heavy lift cranes.

For the full year 2017 we expect newbuilding contracting to reach 0.72 mDWT with around 60 vessels.

#### Global Orderbook

Between the end of 2010 and June 2017, the total MPV orderbook declined by 70%, based on DWT-capacity. This was the result of strong deliveries, cancellations and

However, the differences within the sector are significant. The Heavy Load Carrier orderbook declined until 2013, and has been growing ever since. For MPVs between 2,000-20,000 DWT, the orderbook development has been a straight line downwards since 2010. The orderbook of the smallest MPVs, below 2,000 DWT, remained stable since 2015.

## OFFSHORE



### 2017 YTD review

The situation in the offshore sector remained unchanged in the first half of 2017. It is now three years ago when the oil price plummeted, and until today, no sustainable improvement has taken place. The price for Brent crude oil currently stands at 46.6 USD per barrel (2017-06-28).

Recent decision by OPEC to further curb production did not bring the expected relief to oversupply, as non-OPEC countries and particularly shale production in the United States are continuously increasing their output. US onshore oil production is expected to reach record levels of 11 m bpd in 2017 (2016: 10.45 m bpd). However, there are some signs of a potential slow-down, although whether significant or not remains to be seen.

And there is the crisis between Qatar, the world's largest offshore gas producer, and its neighbors which emerged a few weeks ago. So far this has not had any influence on Qatar's gas production nor on energy prices in general. But of course in case the situation is getting worse this could have an impact on oil and gas production and on prices in both directions.

As a result of the current oil price environment, capital expenditures continued to be sluggish and even less than in the last year. For offshore oil and gas, total CAPEX are estimated to reach some 180 billion USD in 2017, which is another decrease of some 15% compared to the previous year. And this

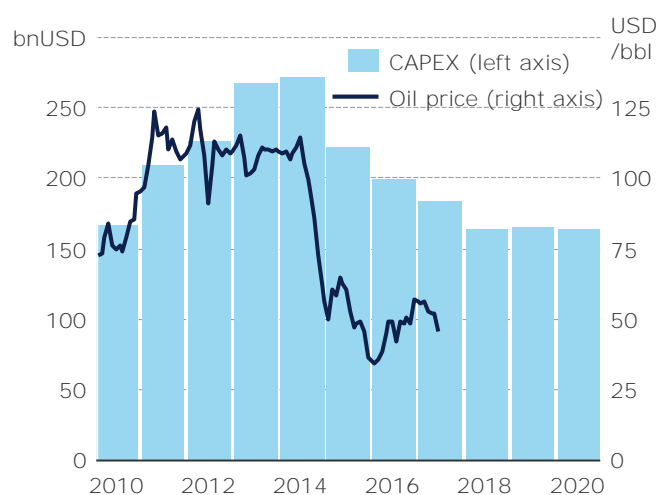
is even more significant for exploration CAPEX only.

Offshore exploration activity is expected to decline by 50% in 2017. Until May, only 20 new fields have been discovered, compared to 100 fields in 2016 FY. Latest discoveries were the Yakaar field (Senegal) and the Gorgon field (Colombia), both in ultra-deep waters. Same trend is observed in the number of total start-ups: 22 new fields have come onstream this year so far, this is around 40% below levels seen in the previous year.

### Demand

Based on the low oil price, capital expenditures at minimum and decelerated activity in developing new fields, the demand for basically all kind of mobile offshore units and supporting vessels remained depressed.

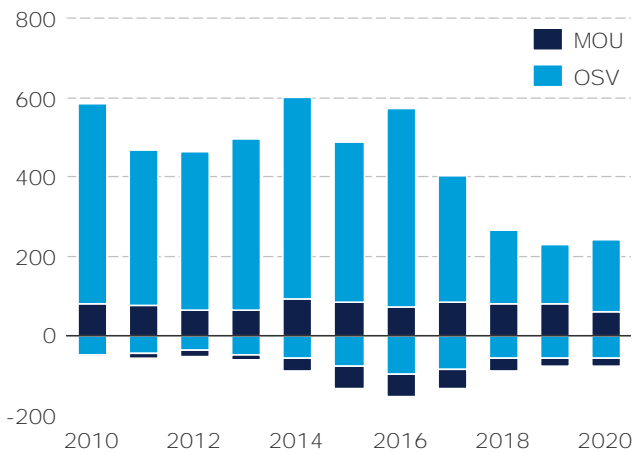
### CAPEX OFFSHORE OIL & GAS AND OIL PRICE





## OFFSHORE | UTILISATION AT ROCK BOTTOM LEVELS

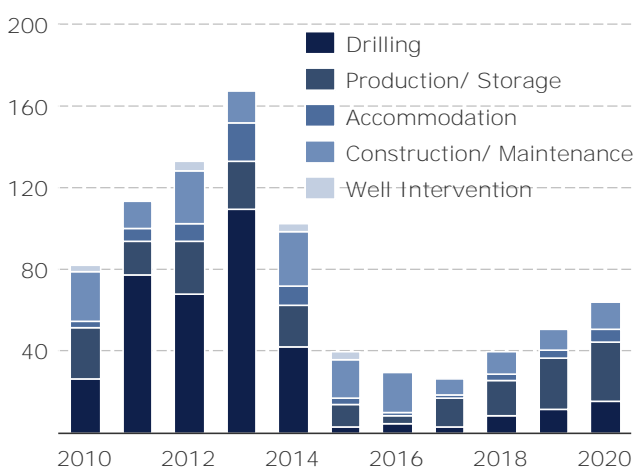
**EXPECTED DELIVERIES & REMOVALS [units, vessels]**



Demand for drilling rigs hit already rock-bottom last year, with a utilization of combined jack-up and floaters of 63%. This year so far the situation was more or less unchanged, a little bit more positive for jack-ups, slightly lower for floaters. For the whole year demand is expected to rise by 1% compared to 2016, utilization at the end of June reached 64%.

Demand for AHTS is upset especially by the low number of drilling rig moves, and a considerable portion of the fleet is currently in lay-up. In the North Sea, utilization has dramatically fallen to less than 20%. Utilization of PSV is slightly better, however, it currently stands at 55% only (North Sea).

**EXPECTED MOU NEWBUILDING CONTRACTING [units]**



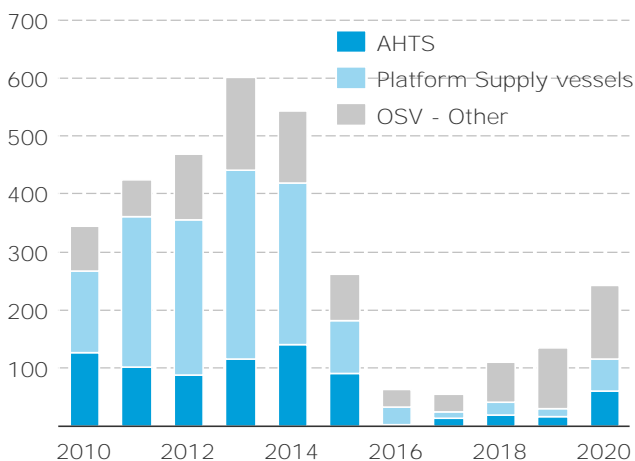
Only the increase in decommissioning of platforms brings some demand, in particular for offshore units and ships with large and flexible crane capability.

Nevertheless, based on the outlook of CAPEX for offshore oil and gas, the demand side for both MOU and OSV is not expected to improve soon. The next years CAPEX is estimated to account for 160-170 bn USD every year, so even less than this year, providing that the oil price will remain below 70 USD/bbl.

### Supply

Beside the drop in demand, it is especially the large amount of available capacity on the supply side which worsened the situation in the offshore market with a massive oversupply of units and particularly support vessels.

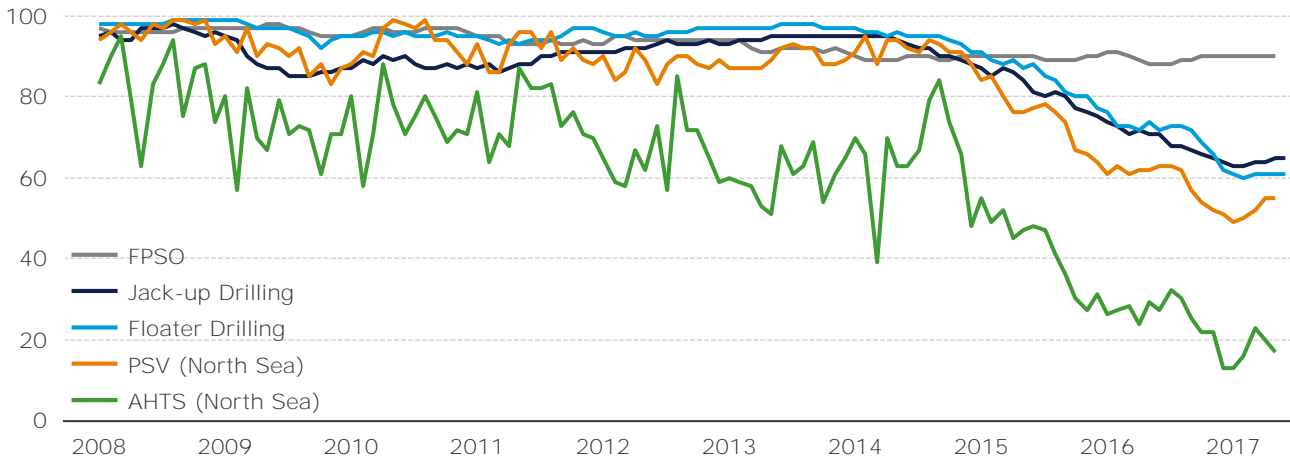
**EXPECTED OSV NEWBUILDING CONTRACTING [vessels]**



400 OSV were delivered in 2015, and around 300 ships last year. At the beginning of the year, the OSV fleet accounted for 9,700 vessels worldwide. At the same time, 800 vessels were in the orderbook, of which the majority was actually planned to be delivered this year. In fact only 83 ships were delivered in the first five months of the year, as owners try to postpone deliveries as long as possible, and there are even ships completely built at yards which are just not taken by the owners.

## OFFSHORE | NEWBUILDING INTEREST ONLY IN INDIVIDUAL CASES

UTILISATION OF OFFSHORE UNITS AND SHIPS [%]



A same pattern is observed for MOU. The global drilling fleet amounts to 845 rigs, and as already mentioned before, a large number of units is currently inactive.

Additionally there are further 150 rigs in the orderbook. Obviously the majority of these units are rather not very appreciated in the current market environment, and only six newbuildings have finally hit the water in 2017 so far.

### Newbuilding Contracting

Newbuilding activity in 2017 is in the doldrums. Only nine contracts for MOU have been signed between owners and yards so far, including two conversions. Typical units ordered these days are rather simple self-elevating platforms, already a few were already seen last year. And there were some production units for projects being under development for some time: six units have been ordered this year, for instance one semi-submersible for BP for the Mad Dog 2 project in the US Gulf of Mexico.

Newbuilding interest for offshore vessels is also very limited, and rather focussed on specialized types for unique purposes based on individual demand from owners than for ordinary OSV. The offshore wind segment is for instance a steadily growing market, and two vessels have been inked at yards in 2017 YTD. At the same time the number of newbuilding contracts for AHTS accounted for 8 ships and for PSV 7 ships which is nothing compared to the levels seen in the years before 2016.

### Rates

In the situation of significant capacity oversupply, rates have been extremely under pressure for a considerable time, although changes since the beginning of the year were rather moderate. Global average day rates for floaters stood at 140k USD/day at the end of May, which is a decrease of 18% comparing year-on-year. Rates for Jack-ups have behaved slightly more positive and rose by 8% since start of the year (but on very low level). 85k USD per day costs a jack-up drilling rig on a global average.

Time charter for AHTS was steady on average in recent months, however, current levels are between 6-31% below levels one year ago. And North Sea spot rates plummeted in May down to some 8,000 GBP per day an AHTS >16,000 BHP.

And for PSV, time charter rates declined by 2-3% since the beginning of the year. Comparing year-on-year- this is a decrease of 20%. At the end of May, a large PSV of 4,000 DWT was around 11,150 USD/day.

## LNG



### Something is happening, time for remodelling?

Although current LNG tanker earnings are not something to write home about, the on-going transformation of this market is worth paying closer attention to. Until recently, the LNG seaborne trade represented only 8% of the total gas trade and was limited to a few large importers such as Japan or South Korea. Oil linked gas prices prevailed and almost all contracts were signed as long time charters with very few ships involved in spot activities. However, a substantial increase of gas production, combined with significant additions to both liquefaction and regasification capacity have changed the market fundamentals. Let's try to examine some of the most critical ones.

The seaborne trade, after years of stagnation, grew by 7%, adding 17 million tonnes of new cargo. The demand growth was driven predominantly by China and India, but also by newcomers such as

Pakistan, Egypt and Jordan. These countries will continue to drive demand, however we also expect other countries such as Thailand, Vietnam or Singapore to play an increasing role as importers. As 85% of newly constructed import terminals (or FSRU projects) are located in Asia, it is obvious that a substantial part of the new demand will be satisfied by sea transport. Clarkson's Research expects a continued strong growth of seaborne trade, reaching 8% in 2018.

### Growth Factors

Most of the growth is catered for by Australian and US projects. Last year, newly opened terminals like Australia-Pacific and Cheniere Sabine Pass (T1 and T2) in the US generated the majority of new cargoes. In 2017, we expect a modest 25.5 bcm/y increase of the liquefaction capacity, mainly coming from Australian Gorgon (T3), Wheatstone LNG (T1), and Cheniere Sabine Pass (T3 and T4) in the US.



LNG Trade in 2016

## LNG | US EXPORTS INTRODUCE POSITIVE DISRUPTION FOR LNG

Much higher increase is expected in 2018 when 43.8 bcm/y of new capacity comes on-line and in 2019 when another 47.8 bcm/y is added. In the next year most of the additions will come from Australia whereas 2019 growth will be dominated by the US export facilities.

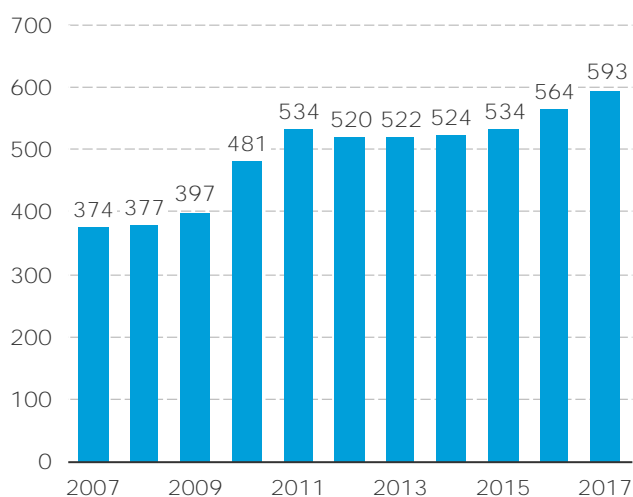
The US, as a “new kid on the bloc” seems to be introducing new dynamics such as increased tonne-mile demand, attractive price arbitrage and much more flexible terms of contracts. US gas is still establishing its footprint and is testing all potential markets, such as Latin America and Europe as well as the Far East, which, due to the distance, generates the highest tonne-mile demand. One million tonnes of the US gas that is to be sent to the Far East (per annum), requires around 1.7 ships, whereas the comparable trade originating in Australia generates a demand for 1.1 ships only. So, the tonne-mile effect generated by US exports is currently more rewarding than anywhere else.

### Market forces

Another interesting factor is the pricing of US gas and its competitiveness. Most of the traditional Asian gas contracts are based upon oil linked prices. In the US however, gas is priced according to the Henry Hub Gas Index and as such is not sensitive to changes in the oil industry. Needless to say, not only it is de-coupled from oil, but it is also cheap! In fact, with current freight rates of some 40 000 USD/d, a price differential between 6 USD/mBTU FoB in the US and 8 USD/mBTU in Japan may create an arbitrage of some 0.5 USD/mBTU, which translates to one mUSD per cargo. It is important to notice that assumed charter rates are very low, due to the current oversupply. If rates go higher in the future (which is what we hope for), it will require a wider price differential in order to create arbitrage.

The US contracts also bring a great deal of flexibility, when it comes to terms and conditions. Contracts can be signed for any duration and quantity. There is also a lower penalty for not picking up the cargo (ToP), as in the US only the liquefaction fee is charged. In addition, no fixed delivery locations are required, which is of particular interest for traders, who in case of over contracting are able to re-sell their surplus of cargo somewhere else.

LNG TRADE DEVELOPMENT [in million cubic meters]



All of these new developments have changed the LNG trade rather substantially, making it more international and flexible. On one hand, the growing number of importers generates a steady increase of demand, but on the other hand forces the suppliers to demonstrate more flexibility. According to IEA, there is an increasing number of contracts, signed for a shorter duration, smaller quantities, without fixed destinations and de-coupled from oil prices.

For shipping it means more spot trading and more diversified trade patterns. In general, more competitive US pricing should have a positive tonne-mile impact, however on the flip side it also introduces a risk of redirecting some of the cargoes to shorter routes i.e. Japanese traders, re-selling their US purchased gas in Europe.

### Rate increases will take time

Unfortunately, it may take a while, before the LNG carriers experience higher earnings. The orderbook is still over 120 ships strong. Deliveries in 2017 will reach 53 ships, whereas in 2018 the fleet will swell by another 41 tankers. It gives an estimated growth of 10% and 7% respectively.

In light of the fact that the major expansion of exports terminals is planned for 2018 and 2019 (if not further delayed), freight rates are likely to remain low throughout 2017. Nevertheless, the current re-modelling of the market creates new opportunities in the longer perspective.

## CRUISE SHIPS



### Market optimism continues in 2017

The positive sentiment, which was seen in the cruise industry last year is also bound to continue in 2017. Last year, a total of 24.7 million passengers make a cruise trip globally, according to Cruise Lines Int. Association (CLIA), up from a projection of 24.2 million. Strong growth in passenger numbers is also expected for this year, with a projection of 25.8 million.

Cruise vessel operators remain optimistic about the future of the sector as well as the Asian growth expectations. However, some cruise operators have announced delays to deployment in Asia in order to manage capacity in a better way.

A recent survey by CLIA revealed that 77 percent of cruise travel agents indicate that their 2017 sales volume is better than last year. In general, cruise passenger growth expectations are the results of the rise of multigenerational cruise travel, a high demand for shorter duration cruises, and travelers looking for all-inclusive options. Nearly three quarters of agents say they expect an increase in customer spending in 2017, especially when it comes to cost of excursions. Furthermore, the rising popularity for river cruises also continues in the current year, according to travel agents.

### Expedition cruises

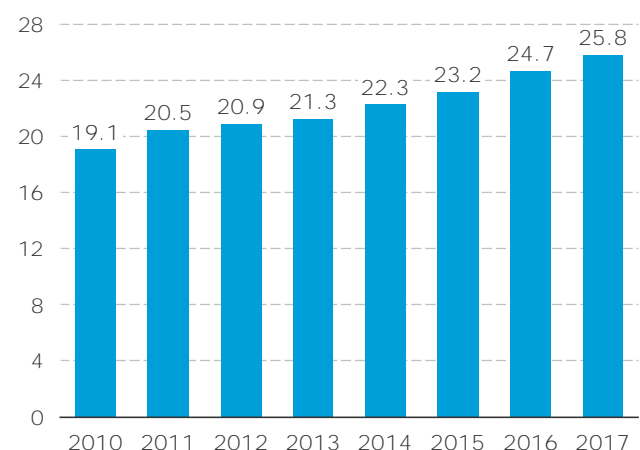
Seventeen new expedition ships have been ordered for delivery between 2018 and 2021,

according to the Expedition Cruise Market Report.

Currently, this segment represents only 1% of the global cruise vessel capacity, due to the fact that the ships are generally smaller. But the segment is certainly growing, due to an aging Western population with money to spend and willing to travel. Some of them have checked the usual cruise locations off the list, and now want to see the Polar region, for example.

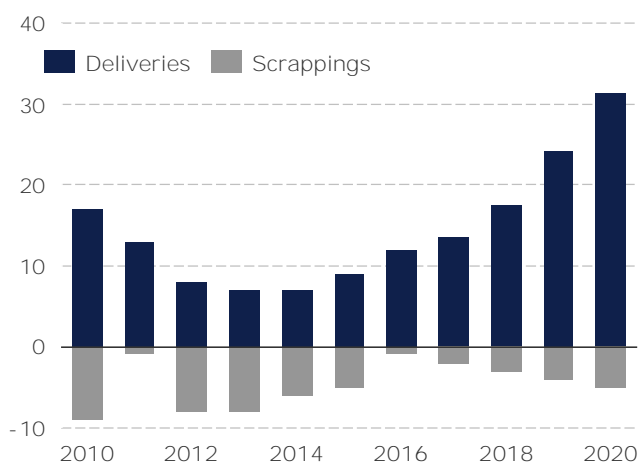
What counts for expedition vessel operators, their vessels earn high day rates but have a relatively modest expense profile when it comes to port costs.

GLOBAL OCEAN CRUISE PASSENGERS [IN MILLIONS]

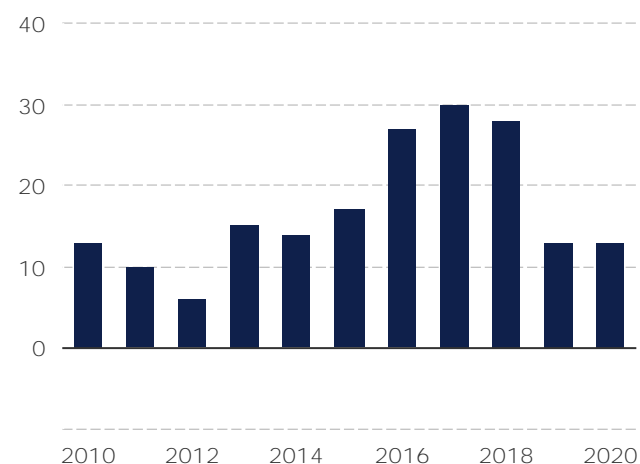


## CRUISE SHIPS | FLEET CAPACITY WILL STRONGLY INCREASE

EXPECTED DELIVERIES & REMOVALS [VESSELS]



EXPECTED NEWBUILDING CONTRACTING [VESSELS]



### Outlook

Cruise vessel newbuilding contracting is expected to remain as strong in 2017 as it was last year. The majority of new contracts could come from the large cruise vessels (+100,000 GT) as well as from the small, specialized (expedition) cruise vessels.

Refurbishment activity of existing cruise vessels is also expected to remain strong, partly coming from (environmental) requirements for scrubbers, renovations to upgrade older vessels to the standards of the newer ones and from installing onboard technology aimed at improving the cruise customer experience. Besides this, cruise lines are increasingly interested in the possibility to use LNG as fuel for their new vessels.

### New entrants

The Ritz-Carlton Hotel Company is launching a luxury cruising yacht line, aimed at the top 1% of global travelers. The first vessel is scheduled to start in the fourth quarter of 2019. The company expects to contract a total of three vessels, of which one vessel was ordered recently at Spanish shipyard Astillero Hijos de J. Barreras (HJB). Each ship will feature 149 balcony suites and two duplex penthouse suites.

### Fleet

On the back of strong newbuilding contracting activity, which started last year, the global cruise vessel fleet is bound to experience considerable growth in the coming years.

For 2017, the global capacity of the fleet is expected to increase by 5% (as was the case for last year). But due to increased deliveries, the yearly capacity growth of the fleet will rise to 6.5% in the 2018-2020 period.

### Newbuildings

So far in 2017, a total of 19 cruise ships were contracted globally. The full year outlook is projected at 30 vessels.

Among the contracts year-to-date is an order for four ships by MSC Cruises, which would be the largest in the world (to current standards). The vessels will be built at STX France between 2022-2026 and will be able to carry 6,850 guests in 2,760 cabins. Currently, the world's largest cruise ship, Royal Caribbean's *Harmony of the Seas*, has a capacity of 6,360 guests.

## SPECIAL TOPIC | FINANCE



...to your banker friend

You may have known each other for a long time. He has always been looking after your credit lines. He may have been very helpful in arranging new credit facilities for your ships. He may have proved to be instrumental in keeping your fleet running, when the markets turned against you, even if you were breaching your covenants. He has been far more than your banker. He has been your friend and unfortunately it is now the time to say goodbye to relationship banking as it is quickly dying.

The recent downturn in shipping has proven beyond doubt, that both ship owners and bankers grossly underestimated and mispriced the risk associated with financing ships. A typical senior debt (mortgage) arranged against the asset value, based on LTV (loan to value) may look almost bulletproof when the freight rates are high. During the downturn, however, such a finance structure may easily kill you. Short lasting periods of weak earnings can be easily mitigated. Your friendly banker will be able to offer you a temporary solution. Anything from a grace period for repaying the loan principal through accepting red-inked balance sheets, to casually ignoring the fact that you are in breach of your covenants. In the end, what are friends for?

The real problem begins, when the down-cycle takes much longer than either you or your friendly banker had expected. Your fleet continues to

underperform and in addition a prolonged low-earnings period takes its toll on asset values. It leads to introducing difficult and often painful measures. Banks, however, are not interested in freezing your assets and the last thing on their agenda is to become a ship owner themselves. A good old practice teaches us that loans up 60% LTV prove to be relatively safe even during challenging times. Unfortunately, many owners together with their friendly bankers often arranged much higher leverage and to make it worse during the times when interests rates are extremely low. When most of the shipping segments entered the recent downturn it finally back-fired. Owners started to lose their ships and their friendly bankers were left with toxic assets, which they had to sell with losses anyway. As a result, pretty much all of the typical shipping banks either substantially reduced their lending portfolio or disappeared from the maritime arena altogether.

As we slowly start to see the market recovering, who is going to provide capital for the future investments? Although we do not believe that banks will close their doors completely, they will assess the risk in a much more strict and conservative manner. In general, they will be lending less and charging more, which will create a gap that somebody needs to fill.

Luckily for owners, there are quite a few alternative sources for raising capital, and those sources are gradually becoming more popular.

## SPECIAL TOPIC | SAY GOODBYE TO YOUR BANKER FRIEND...

Among the most common ones are IPOs (initial public offering) and their Follow-ons, high yield bonds, PE funds (private equity), sale-lease back, ECAs (export credit agencies) as well as corporate lending and more recently Term Loan B structure.

Although we still call these sources “alternative”, during the first 5 months of 2017, 13 bnUSD was raised in such a way. It is roughly three times more than during the entire previous year and constitutes the majority of the 2017 investment in newbuilding contracts. In light of such evidence shipping needs to start paying a lot more attention to the new ways of finance. In fact the traditional banks have already started their transformation. For example, DNB is currently the biggest issuer of shipping bonds in the US and is looking further to expand their portfolio through non-senior debt lending.

Nevertheless, not every source of capital is equally available to all ship owners. Starting from the easiest ones, export financing seems to be fairly open to all. One needs to remember that the principle reason for ECAs is to attract newbuilding contracts in their respective countries. It means that they are placed mainly for the sake of yards rather than owners, which means they are prone to lending to anyone without being overly worried about the future performance of assets. It may result in similar problems to those that we have experienced within traditional lending.

Capital markets have been open for shipping for quite a few years already. Although there has been a growing number of IPOs, shipping companies in general have extremely low market capitalization (usually well below 1 bnUSD), which is a key to success in a stock market. For example, in NYSE, the average size of a company that a ship owner would be benchmarked against, has a CAP of 10-12 bnUSD. In addition, listed companies would normally be debt-free, whereas shipping companies tend to have an overdraft which would make many of the investors cry. They like dividends, which in case of heavily leveraged companies may quickly disappear. It means that only large and financially stable companies may raise capital in this way.

The situation is not much different with respect to bonds, although in this market shipping tends to

be slightly more successful especially this year. The companies still need to present a solid financial situation for the investors to buy in. It appears that Oslo is more friendly for owners compared to New York as it requires weaker covenants to fulfil.

Sale and lease-back structure is being gradually more and more utilised. Names such as JOLCO, Bank of Communications or Minsheng Financial Leasing are already well recognized among the top lenders. Chinese houses have already arranged over 11 bnUSD of such transactions. The recent deal between the cargo owner Trafigura and the Bank of Communications worth 1.35 bnUSD serves as a great example. Owners using sale-leaseback have an advantage of removing ships from their balance sheets, which removes their risk associated with sudden assets value changes. In addition, you may raise up to 100% of the asset value, which makes it very attractive for some clients.

The recent new kid on the block, which quickly gets a lot of traction within the ship owners is Term Loan B (TLB). Unlike a typical loan, it is issued by institutional lenders and thus has fewer covenants. Also unlike bonds it has a floating interest rate which is margin over LIBOR. It offers 300 - 500 mUSD per issuance and features large balloon payment at maturity. Due to low interest rates environment, TLB is increasingly popular, however, it may lose some of its attractiveness when interest rates start to grow up again.

So, is there a place for the traditional, relationship based banking? As both banks and owners seek for new sources of finance, it seems like the old way of finance will sooner or later be phased out. The financial risk needs to be better evaluated. Seems like all players have finally realised that just because all parties want to succeed it does not yet guarantee the success. The future ships finance will be more fragmented, with owners tapping to various sources and banks gradually providing new, more sophisticated products. In order to fine-tune the existing sources of capital, banks will most likely come up with some kind of hybrid solutions, containing the elements of the existing products. Do you wonder who will be your future banker? It may be an algorithm!



**The Trend Report is published by the Sales & Market Intelligence department.**

**Contact persons for the respective chapters are:**

Containerships, MPV, Cruise Vessels

Jeffrey van der Gugten

Bulk Carriers

Pierre Pochard

Offshore

Matthias Losse

Tankers, LNG, Special Topic Finance

Jakub Walenkiewicz

Philipp Westphal

Head of Sales & Market Intelligence

Email: [philipp.westphal@dnvgl.com](mailto:philipp.westphal@dnvgl.com)

Telephone: +49 40 36149 6197

Disclaimer: Whilst care has been taken in the production of this analysis, no liability can be accepted for any loss incurred in any way whatsoever by any person who may seek to rely on the information contained herein.