## Contents

- Introduction 5
- The Economic Backdrop 6
- The Dry Bulk Market 13
- The Tanker Market 23
- The Containership Market 33
- The LNG Market 39
- The Newbuilding Market 44
- The 2020 Global Sulphur Limit 49
- Conclusion 54
- Chart Series 55
  - Global Macro Environment 56
  - The Dry Bulk Market 63
  - The Tanker Market 69
  - The Containership Market 77
  - The LNG Market 81
  - The Newbuilding Market 85
- Appendices 89
Foreword

In Shipping Markets Outlook 2017 our theme was “Opportunity Knocks”, in the belief that 2017 would be a year of opportunity, and so it proved to be. The three main sectors were differentiated from one another in being at different points in their cycles so, as always, timing was important. The bulk carrier sector saw average earnings improve during the course of the year and this supported higher asset values. For the tanker sector it was a tough year for earnings but at least asset values hit rock bottom at the end of the first quarter and staged a gentle recovery over the balance of the year. The tramp container sector also enjoyed a rebound in earnings and values during 2017 as it became apparent that the worst is past. The tanker sector is lagging behind compared to the other two sectors as it suffers from continued oversupply and disruptions to the demand side caused by Opec-led output cuts and global destocking. Bulk carriers and box ships should see further improvements over 2018 while crude oil tankers may have to wait until 2019 to experience a turnaround.

Our theme for Shipping Markets Outlook 2018 is “Tacking into the Wind”. We are moving steadily forwards but it is still hard work as we battle against the headwinds. The main headwind is the legacy of tonnage oversupply, despite the tailwind of consistently rising demand. The other major headwind we face is that of IMO regulation of ballast water exchanges and harmful emissions. The upcoming IMO 2020 will reduce the permissible sulphur content in marine fuels from 3.5% now to 0.5% from 1st January 2020. It could turn from headwind to tailwind if it leads to the scrapping of older and less efficient ships of all types. But, so far, it is unclear what measures must, or can best, be taken to comply and yet the deadline is fast approaching. It is generally recognised that if all ships slowed down by a factor of 10%, in response to the higher cost of marine fuel, then they would gain more than 10% in freight. It would be a neat solution to oversupply and emission problems.

This issue covers a broad range of subjects including the macro economic context, bulk carriers, tankers, containers, LNG, shipbuilding and IMO 2020. We hope that you enjoy reading our opinions and we welcome any feedback. May I take this opportunity to thank our customers around the world for their continued support and to our staff in London, Singapore and Shanghai for their hard work. The supply and demand fundamentals indicate that we have the most benign tonnage supply situation than in many a year, with historically low order book to fleet ratios. If we can rely upon the past pattern of steady demand growth then we should be set for some of the best years in shipping in a long time. Make no mistake, we are still tacking into the wind and it is tiring work but, if all goes according to plan, we will soon be speeding downwind. We now look forward to enjoying some great sailing with fair winds and following seas.

Chris ONion
Managing Director
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Introduciton to the Consultancy Division of Hartland Shipping Services

The Consultancy division of Hartland Shipping Services is a specialised shipping and shipbuilding industry team. It provides detailed sector research and consultancy to external clients in addition to consultancy services to the HSBC Group on a global basis. The Consultancy division has a track record of successfully completing shipping industry studies and consultations. These include providing commercial due diligence for investments in shipping and shipbuilding, conducting feasibility studies for new shipping operations, counselling banks on portfolio risk, engaging in commercial restructuring, and working on leading shipping mergers and acquisitions and equity capital markets projects.

Research publications include:
- Shipping Markets Outlook (annual publication)
- Weekly Commentary
- Market Monitor (weekly publication)
- On-demand bespoke shipping and shipbuilding
- Bi-weekly newbuilding market report

Consulting and advisory work scope includes:
- Commercial and strategic advice
- Feasibility study and business risk assessment
- Commercial due diligence for investments
- Vessel valuation and fleet analysis

The Consultancy division of Hartland Shipping Services aims to offer in-depth coverage of the interface between shipping markets and the global economy.

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The Economic Backdrop

In our economic chart book at the back of this publication we follow the timeline of economic events that have unfolded since the beginning of 2017.

Global equity markets had their best January since 2009 as the MSCI All World Index surged 13% in the first month of 2018. Most stock market indices capitalised on their good runs of 2017 with an explosive start to 2018 right up until the end of January when a bond market sell-off contaminated equities, which we will return to later. The S&P 500 returned 21% in 2017 before shooting up another 25% in January 2018. The other US indices did even better in 2018’s opening month with the Dow Jones Industrial up 6% (after 2.4% in 2017) and the Nasdaq up 7% (after 27% in 2017). Such a brisk start to the year was most welcome but it also begged the question of just how sustainable such a market surge could be on the back of strong performances in 2017. Back here in the UK it was a different story with the FTSE 100, having gained a more modest 8% during 2017, added another 1% in the first eight days of January. It then suffered a late month correction causing the index to end up 2% lower for the month. The UK appeared to be missing out on the global equity rally as it continues to be mired in Brexit negotiations with no clear outcome visible, with this uncertainty being reflected in stock market performance. Another reason is the heavy exposure of the FTSE 100 to the US dollar which lost almost 3% against sterling in January, but this failed to explain weakness in the more domestically orientated FTSE 250. In Europe, the German DAX gained just over 13% in 2017 and then added another 1% in the first eight days of January. It then suffered a late month correction causing the index to end up 2% lower for the month. The UK appeared to be missing out on the global equity rally as it continues to be mired in Brexit negotiations with no clear outcome visible, with this uncertainty being reflected in stock market performance. Another reason is the heavy exposure of the FTSE 100 to the US dollar which lost almost 3% against sterling in January, but this failed to explain weakness in the more domestically orientated FTSE 250. In Europe, the German DAX gained just over 13% in 2017 and then added another 1% in the first eight days of January. It then suffered a late month correction causing the index to end up 2% lower for the month.

In Japan, the Nikkei 225, having gained 18% in 2017, was most welcome but it also begged the question of just how sustainable such a market surge could be on the back of strong performances in 2017. Back here in the UK it was a different story with the FTSE 100, having gained a more modest 8% during 2017, added another 1% in the first eight days of January. It then suffered a late month correction causing the index to end up 2% lower for the month. The UK appeared to be missing out on the global equity rally as it continues to be mired in Brexit negotiations with no clear outcome visible, with this uncertainty being reflected in stock market performance. Another reason is the heavy exposure of the FTSE 100 to the US dollar which lost almost 3% against sterling in January, but this failed to explain weakness in the more domestically orientated FTSE 250. In Europe, the German DAX gained just over 13% in 2017 and then added another 1% in the first eight days of January. It then suffered a late month correction causing the index to end up 2% lower for the month.

In Asia, China’s major indices, the Shanghai Composite and Shenzhen, were up 5% and 9% respectively. In 2017, China’s economic growth rate was 6.9%, the lowest in 28 years. However, the economy is expected to pick up pace in 2018 due to the government’s efforts to boost domestic demand. In India, the Sensex was up 13% in 2017 and then added another 2% in January 2018. The other major markets in Asia also performed well, with the Hong Kong Hang Seng up 10% in January.

While global stock market fortunes were mixed in January 2018, we were left wondering how the first month turbulence in bond and equity markets would pan out, and whether bond and equity prices were on the verge of heading lower after a prolonged bull run. In the early days of January, Jeremy Grantham, a founding partner of GMO, observed that we may be on the cusp of the blow-off or melt-up phase of a very long bull market. This could well drive equities to even higher over the coming months before an inevitable steep correction. That being the case, then the exit timing would be all important but any precise advice as to the duration of this final phase of the bubble was kept to between six months and two years. Grantham suggested that a signal that we might be near the end of the long bull phase would be when the overwhelming focus of television pundits turns to promoting bitcoin, the FANGS (Facebook, Amazon & Apple, Netflix and Google) and not forgetting the new Chinese pretenders Alibaba and Tencent. In the past, the end was usually nigh when taxi drivers and hairdressers started offering share tips, a sure sign that it was time to sell. Peter Oppenheimer, chief global equity strategist at Goldman Sachs, also voiced his concerns in January – just ahead of the turn – that a correction of some kind seemed to be a high probability in the coming months. His view was that it was unlikely to be prolonged, or to morph into a bear market, and it should be viewed as a buying opportunity.

Regardless of the high price to earnings ratios of equities, reminiscent of levels seen in the run-up to the dotcom bust in 2000, we are enjoying a rare period of synchronised global economic growth. HSBC estimates that developed market growth rose from 1.6% in 2016 to 2.1% in 2017 while emerging market growth rose from 3.8% in 2016 to 4.6% in 2017. Furthermore, in late January during the World Economic Forum in Davos, the IMF upgraded its own estimates for global GDP growth from 3.5% to 3.7% for 2017 and from 3.7% to 3.9% for both 2018 and 2019. This set a positive economic backdrop to the turbulence that lay just ahead in global financial markets, of which the IMF was quite prescient in warning about. In 2017, growth in the volume of global trade in goods and services exceeded the growth rate of world GDP for the first time since 2014, at 4.3% versus 3.6% in 2017, after 3.8% versus 3.6% in 2014. This pattern of trade growth exceeding GDP growth is forecast to persist in 2019. 2018 saw 3.7% in 2017, 3.5% versus 3.7% in 2018, 3.8% versus 3.7% in 2019, 3.7% versus 3.9% in 2020, 3.5% versus 3.8% in 2021 and 4.0% versus 3.8% in 2022.

The surging equity markets of 2017 were accompanied by very low volatility as expressed by the CBOE VIX Index, which traded in a narrow band of 10 to 15 points all year. This was taken as a sign of investor complacency, although such complacency could also derive some support from improving global economic conditions. This led to a surge in equity investments in January 2018 as many investors, having been sitting on the side lines for so long, piled in. It was the ultimate capitulation as the bears reluctantly turned bullish. In the first four weeks of 2018, a record $100bn was ploughed into equity funds, with most of it originating from retail investors. They finally bought into the idea that strong global growth and rising corporate profits supported current high valuations despite the prospective imminent removal of central bank largesse. This was to be the last gasp of the long bull market in bonds and equities. Aiding and abetting the positive vibes was the fact that the Global Manufacturing PMI hit a seven year high in 2017 just as unemployment was trending lower in the leading western developed market economies of the US, UK and Eurozone. Signs of rising inflation in these areas were generally dismissed as temporary, as despite tightening labour markets, productivity and wage growth remained under pressure. The low unemployment rate of just over 4% in the US overlooked the fact that the labour participation rate had fallen, meaning that some people had given up looking for jobs and thus fell off the radar. So, the real slack in the US labour market is actually somewhat higher than the unemployment figures would suggest. Anyway, the US Federal Reserve always pays close attention to the labour market and inflation and it had already embarked upon a gradual rate tightening process that started so far back as the autumn of 2015. Since then the base rate has stepped up from 0.1% in October 2015 to 1.5% today with three more rate rises expected in 2018, as of January this year.

This gradual ‘normalisation’ of monetary policy was accompanied by a step down in quantitative easing (QE) as the Fed sought to shrink its balance sheet, in the first instance by not re-investing the proceeds of its maturing bonds. The risk was always that a retreat from quantitative easing, and a move to normalise monetary policy by gradually raising interest rates, would scare the markets. QE, as practised by the central banks of the US, UK, Europe and Japan, kept bond prices high and bond yields low. Interest rates could thus be pegged at ultra low levels to protect borrowers from what would otherwise be higher debt servicing costs. Low rates also tend to encourage fresh borrowing, refinancing, investment and spending which should all help propel economic growth. Ten years of QE was always going to be difficult to exit as the end of central government bond buying and a return to higher interest rates would inevitably put pressure on the more highly leveraged household and corporate balance sheets. The situation we will soon face is that the BoE, ECB and BoJ will follow the Fed’s lead in raising rates and in tapering QE down to zero over the balance of 2018, or soon after. This is an untested process and we have little idea what the ramifications will be but, at its best, we are in for a bumpy ride and, at its worst, we could be heading for another recession. A bumpy ride might be a case of share prices continuing to fall all the way back to a point at which buyers see fair value in the context of a growing global economy and robust corporate earnings. The recession risk rises if share price declines feed back into the real economy as the loss of wealth...
causes consumers to cut back on spending, companies to delay projects and young people to put off stepping onto the housing ladder. In the first quarter of 2018, to mid March, we have had three equity sell-offs with two of them prompted by good news and one by bad. At the end of January it was the evidence of US wage growth, at the end of February it was Jerome Powell’s hint that rates may have to rise four times this year as the US economy was picking up speed, and at the beginning of March it was fear of a US-induced global trade war starting with tariffs on steel and aluminium.

It is generally accepted that any sell-off in the bond market in response to inflationary threats will push the yield on 10-year US Treasuries higher, possibly forcing the Fed to raise interest rates sooner and more frequently than it had intended. Also at risk would be the stock markets, with their frothy valuations, as higher rates would reduce the attraction of equities in the search for yield. Other speculative investments that have benefited from high risk appetites, such as cryptocurrencies, would also suffer in any mass retreat from risk assets. Towards the end of 2017 there was a sharp rise in the purchase of bitcoins which substantially unwound in January 2018 as investors feared that the bitcoin had been overhyped and overbought. It has more than halved in value since its end 2017 peak. At the US corporate level President Trump’s tax cuts, announced in late December 2017, were generally well received as it is estimated that these will provide a saving of almost $2.7tn in business taxes over the coming decade. A saving of $2.7tn in business taxes over the coming decade.

The abrupt change in sentiment in early February saw both bonds and equities sold off, wiping billions of dollars of value from investor and pension fund holdings. As Irwin Stelzer wrote in his American Account; “The good news is that the twin dragons of complacency and fear of Japanese-style disflation have been slain. The bad news is that they have been replaced by two new dragons: panic and fear of inflation.” In the first full trading week of February, markets reacted badly to the positive news that the US economy was growing at an annual rate of around 3%, that US average weekly wages rose 2.6% year-on-year in January, and that the unemployment rate remained at 4.1% after 200,000 new jobs were added in the month. This wage rise, after a long period of stagnant wage growth, suggested that the US economy was reaching full employment and that wage pressures may soon feed through into core inflation. This would require the Fed to raise interest rates more often and more quickly than previously planned. The yield on 10-year Treasuries started 2018 at 2.4% only to break above 3.0% in the second week in February. Inflation fears were exacerbated by the announcement of personal and corporate tax cuts and unfunded increases in spending on infrastructure. Rising wage bills, tax cuts and increased spending were taken together as a harbinger of rising inflation. Fixed interest investments are more risky in an inflationary environment and so bonds were sold and, as their prices fell, so their yields rose inversely. With yields nudging up towards 3% they became more appealing and less risky than overpriced shares. This fuelled an equity sales frenzy. The S&P and Dow Jones suffered a 10% correction in the second week of February, which only took these index values back a few months to end November levels.

These sharp falls were made worse by a spike in the CBOE VIX index to just above 30 points, as computer trades triggered further sell orders, reinforcing the downward spiral, in what some consider a welcoming return to volatility and the end of complacency. Opinions were much divided as to what would happen next. The indices might yet go down further, and even exceed the 20% that will officially take us into bear market territory, in the process returning us to more defensible price earnings valuations. Besides, a 20% crash in the S&P from its 26 January 2018 peak close of 2,873 points would only take us back eight months to the beginning of 2017, just as President Trump was entering office. By comparison, a 20% fall in the Dow Jones from its 26 January 2018 peak close of 24,679 points would only take us back eight months to the beginning of June 2017. Such retracements cannot be considered unlikely if the market bears win the argument. Rising wages and full employment are indicators of economic growth and yet they demand higher interest rates to head off inflationary impulses. Higher rates mean the end of a ten year central bank experiment to buy bonds, keep rates down, and provide a benign debt-servicing environment to over borrowed households and highly leveraged companies. Now this policy is about to be reversed, as slowly as possible to avoid rocking the boat, and it will put pressure on household and corporate budgets and may dent spending, investment and profits. We face a tug of war between the positives of lower taxes, rising corporate profits and synchronised economic growth and the negatives of higher rates, heavy debt burdens and the gradual withdrawal of central bank props. 10-year Treasuries break through the 3% yield barrier, and some pundits see 3.5% or even 4.0% as a reasonable target, then there is further downside ahead for global equities as investors switch more money into these perceived ‘risk-free’ trades.

On 14 February, January UK inflation came in above expectations of 2.9%, matching December’s 3.0%, just slightly off November’s year high of 3.1%. On 14 February, Valentine’s Day, US consumer price inflation did the same, coming in above expectations along with a downward revision to retail sales. This was enough to resume the bond and equity sell off. Beyond stock markets, which often march to a beat of their own, the big picture is one of global economic growth and if this gains momentum in 2018, as many expect, then it can paper over some of the cracks in the system. These cracks include an unevenness and inequality of growth and the fact that so much of the global economic expansion of the past ten years has relied upon the stimulus of ultra low interest rates, central bank bond buying and an increase in indebtedness at all levels, household, corporate and state. Low rates, wage stagnation, poor productivity, rising automation and an absence of collective bargaining have not favoured the less well off. But many of the same features have helped companies increase their profits and for the better off to enjoy a rise in risk assets such as equities, bonds, property and alternative investments. One country is becoming more and more critical to global supply and demand, and that is China, the world’s second largest economy. China is a rising force in every sense as it becomes more influential on the world stage and as an expanding middle class travels and spends its way around the world. It is good to see a return to higher GDP growth of 6.4% in 2017 after 6.7% in 2016. Much scepticism surrounds Chinese official GDP figures as they tend to be smoothed, generally under-reported in good years and over-reported in bad years. However, this latest number

[Image]
The situation we will soon face is that the BoE, ECB and BoJ will follow the Fed’s lead in raising rates and in tapering QE down to zero. We are in for a bumpy ride but we hope to avoid the risk of another recession.

reverses the steady decline in year-on-year GDP growth since China registered 10.6% in 2010. Going forward, China’s GDP growth rate may return to a gently declining trend as the government focuses more on the quality than the quantity of growth and relies more on consumption over investment and upon the private sector over the state owned enterprises (SOEs).

Reform of the SOEs is underway, but in slow motion. It should gain momentum as it dovetails with the aspirations of a rising middle class which demands better environmental security, safe food, clean water, clear air and an expanding private sector that can compete on equal terms with the state. On the pollution front, the government handed out double the environmental fines in 2017 compared with 2016, but these were still low at $154m versus $80m. More importantly, supply-side structural reform has aimed to banish small-scale and heavily polluting industrial producers in mining, smelting, processing and refining. This generally helped push producer prices higher in 2017 as well as boosting revenue growth in these industrial sectors. Revenue growth in the coal sector was up 23% year-on-year in 2017 as less efficient capacity was shut down making it easier for the survivors to raise prices. This process was helped by an increase in electricity consumption at well above 2015 and 2016 levels and rising thermal power electricity generation in 2017 reversing a contraction in 2015 and most of 2016. As one of Li Keqiang’s three favourite measures is moving from pollution to electricity consumption in 2017 ticks one box. Rising loan growth, using domestic real estate loans as a proxy, also grew strongly in 2017, thus ticking another box. Finally, strong growth in rail freight capacity over the past two years, as a proxy for rail freight volumes, ticks the last box. On Li Keqiang’s three measures, even though they decay more than a second school on a stationary clock someottie of an economy transitioning from investment to consumption, the Chinese economy is in good shape. It is not entirely clear whether the structural reform process favours state over private or vice-versa but, in the past, SOEs have usually benefited from their scale, their access to state-owned bank loans and the need to protect public sector jobs. Private sector companies have often been cash-starved and more likely to be sacrificed given their small scale, fewer workers and detachment from the state. It will take a while for blooming private sector companies to thrive and demonstrate the typical efficiencies of private ownership that may help to drive change at the SOE level.

HSBC’s 2017 forecast of China’s GDP growth to 2032 is consistently higher than its 2016 forecast and, over the past two years, China’s import and export trade flows have been on a steadily rising path. Consumer confidence surged to record levels in 2017 and now stands some 3% above the last trough in consumer expectations dating back to mid 2016. Over the same period, state-led investment has been on a declining trend as government stimulus was rolled back allowing household consumption and services to play a larger role in economic growth. An example of this was the reduction in government-led fixed asset investment which fell from 8.3% year-on-year in January to 7.1% by December. An illustration of the emergence of some form of belt-driven industrial strategy relates to new energy vehicles (NEVs; EVs, hybrids, fuel cell) where China has high ambitions. In 2016, China and the US dominated the global stock of NEVs with around 8.6m each out of a total of 2.9m. China raised its total NEV stocks to close 0.8m in 2017 and aims to push this to 1.0-1.2m in 2018. To put this in a wider context, total car sales in 2017 were 28.9m broken down into 24.7m passenger and 4.2m commercial. China is motivated by the need to lower environmental pollution and reduce oil imports. To this end, the BYD 83 has a gross cost of CNY123,000 ($19,100) and a net cost after central and local government subsidies of CNY70,000 ($10,500) which is about 37% below cost. This is a huge subsidy and it begins the question of the sustainability of sales with a shift to lower or zero subsidies. In the short term sales appear safe as central and local government subsidies in line with current levels have been extended to end 2020. The sharp month-on-month rise in house prices in 2017 and 2018 led to a reduction in domestic lending to the sector to avoid overheating market and potential credit losses. This period coincided with rising net capital outflows as investors sought less risky overseas investments for their capital, causing a rapid and worrying reduction in the nation’s foreign exchange reserves. China’s FX reserves hit a peak of $3.4tn in 2014 before sliding 31% to $2.3tn by the end of 2016, only to recover slightly to reach $3.1tn by year end. A 2017 government clampdown on highly leveraged overseas investments by the likes of HNA, Vanke, Wanda, Anbang and Fosun put a stop to this process, reversing capital flight and FX reserve drainage. A cooling in the rate of house price growth from 4.9% and over the course of 2017 permitted a recovery in domestic lending to Chinese real estate.

Although stock and bond markets are currently centre stage, there remain legitimate fears that China’s total debt to GDP ratio is rising too fast. It rose from 145% in Q2 2017 to 156% in Q2 2017, surpassing the United States. Over the same period US debt to GDP moved up from 73% to 74%, mitigated by the fact that the US dollar is still the world’s reserve currency and that foreigners are still willing to buy US Treasuries, at the right coupon rate, and continue to finance America’s debt. The late January 2018 sell-off in US government bonds was caused in part by rumours that China may significantly reduce its holdings of US government debt, something that it later denied. By comparison, Japan’s debt to GDP ratio rose from 98% in Q1 2008 to an eye-watering 173% in Q2 2017. Japan’s advantage is that the vast majority of its debt is held domestically and thus is unlikely to be called in by loyal Japanese investors who are considered to be long-term holders. Where China differs is in the rise of private sector debt to GDP. This ratio has expanded from 18% in Q1 2008 to 21% in Q2 2017 while, over the same period, this ratio has fallen from 18% to 15% in the US and from 14% to 13% in Japan.

The year-on-year change in China’s export growth had been in a gently declining trend from the beginning of zero to end of 2016, before turning back up again from early 2017. There is a changing dynamic in the capacity for Chinese export markets to absorb more Chinese manufactured goods, coupled with the maturing of the offshoring process and a move to reverse or onshore manufacturing in parts of Europe and the US. Equally, China’s huge appetite for imported raw materials, such as iron ore and crude oil, is partly to satisfy rising domestic demand and partly to feed its huge steelmaking industry and its enlarged oil refining capacity. This generates export opportunities not just for steel and oil products but for all manner of value-added goods that pass through China’s massive and diverse conversion and processing industries. However, China’s excess industrial capacity eventually runs into the buffers when protective import tariffs are imposed overseas, as we are potentially about to see with the US putting protective tariffs on products such as solar panels, white goods, steel and aluminium. Shutting illegal and polluting industrial capacity can reduce environmental damage at home and deflect trade spats abroad by reducing the need to export production to foreign markets at ruinously low prices. Within reason, the Belt and Road Initiative provides an outlet for these excess capacity to be exported, protecting Chinese jobs in the bargain, but failure to curtail the export of excess output risks provoking serious backlash and is a step down the road to looming fit for trade wars.

Latest examples include Chinese action against US sorghum (feed) imports by tightening the quality criteria and switching corn purchases from the US to the Ukraine just as US farmers prepare to harvest bumper crops. This is Chinese retaliation for US import duties on its own pork exports. Whatever tariffs the US president finally imposes on imported goods, mainly to satisfy blue collar workers in the Midwest, he will reap an equivalent or bigger response from countries such as China and India, because their demands are created by populations 4-times the size of America’s. At risk might be US soybean exports, with China partially switching to other suppliers to damage the interests of the politically influential pork producers. China’s partial sale of $3.4tn of short-dated US Treasuries that could have the effect of levering up yields and putting pressure on the Fed to raise interest rates. Any counter measures will also impose a heavy toll on the party doing the retaliating, so both sides end up losing out. The US is the standout in terms of economic recovery and growth potential, even if domestic stock markets may have run a bit ahead of economic reality. Since the beginning of 2017, when Trump came to power, the US dollar has been on a weakening trend which has helped US exports. But, in the long run, the US aims for a strong dollar and three or four prospective interest rate hikes over 2018 should logically support this reversal. The combination of job creation, falling unemployment, repatriated corporate profits, rising infrastructure investment and tax cuts that benefit households and business are all positive features of Trump’s first year as president. And, what is good for America is good for the rest of the world, so all these measures can help underpin synchronised global economic growth.

We face a tug of war between the positives of lower rates, rising corporate profits and synchronised economic growth and the negatives of higher rates, debt problems and the gradual withdrawal of central bank props.
There are issues that could upset or derail this process and this would include a US trade war with China starting with steel, aluminium, solar panels and white goods. We can only hope that pragmatism prevails and that this is avoided as it will help no-one. On the geopolitical front the same old issues exist such as a belligerent North Korea, the rising influence of Iran and its proxies in the Middle East and a new assertiveness from Russia that could boil over. North Korea has no desire for self-annihilation and its past threats have generally been viewed as part of a negotiating strategy as well as a means of self-protection. Kim Jong-Lin is well aware of what happened to Libya’s Gaddafi after he surrendered his nuclear weapons. Despite this, we are now aware that he may be willing to meet with Mr Trump to discuss the terms on which he might abandon his pursuit of nuclear weapons. The catch may be that his idea of denuclearisation of the Korean peninsula also involves the removal of all US troops and their weapons, including the nuclear versions. That is not going to happen as it would put South Korea, Japan and Guam at even greater risk.

Within the Middle East, the best counter to Iran’s rising influence is probably the combined power and interest of Saudi Arabia and Israel. It would be wonderful if they could sort out their own local affairs without the assistance or interference of the US and its Western and Asian allies. As far as Russia is concerned, it seems that President Putin generates domestic support by projecting a tough guy image and this encourages more bellicose behaviour. All the indications are that Putin is intent on rekindling the old Cold War, having taken advantage of President Obama’s failure to act on his red lines over the use of chemical weapons in Syria, allowing him to seize the initiative in the Middle East region. He has exploited the weakened resolve and drained resources of the US and its allies after trillions of dollars expended on 15 years of meddling in Middle Eastern affairs. Western intervention in Iraq 15 years ago only served to divide and split the country apart, leaving a vacuum for Iran to walk right into. The perception that the US has had enough of being the world’s policeman has given Russia room to manoeuvre in the Middle East and Europe. Russia aligned itself with President Assad in Syria and found that it was fighting alongside Iranian militias despite which, much more so than the US, it has still become the main interlocutor in Middle Eastern affairs. It is tied to Saudi Arabia through its cooperation with Opec in cutting global crude oil output and is now exploring mutual investments with the kingdom in energy and beyond. As number one and two global oil producers, Russia and Saudi Arabia have a common enemy in US shale oil that promises to propel the US to inherit the crown of being the world’s largest oil producer later this year. Saudi Arabia may consider that Russia can assist it in ending the intractable war in Yemen through its influence with Iran and its connections with the Houthi rebels. Ultimately, Saudi Arabia would rather Russia switched its allegiance away from Iran and develop stronger political and economic bonds with the kingdom. Russia would happily displace western arms manufacturers in supplying Saudi Arabia, hitting back at the US and its allies over its sanctions related to the Crimea and the Ukraine and US investigations into Russian interference in the US election process. US relations with Russia are now at their worst in 30 years and Russia has much to gain from former President Obama’s decision to disengage from the Middle East. In mid March, the UK expelled 23 Russian ‘diplomats’ in response to the poisoning of Sergei and Yulia Skripal in Salisbury, joining the US in a shift back to the chilly relations that prevailed three decades and more ago. Mr Trump’s latest attempts to pressure China to reduce its $775 billion 2017 trade deficit are failing. US trade deficits with China are at about $40bn in 2018 alone, are not generating any goodwill at a time when China is asserting itself in the Asia-Pacific region. The One Belt One Road initiative will extend China’s influence westwards which will create a pincer movement in conjunction with Russia’s westward push. Engagement, diplomacy and free trade are almost certainly the best ways to deal with and neutralise these various threats.
The Dry Bulk Market

This section accompanies the narrative to the dry bulk sector chart book at the back of this publication.

It has been a tough two years in dry bulk shipping but the good news is that the market has been on the mend ever since the BDI hit an all-time low of 290 points on 10 February 2016. The choppy recovery since then has seen the BDI trend upwards on a gently sloping path, but not without its customary volatility. The low point for the BDI in 2017 was 685 points on 14 February 2017, still well above the 290 point trough of early 2016. Its 1,743 point 2017 peak on 12 December was the best reading in four years since the beginning of 2014. In exactly two years since registering that all-time low the BDI recovered to 1,095 points on 14 February 2018, 3.8 times higher. By the end of February it was up another 5.8% to 1,323 points. By the time of final editing on 14 March it is slightly lower at 1,169 points.

To put this in the perspective of time charter earnings, the capesize BCI 5TC rose from a low of $1,994 per day on 21 March 2016 to a high of $30,475 per day on 12 December 2017, a 15.3-times gain. In a weak start to 2018, it fell back almost 6% to $13,547 daily by the end of February. By 14 March this was down another 12% to $10,461 per day, totally confounding expectations. This steep 66% correction, in the space of just three months, illustrates the extent of spot market volatility. A lot of the downward momentum has been put down to the disruption of Chinese New Year and the impact of winter curbs on steel production and coal-fired power plant electricity generation. Other reasons might be more COA nominations on fronthaul cargoes between the Atlantic and Far East that did not come into the open market, and a lot of captive valamax activity on Brazil/China iron ore liftings. This slump places high hopes on a market recovery from mid March when the influence of these disruptive factors starts to fade away.

It is helpful to look through spot market volatility and assess gains realized as per year average earnings by segment in calendar 2017 compared with calendar 2016. Here we can see clear year-on-year improvements with the gains spread across all bulk carrier size segments. The gains were greatest for the largest ships with capesize leading the way with a 103% year-on-year gain in moving up from an average of $37,388 daily in 2016 to an average of $74,983 in 2017. Panamax was up 77% from $5,563 to $9,716 per day, handymax up 47% from $6,373 to $9,490 daily and handysize up 46% from $3,214 to $4,664 per day. The resultant 2017 averages are big year-on-year improvements but are from a low base and merely restore earnings to a level that covers operating costs and permit repayment of interest and some principal to lending banks. This should be a relief to both owners and banks and it should slow down the rate at which banks choose, or are forced, to foreclose on owners. Slowing down the pace of foreclosures is good for the market as banks rarely achieve good prices when selling into the open market, even if they do so via the proxy of the previous owners and managers. The market is capable of detecting a distressed sale, and tends to set bids accordingly, so the fewer distressed sales the greater the chance of a sustained rise in asset values.

Total dry bulk sector sales rose from 408 units in 2015 to 650 in 2016 and to 758 in 2017. The most popular segment was supramax which saw sales rise from 121 units in 2015 to 198 in 2016 and to 253 in 2017. The rise in secondhand buying and selling activity has been assisted since 2015 by the tendency of newbuilding prices to be at a considerable premium to secondhand values, in contrast to the 2010 to 2014 period when the converse applied. This was both a reflection of a distressed secondhand market, and one dominated by bank foreclosures and forced sales, and the need for shipyards to quote prices related to their actual cost of production. Efforts by some yards to quote below such cost, to secure new business and pay down existing financial commitments, were generally met with commercial bank refusal to provide refund guarantees. The rise in secondhand values during 2016 and 2017 has inverted the relationship between resale and newbuilding prices, going from discount in 2016 to premium in 2017. For example, after the BDI plunged to an all-time low in early 2016, a resale 40,000-dwt capesize could be bought for $35.0m in March. At that time a newbuilding unit would have cost $45.0m to order, putting the resale at a 22% discount to the newbuilding contract price. Obviously, the tendency was to chase the resales and ignore the shipyards. 21 months later, in December 2017, an improving charter market has caused this relationship to invert with the newbuilding nominally costing $24.0m and the resale worth $36.5m, a 57% premium. The resale may still be worth that small premium as no one knows what the market will be doing in 1-2 years from now.

The same principle applied to the popular ultramax bulk carrier. In March 2016, a resale 61,000-dwt ultramax was worth $19.5m, an almost 1% discount to the nominal newbuilding contract price at that time of $20.4m. This made ordering unattractive while giving a helping hand towards better future supply-demand balance. By December 2017, a resale ultramax had risen to $27.5m while the newbuilding contract price was still stuck at $24.0m. The resale premium to newbuilding price was at almost 15% and over 21 months a resale ultramax had gained $8.0m or 4% in value. One side effect of this inversion in resale values and newbuilding prices has been to put the brakes on resale and secondhand value gains, even as spot market earnings continued on a gently rising trend. We ended up with a strong run-up in resale and secondhand values in the first half of 2017 giving way to a slower rate of asset value growth in the second half. For example, a resale capesize went up 48.2% in H1 2017, from $38.0m to $55.0m, but by only 3.3% in H2 2017, from $45.0m to $46.5m. It was the same for a resale ultramax, up 10.4% in H1 2017, from $124.0m to $126.5m, but by only 3.8% in H2 2017, from $126.5m to $127.5m. Once into 2018, directionless earnings and stagnant secondhand values are bringing newbuildings back into play, and fresh orders are rising. The advantage of new ships is that they are at historically low price levels for the latest designs and they can incorporate equipment that complies with new IMO rules on ballast water, fuel quality and harmful emissions. The disadvantage is the lack of future market visibility and the risk that a new ship will hit the water after the party has ended. Furthermore, the industry is well aware that almost all of our past problems can be put down to an oversupply of ships not to an undersupply of demand.

The strongest gains for 5-year old bulk carriers in 2017 were 32% for capesize, a 19% rise for Panamax, 13% for Ultramax and 9% for Handymax during the 12 months from February 2016 to February 2017 within the secondhand sector. The strongest losses for 5-year old bulk carriers in 2017 were 43% for Handymax, 15% for Ultramax, 14% for Panamax and 5% for Capesize within the secondhand sector. But overall average earnings are 3% higher for all six segments (capesize, panamax, Ultramax, Handymax, Handysize and Panamax) in February 2017 compared to February 2016 within the secondhand sector. The strongest gains for 5-year old bulk carriers in 2017 were 32% for handysize, 26% for Ultramax and 9% for capesize during the 12 months from February 2016 to February 2017 within the newbuilding sector. The strongest losses for 5-year old bulk carriers in 2017 were 27% for capesize, 14% for Panamax, 14% for Ultramax and 11% for handysize during the 12 months from February 2016 to February 2017 within the newbuilding sector. But overall average earnings are still well above the 290 point trough of early 2016 for all six segments (capesize, Panamax, Ultramax, Handymax, handysize and panamax) in February 2017 compared to February 2016.
2017 were in the capesize segment with the value of a 180,000-dwt capesize rising 37% from $25,000 in January to $33,000 in December. A 2017-built 76,000-dwt panamax rose over 23% from $15,000 to $18,500 in the year, while the same vintage 56,000-dwt supramax gained almost 17% from $15,000 to $17,500 and a 5-year old 32,000-dwt handysize went up just under 4% from $35,500 to $36,000. The continued rise in resale and secondhand values during 2017 helped newbuilding prices to firm up, but not by that much. Over the course of 2017, the price of a conventional 180,000-dwt capesize rose by less than 5% from $23,000 in January to $24,200 in December while an 82,000-dwt kamsarmax newbuilding went up by just over 4% from $34,500 to $35,900. The smaller sizes did rather better with the price of a 61,000-dwt ultramax moving up 7% from $21,500 in January to $23,000 in December and a 39,000-dwt handysize rising 11% in strengthening from $19,900 to $22,000 over the course of last year. The rise in newbuilding prices in 2017, gradual for the larger sizes and more pronounced for the smaller sizes, would play a part in stimulating fresh orders as potential buyers find themselves pressed into moving before prices rise any further. Value gains across the bulk carrier sector have slowed down in 2018 as the freight market awaits a pick-up in earnings going into the second quarter. Ship prices and values may get a further boost at the margin from financial markets as they capture part of the keen appetite for alternative assets which includes infrastructure and its many components. Investors are seeking to diversify their risks as they selectively rotate away from asset classes that appear highly priced including equities, bonds and property. This impulse to diversify was only enhanced by the late January 2018 bond market sell-off, and the February equity market correction, as strong and synchronised global economic growth signalled the beginning of the end of quantitative easing and low interest rates. The 10-year US Treasury yield moved up from below 2.5% at the start of the year to above 3.5% in late February as bond sales pushed yields up and prices down. A 3.5% yield is easily within reach while any shift higher towards 3.5% and higher would likely deliver a further sharp downward correction in equity valuations. A 3.5% ‘risk-free’ return, if held to maturity, might be an attractive alternative to more risky US equities at this point in the value cycle. The proceeds from high-priced bond and equity sales need to find a new home. We understand that some of the proceeds were recycled into perceived better value European, Japanese and emerging market equities. Some portion of the rest has favoured more exotic investments including currencies and alternative assets ranging from hedge funds and private equity to ships, land and highways.

There are more avenues via which institutional investors can attempt to capture the upside in shipping markets without having to buy whole ships and operate them, something beyond the capability of most non-shipping investors. One example is JP Morgan’s Global Alternatives division which has $200 billion of assets under management and offers investment strategies across the alternative investment spectrum including real estate, private equity and credit, infrastructure, transportation, liquid alternatives and hedge funds. In June 2017, JP Morgan Asset Management announced the closing of its Global Maritime Investment Fund II with $6 billion in capital commitments from a broad range of international institutional investors including pension plans, insurance companies and endowment and healthcare entities. It aims to invest in modern vessels operating in shipping sub-sectors that are experiencing substantial distress, with values trading near historical lows. It is thought that have bought 18 vessels for a total outlay of around $450m in 2017. As of end June 2017, only 1% or $1.6bn of the Global Alternatives division’s $150bn assets under management was invested in the wider transportation industry. Another example of bringing shipping to the public is the attempt by Breakwater, a US fund manager, to launch a freight futures exchange traded fund which reflects investor interest in the shipping recovery.

This illustrates the potentially enormous firepower that can be released in capital markets to invest in shipping at a time when investors are clamouring for alternative assets to what are still cyclically high valuations in equities and bonds despite the various market adjustments in the first quarter of 2018. Uncertainty in the direction of financial markets, as evidenced by a return to volatility in Q1 2018, is mirrored by a lack of real conviction in the direction of shipping markets. It is not a one-way bet, there are still risks. We started the year with capesize spot earnings in retreat and, in the first two months of 2018, doing worse than last year at an average of $14,975 per day compared with $15,993 daily in the same period in 2017. Despite these setbacks, all quite normal within our experience of market volatility, there is a belief that the worst is past and this is borne out by those improving asset values across the bulk carrier sector. Much may depend upon new demand drivers and what lies in store from China, an economy in transition from investment-led growth and consumer exports to consumption-led growth and consumer imports. A lower intensity of expansion in heavy industry and manufacturing is demanded by massive productive overcapacity and high airfreight, waterborne and land-based pollution levels. Higher standards of living and a rising middle class of consumers are putting health higher up the list of priorities and meeting this expectation is rightly becoming something of an obsession for the central government. The rising importance of the private sector and the services economy imply a slower pace but higher quality of future economic growth. Chinese GDP growth is estimated to have rebounded to 6.9% in 2017, up from 6.7% in 2016, according to Chinese government data and is expected to fall back to 6.5% this year. We can all remember how WTO entry at the end of 2001 helped to substantially raise China’s contribution to global trade, dragging shipping along with it. Is there any equivalent stimulus on the horizon? We mightoptimistically hope that the roll-out of the Belt and Road Initiative (BRI) will achieve something similar. It was first mentioned by President Xi Jinping back in September 2013 on a visit to Kazakhstan, and it is already taking shape with real investments being made along the designated land and sea lanes that will create a 21st century Silk Road. If BRI stimulates co-investment along its land and sea lanes then it has the potential to pull up emerging markets and raise incomes and living standards in what could become a virtuous circle. Such an event may well be more wishful thinking than probable outcome but it remains a possibility. These land and sea lanes will connect the Far East with Russia, Central Asia, the Middle East, Africa and Europe. China is calling excess and unapportioned industrial capacity at home as it attempts to tackle dangerous pollution levels as well as raising the profitability of state owned enterprises so that they can repay loans to state banks. The BRI gives China an export outlet for its excess capacity which, when harnessed to its ability to finance and build infrastructure overseas, will enable it to dominate these land and sea lanes and transports the raw materials, metals, grains and forest products to support its growing population.

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yet data collection must cover a very large country with regions spanning 3,000 miles from west to east and covering five international time zones. There is a known tendency for provincial officials to exaggerate GDP growth as a metric for their own performance. They have targets and they must hit them. In the end, the final reported growth figures may just be the result of a smoothing process that tends to deflate high growth periods and inflate low growth periods. To the outside world, 2015 and 2016 before rebounding very strongly in the growth of further 2.7% to 5,238mt in 2018. Last year it bounced back nearly 6% to 832mt. Global steel production followed a similar path: from 1,641mt in 2017. It dropped about 1% lower to 1,604mt in 2016 only to move just over 5% higher to 1,691mt in 2017. China’s share of global steel production stood at 49.6% in 2015, was down to 49.0% in 2016 and then up marginally to 49.2% in 2017. Former heavyweight Japan produced just under 10mt in 2017, almost unchanged from 30 years ago when its output was just under 10mt in 1988. Back then, China was far behind Japan at only 9mt. Today, China is producing almost 8 times as much crude steel as Japan (82mt versus 10mt) and just over 14 times what it used to produce back in 1988 (8mt versus 9mt). That is testimony to prolific Chinese economic growth in the past 30 years.

Last year there were significant incremental exports from high quality iron ore producing countries, with another 6mt becoming available from Brazil and another 6mt emanating from Australia. These higher ferrous content ores, especially Brazilian, are particularly in demand in China where central government anti-pollution, safety and efficiency measures favour imports over more expensive and poorer quality domestic iron ore. This means that expanding output of high quality iron ore from Brazil’s 5nD mine and Australia’s Roy Hill mine still can find a home in the Chinese market, adding to seaborne tonne-mile growth. China’s anti-pollution measures included culling inefficient and illegal steel mills and restricting winter output in certain designated provinces and areas. The combination of capacity cuts, output constraints, better raw material inputs and robust demand helped rescue steel prices from an early 2016 trough. Since then prices have more than doubled and this has restored government approved steel mills to profitability. Meanwhile, Chinese steel exports continued their declining trend since an all-time monthly peak of 11.25mt in September 2015. In the first eleven months of 2016 China exported a total of 10mt

Two years of very low demand growth in 2015 and 2016 created better supply conditions today, as they deterred new ordering, which will help in the coming years. In contrast, after the deep dry bulk recession of 2009 there followed five years of catch-up between 2010 and 2014 in which demand growth averaged 7% a year. This should have made for a good bulk carrier market but instead all it did was soak up some of the excessive tonnage that had been ordered in the boom years of 2004 to 2008. This excess of supply took a long time to filter into the fleet as there were a lot of order delays, switches and cancellations. However, the improving market since 2015 saw many of these ships, that were previously stranded at the shipyards, completed and delivered to new commercial and financial buyers. Now that we have got this backlog out of the system we have an improving supply-demand balance and the hope that owners will resist the temptation to push net additions beyond the levels of forecast future demand growth. China has long been the lead player in the dry bulk sector and 2017 was no different. In the biggest trade of all, iron ore, China raised its imports by 4.5% year-on-year to 1,098mt. This was 72% of the total world steel trade in iron ore in 2017 of 1,472mt, itself up 3.9% on 2016. The forecast for 2018 is for China’s iron ore imports to rise 3.5% to 1,099mt whilst world trade in iron ore is estimated to rise 3.1% compared with China reining in their 72% share. China also saw significant year-on-year gains in some of its other commodity imports in 2017 including grains, bauxite and logs. Incremental growth in its own dry bulk imports amounted to 8mt or about 2.3% of total world dry bulk trade in 2017.

Global coal imports, coking coal and steam coal combined, rose 5.2% in 2017 from 1,421mt to 1,490mt while China’s total coal imports rose 8.5% in 2017 from 2016 to 217mt. Slower seaborne coal trade growth is forecast for 2018 with just 1.5% for world trade to 1,451mt and 1.1% for China to 205mt. Despite producing between 3.5 and 4.0 billion tonnes of coal a year, China has seen its domestic production decline in recent years, and its import demand rise. As with iron ore, China has quality issues with its domestic coal production which necessitates the import of higher quality thermal and coking coal with greater efficiency and lower pollution characteristics. The National Development and Reform Commission (NDRC) is in the process of reforming domestic coal mining in the world’s largest coal producer nation in order to tackle pollution and mining inefficiencies. It is proposing to increase coal output from 3.785mt in 2015 to 4.396mt in 2020 while, over the same period, consumption is forecast to rise from just under 4.0mt in 2015 to 4.1mt in 2020. The shortfall must be made up with imports. The NDRC aims to cut a net point of capacity by closing down 800mt of outdated and inefficient production...
of steel while, in the same period in 2017, this figure fell 31% year-on-year to 207. The reasons for the fall in China's steel exports include strong domestic demand for construction and infrastructure, falling domestic steel inventories and rising protective tariffs in overseas importing countries. These steel export volumes, averaging over 68mt per month in 2017, are small change compared to iron ore volumes, but they are carried in smaller bulk carriers and provide important support.

The management of domestic coal production capacity directly impacts on China's coal import requirements, especially with increasing demand for higher calorific and lower sulphur content. Import demand is also determined by rainfall, which affects domestic hydroelectric production, and by the cost and availability of imported LNG, a proportion cleaner burning fuel. If hydroelectric power fails and the cost of coal and gas imports rise, then the tendency for the rules to be relaxed, so it is quite a fungible situation. After China introduced production curbs in April 2016, the price of thermal coal in Asian markets more than doubled to $140 a tonne as power utility companies were forced to import. Similar output curbs on coking coal saw prices spike to above $200 a tonne, increasing input costs to Chinese steel mills. As a consequence, China's total coal imports surged 23% in 2016 to hit 207mt, rose 91% to 278mt in 2017 and remain forecast of 300mt or more to 2017 this year. The central government reaction to the self-induced coal price spikes in 2016 was to ease controls and bring domestic and international prices back down the curve. To a point, the government is happy to see coal prices firm, but only so far, as higher prices enable highly indebted state-owned coal miners to repay loans to pocket state-owned banks. What has not apparently noticed was the extent to which private miners had been squeezed out of the market by the halving of coal prices in the three years from the beginning of 2015 and early 2016.

Indian domestic coal production, as illustrated by Coal India that controls 76% of national output, continues to rise but at a slower pace. It jumped 3% year-on-year in 2015-16 from 449mt to 457mt before slowing to 1.3% growth in 2016-17 in reaching 554mt. India's seaborne coal imports have been in decline over the past three years just as domestic coal production has been rising, thus exploiting an abundant domestic resource that is not so accessible given land rights issues. India's coal imports stood at 286mt in 2015, then retreated 2% to 197mt in 2016 and were down another 3% to 181mt in 2017. In the final four months of 2017 there was a return to year-on-year import growth reversing the trend since the start of 2016, and adding a little ray of sunshine should this upward trend be sustained. In the final four months of 2017, India imported a total of 67mt in all. This decrease up to 70mt total in the same period in 2016. Over in the US, having won the coal mining vote, the Trump administration is now committed to bringing back coal production and mining processes if it ever happens. Extra production will not all be consumed at home and some or most of it will be exported into overseas markets.

In 2016, US coal exports into the Atlantic were pegged at 21mt and into the Pacific at 36mt. In 2017, these figures were up 49% to 31mt into the Atlantic and up 26% to 45mt into the Pacific. In January 2018, the US exported 2.6mt into the Atlantic, up 20% on 2017 in January 2017, and 3mt into the Pacific, up 17% on 3.1mt in January 2017. If this export growth trend is maintained then it will be mainly beneficial to the ultramax up to kamsarmax range of bulk carriers.

On the supply side of the ledger, the delivery schedule of new ships is winding down from the high annual figures of the past few years. The other segment that has impacted on the order book in 2016 is with 33 units out of 61 by number and 3.1% from the end of 2017. To put this in context, the previous lowest delivery year in capacity terms was 2008 with 36 units of 25.4mt-dwt. The 2018 delivery schedule includes 64 capesize, 8x panamax, 86 supramax and 8x handysize. In 2019, 196 units of 23.7mt-dwt are booked for delivery including 59 capesize, 61 panamax, 41 supramax and 33 handysize. These actual and scheduled deliveries need to be put into the context of the overall fleet. It would appear that new fleet supply growth in the dry bulk sector in the four years from 2016 to 2019 will be modest by historical standards. We saw net growth in the dry bulk fleet of 2.3% in 2016, rising to an estimated 3% in 2017 and then down to a forecast 1.5% in 2018 and 1.6% in 2019. Absolute growth in total dry bulk trade is expected to be around 2.7% in 2018, well ahead of forecast bulk carrier fleet growth of 1.5% this year. Meanwhile, estimates of tonne mile trade growth in 2018 give a slightly higher figure of around 3.8%, thus pulling even further away from estimated fleet growth by a margin of 2.3%. This renders the best chance in 15 years to enjoy a period in which demand exceeds supply, feeding into higher earnings and rising values. The supply and demand balance is dynamic and will change on a weekly basis.

Bulk carrier contracting rose from 61 ships in 2016 to 37 in 2017 with the deadweight capacity of such carriers rising 15% from 14.3mt-dwt in 2016 to 36.4mt-dwt in 2017. This was a significant rise in bulk carrier contracting last year in response to a quite modest absolute increase in earnings and values. There is a clear disconnect between a 3.4-times rise in number and an only 1.6-times rise in the deadweight capacity of bulk carriers ordered last year. The figures were heavily distorted by Chinese orders for a total of 30 x 40,000-dwt very large ore carriers (VLOCs) in March and April 2016 for the Brazil to China iron ore trade. Beyond these giants of a combined 1.2mt-dwt virtually nothing else was ordered in 2016. The so called capesize season that Year-2015 was the strongest in 2016, where orders placed for smaller ships in 2016 with orders placed for only 5 handysize, 19 supramax and 4 panamax. Such light ordering in the sub cape segments in 2016 has improved the near-term outlook for these segments. In 2017, capesize and larger accounted for 84 (20.85m-dwt) of the total 317 orders while handysize took 36 slots (1.07m-dwt), handymax got 72 slots (4.43m-dwt) and panamax accounted for 75 slots (2.62m-dwt). In spite of the 2017 surge in the contracting of bulk carriers the order book to fleet ratio is currently at a low 8.9% (1.01m-dwt versus 88.2m-dwt) for the first time since the end of 2002. With higher earnings and values and a lower O/BFL ratio we seem to be returning to conditions that prevailed in 2003. Back then, a substantial strong demand side performance coincided with modest fleet growth to deliver an unprecedented break-out from trend earnings and values. However, it is most unlikely that we will see a repeat of the super benign combination of conditions that prevailed back then, but we live in hope.

The 15-year low in the O/BFL ratio has been helped by a reduction in slippage rates which fell from 4% in 2016 to 2% in 2017. With more ships confirmed to have delivered, partly a function of an improving charter and asset market, the remaining undelivered order book shrinks. We should be closer to getting a truer representation of the actual order book once ghost orders and cancellations are whittled out of the system. As something of a pattern continues to the dry bulk fleet of 157 units of 179mt-dwt in 2016 were at their lowest reading since 2003, when they were at only 62 units of 77mt-dwt. In 2017 this ticked back up to 235 of 369mt-dwt as demolition to half the rate of 2016. 14.6mt-dwt versus 29.5mt-dwt, a natural symptom of an improving market. Only 217 ships of 14.6mt-dwt were scrapped in 2017; the last time we had less than a set amount scrapped in a year was in 2010 when only 145 ships of 6.7mt-dwt went to the breaking yards. Scrap prices have moved back upwards in response to the slowing rate of demolition with upwards of $400 per lightweight tonne available in the Indian Subcontinent in early March 2018. This is up on last year when average scrap prices soared to $250 in December by $50 in January.

In summary, we are expecting net bulk carrier fleet growth to fall from 2.3% in 2016 to 2.8% in 2017 and then to a forecast 1.7% in 2018, 2019 and 2020. We currently forecast a contraction in the bulk fleet of 0.8% in 2020 but this will be revised once new orders for 2020 delivery are placed. It is unlikely that many new orders can be placed as we were before the end of 2019. Demand growth should comfortably exceed supply growth this year at 3.7% absolute demand growth, and 3.6% tonne-mile demand growth, versus 1.3% net fleet growth. There are always threats to such a rosy scenario and these might include a possible understatement of the order book in Japan, where we have poor visibility, and a possible overstatement of the demand prospects in China, which is critical to overall performance of the dry bulk sector. It is true that markets have been worried about a setback in China for the past 40 years, and yet nothing out of the ordinary has happened. China has serious issues to deal with including an elevated debt load and the need to urgently tackle pollution and reform the SOEs, three example issues that are interlinked. In 2017 the government made headway in attempting to reduce industrial overcapacity in areas such as steel, mining, glass, cement and aluminium. Closing down unregulated excess capacity, often the most polluting, helps to raise prices and profitability among approved producers. It is a long process and removing excess capacity is not necessarily bad for demand, as approved producers can step in and increase output to compensate for lost production from closed down businesses. The need to improve the quality of output, and reduce pollution, has led to higher grades of iron ore and thermal coal being imported over lower quality domestic production. This import substitution continues to benefit the bulk carrier sector and China's
Imports by volume of iron ore and coal continue to rise in line with overall demand growth. The data tells us that demand growth will exceed supply growth over the next several years and this is a rare event to be enjoyed while it lasts. Looking further out the demand picture becomes hazy. However, as things currently stand with IMO 2020, from January 2020 fuel costs will almost double as the majority of ships will shift to burning 0.1% sulphur MGO, or 0.5% sulphur LSFO, from current high sulphur content heavy fuels with up to 3.5% sulphur content. Freight rates will rise to reflect these higher fuel costs and ships will slow down to self-imposed speed limits to save on fuel consumption and to reduce harmful emissions. Legitimate and charterer supported slower steaming will reduce effective tonnage supply, tipping the supply demand balance in favour of the ship over the cargo. Far from penalising ship owners, the IMO might actually be doing them a favour as it intervenes positively in an area in which owners rarely excel: fleet capacity management. Ultimately the consumer will have to pay a bit more to cover these increased costs, but this will be a small price to pay to protect our planet.
The Tanker Market

This section accompanies the narrative to the tanker sector chart book at the back of this publication.

The tanker market has been volatile in recent years shifting from benign demand conditions in 2015 and 2016 to reversed circumstances in 2017 and 2018 as the mood shifted from euphoria to despair. Tankers enjoyed a good year in 2015 as oil prices fell, boosting both end user consumption and seaborne oil shipments into commercial and strategic storage. 2016 saw this phase gradually peter out after Brent hit a cyclical low of $27 a barrel in January 2016 before embarking upon a grinding recovery. In essence, the tanker market gradually shifted from restocking in 2015 to destocking in 2016 which caused a gradual reversal in tanker fortunes. Brent was available in the market within the $30-50 a barrel range for most of the second half of 2015 and for most of the first half of 2016. From then it staged a volatile upward trajectory in the second half of 2016 and during calendar 2017 to reach above $70 a barrel by January 2018, only to fall back to below $65 by mid March. Firming oil prices totally changed tanker market dynamics as full stocks of low priced crude were progressively drawn down as prices rose. This was a better option than buying and shipping new cargoes at prices higher than crude oil held in storage, both on land and at sea. This reduced seaborne tanker demand over the course of 2017 at a time of the delivery of tankers ordered in the 215 boom. a pattern that is often repeated as the 3 year time lag between contracting and delivery usually spans quite different market performance. Falling earnings caused a large correction in asset values such that, by the end of the first quarter of 2017, buyers believed that market prices represented good value. Values were thus able to rise off the bottom even as earnings failed to match the switch, with earnings for the largest tankers continuing to fall. Two months into 2018 and VLCC spot rates are at appallingly low levels which will push many of these giant breaking yards as they approach 20 years of age, their 4th special survey and the uneconomic costs of retrofitting scrubbers and ballast water treatment systems to become IMO compliant. 2018 will be a year of pain for VLCCs but it will improve the prospects of 2019 being a year of gain.

According to the Baltic Exchange, daily and Aframax tankers. MRs have also had a much better start to 2018 than crude tankers in averagining $13,009 per day over the first two months of 2018 before collapsing to a reading of $13,006 daily on 14 March. Earnings have gone from bad to worse as seaborne oil market has softened while tonnage supply has remained relentlessly high. At the end of 2016, Opec and Russia set a target of removing 1.8 million barrels a day (m-bpd) from the market in 2017, and they intend to stick to this over 2018. This should, in theory, have improved the tonne-mile dynamics. Opec cuts of mostly Middle East supply from Saudi Arabia, Kuwait and the UAE and erratic production and a degree of exemption from cuts in Iran and Iraq have to some extent opened up opportunities for long-haul movements from the Atlantic to the drivers of demand growth in the Indian Subcontinent and the Far East. However, the growth in Atlantic crude oil supplies from the likes of the US, Brazil and the North Sea have been largely cancelled out by patchy, unreliable and declining production and exports from the likes of Libya, Nigeria, Angola and Venezuela. It is noteworthy that large volumes of US crude exports go into the European market rather than Asia. Energy Information Administration (EIA) data for 2017 indicates that the US exported over 850 million barrels of crude oil over this period, equating to an average of 1.1m-bpd. In December 2017, the last month for which data is available, the US exported 70 million barrels, equating to an average of 1.1m-bpd. In Q4 2017 the US exported an average of 1.3m-bpd which was an exceptional quarter as hurricanes Harvey, Irma and Maria had damaged Gulf Coast refineries and oil infrastructure, reducing crude oil demand and causing WTI prices to plummet, thus opening up an export arbitrage window. However, even the 2017 annual average of 1.1m-bpd was up a huge 9% on 2016’s 1.0m-bpd and off the chart compared with 2015 when US condensate exports averaged only 417,000-bpd, just 3.7% of 2017 volumes.

The five largest importers of US crude oil were Canada with 235,000-bpd (8.8% of total US exports), China with 215,000-bpd (8.5%), the UK with 100,000-bpd (3.5%) and South Korea with 72,000-bpd (2.5%). The top five accounted for 0.7m-bpd, or 70.1%, of the 1.1m-bpd total. The balance was widely dispersed amongst other global buyers. The two top five Asian destinations, China and South Korea, accounted for just over one quarter of total US crude exports, at 0.28m-bpd. Adding in other off-takers east of Suez in order of off-take volumes (namely: Singapore, Japan, India, Malaysia, Taiwan, Hong Kong, Thailand and the UK) adds a further 0.1m-bpd, taking total Asia-bound volumes to 0.4m-bpd or 37% of the total. This contributed little to long-haul crude oil trade and added little to seaborne tonne-mile demand. As for No.1 Canada, its preferred delivery mechanism was by pipeline. The US faces strong competition from Middle Eastern Opec suppliers when trying to sell into Asia, as they are being squeezed out of western markets by rising Atlantic crude oil production. Middle Eastern exporters also seek to sell more crude oil into the growth markets in Asia where they get better netback returns than they do by selling into Western markets. Seaborne routes east are much shorter than seaborne

January 18 December) rising from $53.41m to $61,13m, a 105,999-dwt crude aframax gained 3.1% from $28,41m to $29,47m and a 1,040,000-dwt MR went up 13.5% from $8,8m to $13,1m. In 2018 to 12 March, the VLCC reading is almost unchanged at $61.4m, the aframax is up a bit to $59.7m and the MR is almost 5% better at $32.6m. The turnaround in values has been based mostly upon bargain hunting. It has been assisted by positive sentiment in the context of historically low values rather than on the performance of the freight and charter markets that have remained choppy and largely disappointing, as demonstrated by the Baltic index. The Baltic Dirty Tanker Index (BDTI) averaged 835 points in 2015, followed by 716 points in 2016 and 787 points in 2017. In 2018 so far, the average over the first two months of 2018 was back down to 670 points, with an even lower reading of 641 points by 14 March. In terms of time charter equivalent earnings the numbers were no better. The VLCC-TCE (the average of TD1: AG/USG and TD2: AG/China) was on a downward trend all year, despite the usual and occasional upward blips, starting at $8,172 per day on 3 January and finishing 92% lower at $1,068 daily on 22 December. The average for the whole of 2017 was a lowly $10,239 per day, compared with $19,972 daily in 2016 and $49,635 daily in 2015. In 2018 to date, it is in negative territory over the first two months of the year at minus $1,068 per day with an even lower reading of minus $3,928 daily by 14 March. The Suezmax-TCE also trended down over the course of last year starting at $29,521 per day and finishing 65% lower on $10,857 daily with an annual average of $12,397 per day. This has fallen to an average of just $2,68 per day over the first two months of 2018 with a slightly better reading of $5,668 daily on 14 March. The Aframax-TCE followed the downward trend of its larger crude siblings despite enjoying a stronger autumn. It started 2018 at $18,135 per day and ended 63% lower on $6,855 daily, with an annual average of $7,951 per day. In the first two months of 2018 it has averaged $4,395 per day with a reading on 14 March of $2,955 daily. On the clean products side, MRS suffered volatility but did better on average on a dollar per tonne basis than the larger crude oil tankers. The MR Atlantic Basket opened 2017 on $48,135 per day and closed the year 27% lower on $31,688 daily. The average for the whole year was $10,554 per day, out-performing both VLCC and aframax tankers.
routes west, so this amounts to a net tonne-mile effect. With some arbitrage exceptions, the developing pattern appears to be less long-haul east to west and west to east shipments and more short-haul west to west and east to east shipments. The outlook will be considerably more rosy when Opec and Russia end their coordinated output cuts in 2019, allowing them both to flood the market in the next restocking phase.

Unfortunately, the involvement of Russia in the 1.8-bpd Opec cuts will reduce seaborne exports of Urals crude from the Russian Baltic and the Russian Black Sea, thus cancelling out some of the positive tonne-mile effects. Reuters reported in mid-January that seaborne exports of Russia’s flagship Urals crude will fall in 2018 to their lowest levels since the early 2000s as Moscow diverts oil from the west to east, boosting supplies to China, in line with plans by Russian pipeline monopoly Transneft. The January 2018 opening of a new parallel pipeline, from Mohe on the Russia-China border to Daping in northeast China’s Heilongjiang province, doubles the East Siberia Pacific Ocean (ESPO) pipeline capacity from 15mt to 30mt per annum, or from 0.3m-bpd to 0.6m-bpd. China’s imports of Russian crude were at 1.3m-bpd in January 2018, up 25% in 2018 and up from 1.9m-bpd in December 2017. Russia is consciously pursuing closer ties with Asian countries with the West over Moscow’s role in the Ukraine and Crimea, accusations of meddling in foreign elections and the alleged poisoning of its former subjects in Europe. Politics aside, as with the Middle Eastern Opec producers, Russia can sell oil into Asian markets more profitably than it can sell into Europe. Reuters reports that the biggest reduction for Russia’s key Urals export blend will be at Baltic ports. Loadings from Primorsk and Ust-Luga are planned at 63.4mt for 2018, over 19% or 14.7mt down on the 76.7mt in 2017. Urals and Siberian light loadings from the Black Sea port of Novorossyisk are planned at 21.3mt, which will be 12% or 2.7mt lower than the 24.0mt of 2017. Urals exports are seen as drying up as Russia increases supplies to China under the Moscow-Beijing agreement to supply 380mb per year to China starting in 2018. Transneft data suggests that crude oil supplies to China via the ESPO pipeline spur and Kazakhstan will rise to 38.7mt in

On the supply side, too many tankers have been delivering from shipyards, too few have been scrapped, and too many have been released from floating storage to resume active service. On the demand side, Opec and the non-Opec-11 have succeeded in returning some 1.8m-bpd from the seaborne market since the beginning of 2017.

In tonne-mile terms, there is a 2.6% gain in 2018 to 26.4bi tonne-miles, up 14.6% to 3.0bi in 2017 and up another 7.6% in 2018 to 3.3bi. These figures are in line with the absolute numbers except for 2017 when tonne-mile growth was 6.3% ahead of absolute tonne growth. Moving to the present, China imported a record of 9.6m-bpd in January before falling to 8.4m-bpd in February, according to General Administration of Customs data. One is nothing to worry about, it is just a distortion caused by the impact of the Chinese Lunar New Year holidays and new tax rules affecting teapot imports. The global historical global import figures, which imply strong demand growth, do not quite tally with the estimates of annual average spot earnings for a modern VLCC of $14,488 daily in January, falling to $17,794 per day in 2017 and to $6,532 daily to 09 March 2018. Suffice to say that matching the supply and demand data with actual earnings outcomes is one nut that no-one has yet cracked. Of course, seaborne demand is only one side of the shipping coin, the other being tonnage supply. In 2017, as we examine, we had the perfect storm of high VLCC newbuilding deliveries and very limited slippage coinciding with low scrapping rates and a tsunami of super tankers being taken out of storage. Supply growth simply overwhelmed demand growth and this shines through in the results. Opec and the non-Opec-11 have done a reasonable job in ensuring compliance after signing up to output cuts in November 2016. Opec claims its members were 107% in compliance with their share of the cuts in 2017 with this figure rising to 135% in January 2018. Argus, an oil consultant, claims that the global surplus has halved from an estimated 380mb at the start of last year to about 320mb at the beginning of 2018. More importantly, the key OECD commercial inventory indicator (US, EU-6 and Japan) has seen stocks fall back towards the 5-year average. In January 2018, Argus put the surplus to the 3-year average of about 75mt in January and 44mt in February. The IEA's latest estimates from the EIA are that US crude output was at an average of 9.3mbp in 2017, increasing to 9.9mbp in December 2017 and 10.3mbp in January 2018. Latest estimates from the EIA are that US crude output was at an average of 9.3mbp in 2017, increasing to 9.9mbp in December 2017 and 10.3mbp in January 2018. US drillers added another oil rig to make a total of 800 in service, the highest since April 2015. The rig count naturally rises in response to higher WTI oil prices and to lower costs of production. Average shale oil production costs have dropped from just under $74 a barrel in Q1 2015 to $50 a barrel in Q3 2017. This was actually up from an average of below $56 a barrel over the previous 14 months as subcontractors looked to
above $70 a barrel in January, would indicate that Opec and Russia will be keen to reopen the spigots and raise revenues, providing the market with more seaborne oil exports.

The demand dynamic should also improve in 2019 as Opec and Russia will be keen to reopen the spigots and raise revenues, providing the market with more seaborne oil exports.

The US is also shaking up global oil trading patterns with its crude oil exports, as we have seen earlier. The IEA points to a recent shipment of condensate from the US to the UAE, not something that one could have imagined a few years ago, making it all but impossible to anticipate trade changes that impact tonne-mile demand and tanker utilisation and earnings. It would also have been hard to predict that the US would be supplying LNG to China in competition with nearby suppliers in Indonesia and Malaysia and with the farther away but prolific exporters of Australia and Qatar. Another hard to predict event has been the rapid decline in Venezuela’s fortunes, a country with the world’s largest crude oil reserves, at 30bn barrels ahead of Saudi Arabia with 267bn barrels, and a big reduction in its exports to the US and Asia.

Oil export revenues account for 95% of total export earnings while the oil and gas sector represents around 45% of national gross domestic product. Limited US sanctions on Venezuela that were introduced in 2017 have made its parlous economic state even worse. The country’s crude oil production declined to a 38-year low of 1.8mbpd in 2017 from a peak of 3.1mbpd in the 2011 to mid 2014 when Brent averaged over $70 a barrel. As the IEA points out in its February Oil Market Report, conventional oil producers who are sitting on shut-in production are seeing their market share eroded by these new nimble producers who can adjust their production in response to the oil price versus cost dynamic. The flexibility and fleetness of foot is enviable.

On 20 February 2018, at International Petroleum Week in London, US deputy energy secretary Dan Brouillette highlighted US plans to move beyond achieving American energy security towards achieving “energy dominance” in oil and gas. This would follow on from President Trump’s decision to roll back environmental regulations and loosen restrictions on drilling for oil and gas on federal territory, on land and at sea. The US will seek every opportunity to export its oil and gas and is forecast, by the EIA, to become a net exporter by 2022. Since the end of the decades-long bon on crude exports was lifted in 2015 the US has been keen to raise production and exports of its oil and gas. It will do so on commercial terms but aims to challenge the commercial and political influence of big oil and gas suppliers such as Russia, Saudi Arabia, Iraq, Iran and Qatar. The last four are Opec members. US imports of crude oil from Opec peaked in August 2008, according to EIA data, at 8.8mbpd and have since fallen 53% to 7.04mbpd in November 2017, the last date for which data is available. The US is now urging consumer countries not to become over reliant on certain sellers of product as it uses surging energy exports to increase Washington’s geopolitical influence in competing with suppliers with whom it has had a chequered history over the past 15 years. One such example is the US pledging last year to help Poland diversify its energy imports away from neighbouring Russia. A more topirical example is Exxon’s announcement on 28 February this year that it is quitting almost all of its joint ventures with state-owned Rosneft in belated and reluctant compliance with US and EU sanctions that were first imposed in 2014. Its joint venture Sakhalin project in the Pacific is excluded as it long predates the sanctions. Tensions between Russia and the West have risen this millennium as Europe and Nato have pushed east with the Baltic states, Poland, Hungary, Slovenia, Slovakia and the Czech Republic joining the EU in 2004 and Romania and Bulgaria joining in 2007. This perceived encroachment on its sphere of influence was much to the annoyance of Russia which has pushed west by its more recent actions in the eastern Ukraine and Crimea. Russia has undoubtedly used its oil and gas pipeline supplies to Europe as a political tool and now the US is getting closer to weakening that dependence by increasing the supply of LNG and crude oil to Europe and Asia. It is a huge dynamic shift in both commercial and political terms.

The US imports of Venezuelan crude plummeted in 2017 to well below the 3-year average of 6.7mbpd in the 2014 to 2016 period. They started 2017 at 0.28mbpd but by November 2017, the latest data point available, they had collapsed to 0.1mbpd, a 98% decline in less than a year. US imports of Venezuelan crude oil will continue to track oil production on its downward trend as the country tries to divert sales to Asia in response to US sanctions. Voluntarily losing the US as a customer is a big mistake as it is a cash buyer and PDVSA’s Citgo refineries in the US are geared towards refining the heavy crude oil that Venezuela produces. Selling more crude oil to Asia, where China is its largest customer, is not cash generative as shipments to the larger buyers such as China and India are used to repay oil-for-loan deals. Gulf refineries are now in a dilemma, whether to sustain Venezuelan crude due to quality and credit issues while shipments to Citgo’s refineries in Lake Charles and Corpus Christi have fallen from a 0.2mbpd 3-year average to just 0.000mbpd last November, the lowest on record. An end February internal memo indicated that PDVSA’s refineries in Venezuela and the Caribbean will operate at only 45% of their total capacity in March due to a lack of spare parts, light crude and feedstock. This compounds the nation’s problems in further reducing its ability to generate income, moving it closer to sovereign default and economic collapse. The Trump administration is considering further sanctions against the country’s oil industry, including restricting insurance cover for oil shipments, as it ratchets up the pressure on the socialist regime of President Nicolas Maduro ahead of an April election that it regards as a sham. Some international oil companies, such as Exxon and Conoco, pulled out of joint venture projects with PDVSA back in 2007 after President Hugo Chavez expropriated 60% of Orinoco Belt production from foreign hands. Other IOCs such as Chevron, Total, Eni and Statoil are hanging in there, for now, because of the potential cuts without too much pain and effort. According to Rice University’s Baker Institute, out of the roughly 1.8mbpd that PDVSA was producing up until December 2017, only about 0.8mbpd was generating any cash flow for the state oil company. Over 1.0mbpd was consumed in the domestic market at heavily subsidised and loss-making prices, some 0.5mbpd was committed to repaying loans to Russia and China and the balance under 0.5mbpd was supplied to Caribbean countries on generous terms, mostly to Cuba.

The demand dynamic should also improve in 2019 as Opec and Russia will be keen to reopen the spigots and raise revenues, providing the market with more seaborne oil exports.
size of the last opportunity. State-owned national oil companies from Russia and China have had less difficulty investing billions into supporting Venezuela’s oil industry as any default will convert their loans into equity and they will then have stakes in the largest oil reserves in the world. It is a risky investment, but it is something that state actors can do that others cannot.

At the beginning of 2018, with Opec output cuts and rising non Opec production, we can safely say that there will be no shortage of oil supply or demand for it. From a tanker shipping perspective, what counts is how the market supplies tanker tonnage to meet forecast future tanker demand. There is always a tendency to overdo this part of the equation. We had two and a half years of strong earnings for crude oil tankers following the decline in oil prices from mid 2014. The sharp drop in Brent from $115 a barrel in mid June 2014 to a trough of $27 a barrel in January 2016 stimulated end-user consumption and buying for commercial and strategic storage. As one might expect, owners responded to better earnings by ordering tankers in 2014 and 2015 that were scheduled to deliver in 2016 and 2017. Unfortunately, crude oil tankers suffered a half year of strong earnings for crude oil tankers 2014 and 2015 that were scheduled to deliver in 2016, followed by another half year in 2016, so that 30 to 40 VLCCs may be scrapped this year as he counts 45 units as being due their 4th or 5th special survey in 2018, followed by another 35 coming due in 2019. Interestingly, the Front Cassiopeia (306,009 DWT, 1999) 43,020 DWT) was reported sold in mid February to Foresight for further trading at $18.5m. This appears to be lower than its scrap value of $18.6m at $340 per DWT. With second hand prices and demolition values equalling it is better to scrap with a view to helping the survivors than it is to sell for further trading. The supply evolution has been slightly less severe for suzmax and aframax crude tankers but the number and size of deliveries in 2016 and 2017 was still enough to have a detrimental impact. 25 crude suzmax of 5.3m-DWT delivered in 2016, followed by a surge to 58 units of 8.76m-DWT in 2017, and another 12 of 8.87m-DWT delivered up until the end of March. Suzemax demolition followed a similar pattern to VLCC with only 10 of 3.9m-DWT going to the breakers in 2016, followed by 15 of 2.9m-DWT in 2017 and 2 of 0.38m-DWT in 2018 to date. This gave rise to net fleet growth in the suzemax segment of 14 units in 2016, 43 in 2017 and 10 in this year to date. On the crude aframax front, 32 units of 2.47m-DWT delivered in 2016, followed by 32 of 3.67m-DWT in 2017 and 8 of 4.90m-DWT at the time of writing this year. Fortunately, demolition was much more severe than the larger segments with 6 pairs of 6.6m-DWT disappearing in 2018, 34 of 3.9m-DWT in 2017 and 15 of 1.36m-DWT were reported to be scrapped before Easter. The net impact on the aframax crude tanker segment was for a gain of 46 units in 2016, a loss of 2 in 2017 and a loss of 5 this year to date.

The one feature that has really damaged crude oil tanker earnings in 2016 to date is the huge unwinding of floating storage as rising oil prices caused cargoes to be sold and crude oil tankers to be released back into the trading market. Over the first three quarters of 2016, Iran averaged 23 VLCCs engaged in floating storage, before falling to 16 by the end of 2016. This number trended steadily down over 2017 to three by the end of 2017 and then to zero by the end of January 2018. In less than 18 months Iran has returned 35 VLCCs to active service concurrent with the easing of international sanctions. The status of the non Iranian fleet is even worse. At its peak last year, in early July 2017, 61 international VLCCs were engaged in floating storage. By early March 2018 this number had halved to 30 units. This means that a total of no less than 53 VLCCs have returned to active service within the past 18 months, with a dramatic unwinding of floating storage in just the past three months. This reduction in floating storage, together with net gains in the fleet through new deliveries, lower scrapping, and less than impressive tonne mile demand growth, makes it easier to understand the calamity that is today’s VLCC market. Average earnings for a modern VLCC were just under $40,000 per day in the week ending 23 March, at about the level of typical daily operating costs.

There remain 29 VLCCs in storage which may return to the market should oil prices spike higher; or storage costs rise, and enable or force their cargoes to be sold. It was a similar bearish story for suzemax and aframax crude oil tankers, but we lack reliable data. The release of all this crude carrying capacity into the market has destroyed earnings and yet owners are still willing to place VLCC orders, at bargain prices as low as $15.8m each before required extras, for delivery in a few years time when the market should be better. At the time of writing a European owner is rumoured to have placed orders for three VLCCs at Drauwe for $18.5m each. On the resale front, Ocean Yield has purchased 4 x 190,000 DWT VLCCs under construction at Hyundai for delivery in Q3 and Q4 2019 for $18.75m each. At such prices they would presumably be fully IMO compliant with exhaust gas scrubbers and ballast water treatment systems included. The purchase involves a 15-year bareboat charter back to sellers Kylades, and $5.9m per ship seller’s credit (probably in the form of a performance bond for the bareboat charter), and purchase options in charterer’s favour after seven years. The tankers are said to have a back-to-back 5-year timecharter to a major industrial conglomerate. These two deals imply that a fully IMO compliant VLCC is currently costing in the range of $83.8m on the water. This leads us on to future tanker supply and the status of new orders at the shipyards.

At the end of 2017, the VLCC fleet stood at 375 units of 216.0m-DWT. After 7 units delivered and 16 reported to be scrapped in the week before Easter, the fleet was down to 315 units of 213.5m-DWT as of the end of March. Over the balance of 2018, 41 VLCCs of 12.8m-DWT are scheduled to be delivered, followed by 46 of 14.7m-DWT in 2019, and another 17 of 5.2m-DWT in 2020 and beyond. The total order book comprises 104 VLCCs of 33.1m-DWT which is equivalent to 14.3% of the fleet by number and 14.4% of the fleet by deadweight capacity. At the end of 2017, the suzemax fleet stood at 541 units of 84.4m-DWT. After 11 delivered in the first three months of 2018, and only 2 being scrapped, the suzemax fleet rose to 532 units of 85.8m-DWT. The delivery schedule over the balance of 2018 calls for 25 new deliveries of 3.9m-DWT, followed by 19 of 2.9m-DWT in 2019 and 8 of 1.1m-DWT in 2020 and beyond. The total order book comprises 52 suzemax crude tankers of 8.0m-DWT thus putting the DBI/FL ratio at 9.3%. The last time that the suzemax FL/DR ratio was below 9.3% was in May 2014. The crude aframax fleet stood at 6,458 units of 70.5m-DWT at the end of March, two less than at end 2017 for 73 deliveries and 28 demolitions. There are 85 vessels of 9.6m-DWT on the order book which is equivalent to 15.3% of the current
fleet by number and 13.6% by capacity. 39 of 4.3m-dwt will deliver in 2018, 33 of 3.7m-dwt in 2019, and 13 of 1.5m-dwt in 2020 and later. Lastly, the crude panamax fleet is dwindling fast. It numbered 85 units of 5.9m-dwt at the end of March with an order book of just 8 vessels of 0.6m-dwt set to deliver over the next three years. The OB/FL ratio is an undemanding 9.3% by capacity.

Turning to product tanker supply. At the end of 2017, the LR2 fleet comprised 342 vessels of 37.4m-dwt, rising to 348 units of 38.0m-dwt by the end of March 2018 as six more LR2s have been delivered. Over the rest of 2018, 15 more LR2s of 1.7m-dwt are set to deliver, followed by 39 of 1.0m-dwt in 2019, and another 12 of 1.4m-dwt in 2020 and beyond. The total LR2 order book comprises 38 units of 4.3m-dwt, which is equivalent to 11.3% of the current fleet by number and 11.8% by deadweight capacity. The LR1 fleet stood at 361 vessels of 26.5m-dwt at the end of 2017, rising to 364 of 26.7m-dwt by the end of March 2018 after 15 deliveries and 2 demolitions in 2018 to date. 12 LR1s of 0.88m-dwt are scheduled to deliver over the rest of this year, followed by 10 of 0.7m-dwt in 2019 and 5 of 0.5m-dwt in 2020 and beyond. The total LR1 order book is 27 units of 1.4m-dwt, equating to 7.5% of the current fleet by number and deadweight capacity. The MR product tanker segment is by far the largest with 1,505 vessels of 71.9m-dwt by the end of March 2018. The order book is 47 strong at a capacity of 2.3m-dwt, equating to 9.3% of the current fleet by number and 9.8% of the fleet by deadweight capacity. 47 of 2.3m-dwt are scheduled to deliver over the balance of 2018, 8 of 4.0m-dwt in 2019, and 16 of 0.8m-dwt in 2020 and 2021. SR product tankers of 9,000 to 39,999-dwt are less in demand judging by the thin order book. The fleet in this size is presently made up of 418 vessels of 16.7m-dwt with only 11 vessels of 4.3m-dwt on order, equating to just 2.4% of the current fleet by number and 1.8% by capacity. The totality of them are set to deliver this year. Overall, the OB/FL ratios across the product tanker sector are quite low which raises the probability of a better market ahead with higher earnings and rising asset values.

To conclude, tanker fortunes in 2017 and 2018 to date have been adversely influenced by the confluence of negative supply and demand fundamentals. On the supply side, too many tankers have been delivering from shipyards, too few have been scrapped, and too many have been released from floating storage to resume active service. On the demand side, the Opec and non-Opec-11 have succeeded in removing some 1.8m-bpd from the seaborne market since the beginning of 2017. This does not appear to have boosted tonne miles to the extent that had been expected by replacing, at the margin, AG-Asia supplies with Atlantic-Asia supplies. The Opec-led cuts have rescued oil prices to levels that have encouraged destocking in 2017, a process that will continue over 2018, reversing the positive stimulative effects of low oil prices in 2015 and 2016 that encouraged consumption and inventory building. Despite an increase in ordering, the OB/FL ratios for crude and product tankers are at historically low levels and a poor market this year could see scrapping rise significantly. We have already noted that up to 16 VLCCs are thought to have been sold for demolition already this year; it is a good start. The supply and demand dynamics should improve in 2019, helped in no small part by incoming IMO environmental regulations. These promise to generate a further increase in demolition and a further reduction in vessel speeds for many older tankers, so as to minimise the consumption of costly LSFO or MGO. The demand dynamics should also improve in 2019 as Opec and Russia will by then be keen to reopen the spigots and raise revenues, providing the market with more seaborne oil exports. We might even face a surprisingly good market by 2019 but, given the nature of shortening shipping cycles, it would only be right that a few good years follow a few bad ones.
The Containership Market

This section accompanies the narrative to the container sector chart book at the back of this publication.

As we pointed out last year, the container market has been in a state of crisis for most of its existence, with many more poor years than good. 2017 saw the container sector bounce off the bottom that was marked by 2016 and we now appear to be past the worst. The average of the comprehensive Shanghai Containerised Freight Index, a hybrid container freight index, has performed very poorly in recent years. It is well down on its last peak annual average level of 1,367 points in 2010. Since 2010 it has steadily trended higher on average of 42 in 2012, 46 in 2013, 47 in 2014, 53 in 2015, about 20% higher than demand, creating structural asset values higher and allowing the banks to exit their zombie fleet with some ships working and others not. The Japanese trio of MOL, NYK and K-Line are setting up Ocean Network Express (ONE), with the intention of providing new end-to-end services rather than hub and spoke system. It will have new offices in Singapore, new branding, a fleet of 1.4m-teu contributed by its partners and it will start with a clean balance sheet. It will have assets of around $2 billion with cash on the balance sheet and no liabilities, a great way to start a liner company. It aims to be mid-size rather than competing with the market leading heavyweights, offering what it hopes will be a differentiated service. The top players have grown through both partners and it will start with a clean balance sheet.

The top 5 of Maersk, MSC, CMA CGM, China Cosco and Hapag-Lloyd have gradually increased their global market share from 45.2% in January 2016, to 52.3% in January 2017 to 61.1% in January 2018. Apart from the Top 5 mergers already noted it is worth mentioning Maersk’s completed takeover of Hamburg-Sud in December 2017. Further consolidation is considered likely as the industry continues to achieve greater economies of scale, but sometimes cultural issues prevent rationalisation. In the Top 15 one might think that in Taiwan state-owned Yang Ming might merge with private Wan Hai, given that such a public-private merger model is being tested by Cosco and OOCL. PIL might be a candidate for a larger Top 5 player eager to expand its influence in the Asia-Pacific. Otherwise, most merger opportunities probably lie outside the premier league. Consolidation is not just about mergers and acquisitions, it is also about the shifting alliances and vessel and slot sharing arrangements that add scale to liner operations. In 2016 the main alliances reduced from four to three, triggered by the disruption caused by M&A activity. The former four of JMT, OOCL, CTKYE and GSA became a new three in JMT (comprising Maersk and MSC plus HMM), the Ocean Alliance (comprising CMA CGM, China Cosco and Evergreen) and TME Alliance (comprising Hapag-Lloyd, MOL, NYK, K-Line and Yang Ming). The three enlarged alliances will in theory lead to reduced competition and better enable them to hold the line on freight rates, something that is badly needed after such a disastrous 2016 and disappointing 2017.

Turning to the supply side and recent fleet growth. 2017 was the last year in which we had large net fleet growth at 1.4m-teu, comprising a high 1.66m-teu of deliveries and a low 0.19m-teu of scrapping. This was followed by low net fleet growth in 2016 of 0.25m-teu, comprising a low 0.57m-teu of deliveries and a high 0.67m-teu of scrapping. 2017 saw somewhere in between with net fleet growth of 0.77m-teu, the product of 1.78m-teu of deliveries and 0.94m-teu of demolition. The average scrapping age has risen as we emerge from the worst of the downturn, exposing a slight shortage in some of the sub 5,000-teu sizes that buys them a temporary reprieve from the breakers. The average age of container vessel scrapped in 2017 was 20.7 years, up from 18.1 years in 2016 but down from 21.8 years in 2015. The faster pace of scrapping in recent years has modernised the fleet so there are fewer obvious demolition candidates left. In the global container fleet there are 873 vessels of 6.48m-teu aged up to five years; 1,120 vessels of 6.36m-teu aged 6-10 years; 1,107 vessels of 5.68m-teu of 11-15 years; 536 vessels of 4.68m-teu of 16-20 years; 389 vessels of 4.61m-teu of 21-25 years and just 82 vessels of 0.71m-teu over 25 years of age. The portion of the fleet over 15 years is 13.2%, up to 20 years 3.9% and over 25 years 0.8%.

Staying on the supply side, the order book of all cellular containerships has fallen to 391 units of 2.7m-teu which, on a fleet capacity of 21.09m-teu in early March 2018, puts the latest order book to fleet ratio (OB/FL) at just 15.1%, its lowest in over 20 years since records began in January 1996. One would have to take this as a positive sign as it suggests than continued trade growth over the next few years should convert into better earnings. The focus of ordering has been on larger ships and especially ultra large container vessels (ULCVs). Some common sense entered the market place a few years back and encouraged some supply-side restraint in...
contracting. After 369 ships of 1,313-teu were ordered in 2015 only 99 units of 4,071-teu were ordered in 2016 followed by 112 units of 6,701-teu in 2017. The capacity numbers for 2017 were skewed by the ordering of a units of over 10,000-teu in September last year. Furthermore, 12 units averaging 7,000-teu each were ordered in January 2018 taking orders in January 2018 to 12 units of 10,000-teu, at an average of 6,818-teu each, and in February 8 units of 7,000-teu were ordered. The distribution of the current order book suggests that the focus is either on economies of scale, and ships over 10,000-teu, or on renewing the depleted and beyond. In the 3,000-3,999 teu segment there are 42 ships on order in the context of a current fleet of 1,870 vessels, the low OB/FL ratio of 6.660 units are at 15 years of age or older (35.3%).

In the 2,000 to 2,999 teu segment there are 94 ships scheduled to deliver in 2018, 50 in 2019 and 21 in 2020 and beyond. These new ships deliver from the shipyards they will displace other tonnage and cascade them down the food chain, creating overcapacity in other trade lanes and putting downward pressure on freight rates. Sealntel suggests that this glut of ULCVs means that fleet growth in the 2018 to 2021 period will far outpace fleet growth in the 2012 to 2017 period. That is not a great prospect when we look back at market performance over that term. As in the other main segments of bulk carriers and tankers, it is the largest ships that tend to be the trend setters for the whole sector, so if the big ships do badly then it tends to have a negative trickle-down effect on the smaller sizes. When will the carriers consider that they have enough of these large ships? Latest reported orders include 4 x 1,420 x 1,400-teu vessels at Hyundai for CMA CGM for delivery from 2020. They are rumoured to be costing $195m each for dual fuel and up to $28m for an LNG fuel option. Only recently it elected to make its series of 9 x 2,360-teu order at SWS (4) and Hudong (5) LNG capable at an approximate extra cost of $20 million each. Meanwhile, Evergreen has ordered 8 x 12,000-teu vessels at Samsung at a reported base price of $94.25m each for delivery from 2020. Evergreen will also charter in 12 x 11,000-teu vessels from Shoei Kisen, these larger ordered at Imabari that are also being chartered in from Shoei Kisen, Imabari’s owning and operating arm.

Hyundai Merchant Marine (HMM), despite its well publicised recent solvency issues after suffering a $1.1 billion loss in 2017, that have forced the company to strike down the freeze and auction off 488 units, making the OB/FL ratio 0.9. In the 7,000-9,999 teu size range there are just 3 ships on order for delivery this year out of a current fleet of 479 units, giving an OB/FL ratio of a negligible 0.4%. Despite the high number of orders in the 1,000-2,999 teu size range, 226 orders against a current fleet of 1,870 vessels, the low OB/FL ratio of 0.4%

In this fleet segment of 1,870 vessels some 71 units are at 15 years of age or older (3.8%), 305 units are at 20 years of age or older (16.5%) and 360 units are at 25 years of age or older (15.5%).

Above 10,000-teu the ordering steps up quite noticeably. In this size segment there are 42 ships on order in the context of a current fleet in this segment of 221 vessels, giving an OB/FL ratio of 19.0%. 20 are due this year, 3 in 2019 and 20 in 2020 and beyond. In the 17,300-19,999 teu segment there are 45 ships on order out of a current fleet in this size range of 148 units, giving us an OB/FL ratio of 38.3%. 31 are scheduled to deliver in 2018, 13 in 2019 and 7 in 2020 and beyond. Finally, in the ULCV segment of 18,000-21,000 teu there are 56 ships on order against a current fleet in the segment of 73 vessels, giving an OB/FL ratio of 76.7%. 17 are due this year, 18 in 2019 and 21 in 2020 and beyond. These numbers suggest a glut of new orders for the largest ships that will populate the Asia-Europe route. This applies to most of the ships above 13,299-teu. As these new ships deliver from the shipyards they will displace other tonnage and cascade them down the food chain, creating overcapacity in other trade lanes and putting downward pressure on freight rates. Sealntel suggests that this glut of ULCVs means that fleet growth in the 2018 to 2021 period will far outpace fleet growth in the 2012 to 2017 period. That is not a great prospect when we look back at market performance over that term. As in the other main segments of bulk carriers and tankers, it is the largest ships that tend to be the trend setters for the whole sector, so if the big ships do badly then it tends to have a negative trickle-down effect on the smaller sizes. When will the carriers consider that they have enough of these large ships?

The three enlarged alliances will in theory lead to reduced competition and better enable them to hold the line on freight rates, something that is badly needed after such a disastrous 2016 and such a disappointing 2017

9x 21,000-teu, 8 x 17,000-teu and 12 x 15,000-teu.

Hanjin may have done it, but it looks like it will be reborn in MHH. Finally, Yang Ming is poised to order 10 x 11,000-teu and 10 x 2,800-teu vessels to replace 20 older chartered-in ships in the 5,000-8,000 teu size bracket when their charters expire. The company allegedly had $509 million in short-term liabilities at the end of 2017, but these bank facilities are likely to be extended.

The health of the container shipping sector is reliant upon the interactive relationship between steady demand growth and the rate at which this growth is serviced by a constantly expanding fleet. Comparing total container trade with total cellular capacity over recent years we can see that trade should be getting better for a supply of change. In rounded figures, as these are just broad brush estimates, there was a significant 6% excess in shipping capacity in 2015 but this shifted to small capacity deficits (with demand exceeding supply) of 5% in 2016 and 1% in 2017. The capacity deficit is forecast to shrink to 1% in 2018 and then rise to 3% in 2019. This improving supply-demand balance should work in favour of the tramp ships that are supplied by independent owners to the carrier groups on a rolling short time duration charter basis. These generally speaking ships under 5,000-teu in capacity although on increasing number of ships fall into the 5,000 to 10,000-teu size bracket as tramp owners have traded up. The changing supply-demand balance has been heavily influenced by an over-supply in the market caused by heavy ordering and deliveries of ships above that size range that have been ordered in recent years.

The most important US$2 billion in 2016, $9,696 in 2017 and now averaging a much improved $11.5 billion to end February this year. In all cases, 2018 is showing greatly improved levels after two months. One size that was briefly unfashionable was the classic panamax that has seen the widening and deepening of the Panama Canal from mid 2016. The short-term 6-12 month rate for a 3,313 beam 4,400-teu unit fell from $11,887 in 2015 to $3,970 in 2016, then up to $7,692 in 2017 and to $8,875 in 2018 to date. The longer term 5-year rate for such a unit went from $12,831 in 2015 to $9,477 in 2016, $6,668 in 2017 to $5,970 in 2018 and to $7,370 in 2019 to date. This classic panamax ships still have a place on the short term market but may be on now transiting Panama and most are dispersed across a wide range of different trade. The intermediate 6,800-teu size has yet to recover to the level of earnings that prevailed in 2015. The 3-year time charter rate for such a unit fell from an annual average of $23,725 in 2015 to $17,108 in 2016. It recovered slowly to $15,239 in 2017 and is now back up to $17,473 by the end of February this year. This intermediate size is struggling to identify trade lanes on which it can be competitive and is to some extent a victim of the continuing cascade process.

Asset values have also been on an upward trend and we hope to see more of this in 2018 as the general market fundamentals improve. A year old 1,700-teu geared vessel had an average charter of $414 in 2016 falling to $86 in 2017 and then back to $142 in 2018. In February 2018 such a unit is nominally worth $192.5m. A year old 2,300-teu geared vessel was worth an average of $184 in 2016 falling to $50.9m in 2017.

In February 2018 it is worth a little more at $124.5m.
Global trade can flourish if the US government can be persuaded not to trigger a damaging trade war with China.

The much maligned 4,400-teu classic panamax saw a 5-year old version drop from an average of $16.0m in 2015 to just $9.0m in 2016 before rebounding to $12.5m in 2017. By February 2018 it was nominally worth $12.5m. As recently as 2012 such a unit was worth as much as $18.0m. Finally, a 5-year old 6,800-teu vessel was worth $36.0m in 2015, dropped to $16.0m in 2016 and then bounced back to an average of $24.0m last year. By February 2018 it was worth $26.0m. All of these sub 10,000-teu containerships are seeing higher values but they are well below the levels that they achieved in the past. That would indicate plenty of potential upside for the brave investor. Examples of these include Seaspan and KMT which both bought series of modern classic panamax units, 4,275-teu and 7-8 years of age, in the market trough for scrap equivalent prices of around $5.0-5.5m each. On paper, they have more than doubled their money in well short of 48 months. Latest reports, in early March 2018, suggest that Diana sold a pair of small classic panamax, Centaurus and Sagitta (3,426-teu Thyssen Krupp NSW 23.0 knots) for $12.3m each to MPC Containers.

It is always interesting to see the views of the market leader, Maersk Line, which alone ships one in every five regular containers and one in every four reefer containers worldwide, corresponding to about 13 million forty foot containers a year. 2017 was a better year for the company after a disappointing 2016. In 2017 the AP Moller Maersk group, Maersk Line’s parent, completed a total of $14 billion worth of M&A transactions as it heads towards becoming a unique end-to-end global integrator of container logistics, connecting and simplifying its customers’ supply chains. APMM reported revenue growth of $3.7 billion to $30.9 billion giving an underlying profit of $336 million in 2017. The underlying profit in the transport and logistics business was $1 billion. The highlight for APMM and Maersk Line was the ongoing integration of Hamburger Sud, achieving a combined fleet capacity of over 4 million teu and a 15% share of global container shipping capacity. Maersk Line, not including Hamburg Sud, transported 10.73 million mill at an average freight rate of $2.005 and unit cost of $2.079 on 287 owned and 389 chartered ships aggregating 3.6 million-teu. Maersk Line’s revenues were up 17.3% in 2017 at $34.7bn compared with $29.9bn in 2016 and its underlying profit rose to $2.7bn in 2017 from an underlying loss of $284m in 2016. The sale of Maersk Oil and Maersk Tankers during the year now allow APMM to focus on its core business of transport and logistics.

It makes the point that estimated revenue in container shipping is $150 billion with forecast growth in line with GDP, while estimated revenue in contract logistics is $245 billion with forecast growth above GDP. Maersk Line, together with synergies of other companies in the APMM group, is probably the only liner company that has the wherewithal to compete head-to-head with the likes of UPS and FedEx, and challenge for the higher revenues that are not available in shipping alone.

To conclude, the current fleet to order book ratio of 13% is the lowest in over 20 years, and this is undoubtedly positive as we are allegedly moving into a synchronised global economic recovery. It does seem strange that the trading world is recovering, after a precipitous collapse towards the end of 2008, at a time when financial assets such as equities and bonds are still trading at record highs despite various wobbles in 2018. There is no reason to believe that global trade can flourish if the US government can be persuaded not to trigger a damaging trade war with China other than its duties on solar panels and white goods and its announced tariffs of 25% on steel and 10% on aluminium imports. Canada and Mexico have won exemptions and other countries are welcome to prove that they do not threaten US national security. There must be people in the administration who can persuade the president how damaging this would be to the US economy and to American jobs, although with Gary Cohn and Rex Tillerson gone this may not be the case any longer. The prospect of a further $50-60bn of US tariffs on Chinese goods is not a good one as it will invite equivalent retaliation. Last year it was estimated that total trade growth, in terms of millions of teu lifts, expanded by 5.4% versus total container ship capacity growth of 3.8%. In 2018, trade is forecast to expand by 5.0% versus a 4.3% expansion in capacity and, in 2019, trade is forecast to rise 4.8% versus capacity growth of 3.5%. These container supply and demand forecasts suggest that demand should exceed supply by a factor of 2.5% in 2019 which should play very well in favour of the ships. 2018 is a little less bright but should see things turn around with trade growth forecast to rise by 0.5-1.0% higher than fleet growth. If these forecasts are good then freight rates, earnings and ship values will continue to improve from the low levels that we have become used to over the past ten years. For tramp ships below 5,000-teu, the liquid part of the market in chartering and sale and purchase terms, the prospects are brighter today than they have been for many years.

Global trade can flourish if the US government can be persuaded not to trigger a damaging trade war with China.
The LNG Market

This section accompanies the narrative to the LNG sector chart book at the back of this publication.

LNG evidently faces a bright future after Shell’s CEO, Ben van Beurden, forecast that LNG imports will double globally by 2023. Asia will lead the way with imports rising by 52%, Europe up 6%, the Americas up 15% and the Middle East and Africa up 13% each. Total LNG imports in 2017 were at about 335 billion cubic metres (bcm) of natural gas equivalent, or about 288 million tonnes (mt) of LNG. All told, LNG demand is thus likely to rise by 4% a year to 2035. This outlook certainly validates Shell’s decision two year’s ago to buy the BG Group for the princely sum of $52 billion. In the intervening two years environmental considerations are giving cleaner burning natural gas a big push at the expense of oil and coal. We can even see this in shipping as this year CMA CGM decided to equip a series of nine 22,000-teu ultra large container vessels with LNG propulsion at an extra cost of some $20 million per ship.

It has signed a 10-year supply agreement with Total and will charter a $65m 18,600-cbm LNG bunkering tanker from MOL after it delivers from Hudong yard. CMA CGM’s move will almost certainly encourage other owners to opt for LNG and for oil companies, oil traders and bunkering companies to invest in a global LNG bunkering network. IMO 2020 will ban the use of maximum 3.5% high sulphur fuel oil (HSFO) from 1st January 2022 spelling the beginning of the end of the use of high sulphur fuels in marine transportation. The ramifications of this are as yet unknown and we, as the research department, have our own opinion. Our newbuilding department has a more granular and technical view that is dealt with in a later chapter. Most ships will have to convert to using 0.5% marine gas oil (MGO) or to a new low sulphur fuel oil (LSFO) which will typically be an 15-18% blend of residual oil and MGO, so as to achieve the new 0.5% sulphur cap. Fuel costs are set to rise significantly in 2020, and it is not yet clear who will bear this higher cost, but it will probably trickle down to the consumer, the final end-user. Ultimately, we believe this will end up as a cost ‘pass through’ and raise freight rates proportionate to the increased fuel element.

The only ships that will be able to continue using HSFO are estimated to cost anything between $3m and $5m to fit depending upon the system, the size of the ship and the time of fitting. The options are for open loop, closed loop and hybrid scrubbers. The alternative to burning HSFO in conjunction with scrubbers, which regrettably keep high sulphur fuel grades in play, are various. One will be to use MGO alone, which will be the high cost option, at least initially. Another will be to use blended LSFO subject to its availability. Over time, the cost of HSFO and LSFO will converge based around the lesser availability of the former and the greater availability of the latter, although this is a matter for refiners and bunker suppliers. Exxon says that owners hoping to avail themselves of HSFO may have to enter into annual term supply contracts to guarantee availability, easy for cruise ships on repeat routes but harder for tramp ships plying random routes in the spot market. The higher cost of burning cleaner fuels, with lower harmful sulphur and nitrogen emissions, will be outweighed by the benefits to the environment and assuage growing public awareness of the damage that is caused by SOx, NOx, VOCI and greenhouse gasses. One can anticipate that, in the short term, the cost of HSFO will fall and that the cost of LSFO and MGO will rise. In the longer term, the availability of HSFO will fall and its cost rise, as refineries will not produce the residues that make HSFO if there is little or no demand for it. This increases the risks of fitting scrubbers and supports the level playing field concept whereby all ships should burn cleaner fuels: LSFO, MGO or LNG. Besides, the lowest cost open loop scrubbers spray exhaust gas with seawater in the scrubbing process, converting SOx into sulphuric acid. The sulphuric acid is then discharged into the sea where, as we are told, it will be neutralised by the natural alkalinity of seawater. The jury is out on whether open loop scrubbers really do eliminate harmful toxins, or whether they simply recycle them into the sea rather than emit them into the air. Environmentalists will need to be convinced that scrubbers do not simply switch from polluting the air to contaminating the sea.

We can envisage that most ships in the fleet will not be able to afford, or make economic sense, of retrofitting scrubbers so they will have to opt for MGO or LSFO. Given the higher fuel costs, a premium of at least $200 a tonne over heavy fuel oil today, these ships will probably be operated at slower speeds to save on consumption, and eco ships with slow steaming capability will be in hot demand. Older, high consumption ships of all types will most likely find their lives cut short and head off to the demolition yards of the Indian Subcontinent, China and Turkey. Pacific Basin CEO, Mats Bergland, has called upon refiners to bear the costs of cleaner fuels by stripping out the sulphur at the early upstream stage when switching from HSFO to LSFO production. It should not be for owners to bear the costs of cleaning the fuel at the later downstream stage on board ships. It makes no sense to turn ships into mini refiners at huge cost when logically the issue should be handled at source. There will be enormous demand for LSFO and MGO so it is up to the oil companies and the refineries to meet that demand by raising supplies and lowering costs over time. There are also safety issues involved in the use of blended fuels that are not fully understood, as these will differ according to the blending process and point of origin, so this may play in favour of LNG at the margin. However, LNG and multi-fuel propulsion will most likely be reserved for LNG carriers, cruise ships, passenger ferries, RoRo and other high value assets such as ULCVs, as per CMA CGM. Lower value carriers of bulk oil and bulk raw materials, such as VLCCs and VLOCs, might opt for scrubbers, or just chance it. IMO 2020 will alter shipping habits, shorten the useful economic life of ships, perpetuate slow-steaming and help reduce effective shipping capacity.

Global LNG demand has accelerated over the past five years from 2013 to 2017. Global LNG demand was at 715 bcm of natural gas equivalent (or 230 mnt of LNG) in 2013, rose 18% to 848 bcm in 2014, was up 4% to 331 bcm in 2015, up another 8% to 358 bcm in 2016 and finally increased 12% to 397 bcm (or 288mnt of LNG) in 2017. The biggest market for imported LNG is northeast Asia where imports have risen almost 6% between 2013 and 2017 from 203 bcm to 231 bcm. The smallest market is the Middle East, although it has enjoyed the fastest growth rate, with its imports rising five-fold between 2013 and 2017, going from 4.3 bcm to 21.4 bcm. Europe is an increasingly important

Having long been tied to 25 year life-of-ship contracts, suppliers and end-users are now able to look at shorter term deals and spot merchant deals. A more flexible trading system brings LNG within reach of more customers who are keen to access this cleaner burning, less polluting fuel.
player with its imports rising 53% from 53 bcm in 2015 to 65 bcm in 2017. Last year Europe recorded 15% year-on-year growth from 66.8 bcm in 2016 to 62.1 bcm. Of Asia’s imports, Japan has the largest share at 47.1%, followed by China with 21.2%, South Korea with 11.1% and Taiwan with 9.1%. China has just passed South Korea as the world’s second largest LNG importer and is set to massively increase its import volumes as it attempts to tackle air pollution caused by coal-fired power plants, steelmaking, mining and other heavy industrial processes.

Clarkson data on seaborne LNG trade shows a sharp up step between 2009 and 2010 when LNG trade jumped 27% from 68.9 billion tonnes in 2009 to 87.3 billion tonnes in 2010 followed by a 21% increase to 109.0 billion tonnes in 2011. LNG trade then flattened out over the next five years from 2012 to 2016 averaging 102.2 billion tonnes a year. It was all change in 2017 when it rose over 12% to 115.2 billion tonnes and is forecast to increase by another 15% to 133.0 billion tonnes in 2018. In all, global seaborne trade in LNG has enjoyed a compound annual growth rate of 6.5% between 2016 and 2017 with all indications suggesting that this trade is set to accelerate. As usual, we can expect China to play an outsized role in developments.

China’s natural gas production has grown by 6% from 123.2 bcm of natural gas (equivalent to 89 bcm of LNG) in 2007 to 65.1 bcm in 2017. Last year Europe recorded 31.7 bcm of NG (23.1 bcm of LNG) in 2014 to 41.3 bcm of NG (30.1 bcm of LNG) in 2017. At the end of February it was rumoured that Pantheon Tankers had ordered 2 x 174,000-cbm units at DSME for $184m each for delivery in September 2020. Also, Cardiff is said to have added 11 x 174,000-cbm units at Samsung to the 3 x 174,000-cbm units that it ordered at Hyundai at the end of last year. It is believed that two of them are fixed to Cheniere and Total for 7 years time charter at $165 daily. Finally, US shale gas interests are being linked to 9 x 170,000-cbm units at Hyundai Heavy and Hyundai Samho, but without any confirmation so far. Nikolaos Tsakos, of Tsakos Energy Navigation, announced in March an interest in growing his fleet from two to six units by 2020, and this will only be done against firm charter commitments. The main drivers are more settled technology, lower new LNGC prices and brighter prospects. Peter Livanos controlled GasLog added another 180,000-cbm unit at Samsung in March, after ordering one in January this year, while securing an option for another. The price is estimated at around $180m, an attractive level for a new generation ship of this capacity. In contrast with TEN, these appear to have been ordered without employment but no doubt with business in mind from its portfolio customers. With LNG trade growth of 14.1% in 2017, and forecast trade growth of 15% in 2018, there appears to be room for some extra fleet capacity, most of which is already baked into the order book. The total LNG fleet above 40,000-cbm rose in capacity terms by 77% from 64.6 bcm in 2016 to 69.5 bcm in 2017 and is forecast to rise another 6.5% to 73.9 bcm in 2018. Strong trade growth looks to outpace robust fleet growth over the next few years which suggests that the poor earnings environment of 2015 and 2016 should now be behind us. As ever, the positive LNG demand outlook can only be undone by excessive speculative ordering of new tonnage. The market needs to absorb the heavy delivery schedule of this year and next before reassessing whether demand growth is indeed shaping up as forecast, and leading us to a brighter future.

The market needs to absorb the heavy delivery schedule of this year and next before reassessing whether demand growth is indeed shaping up as forecast, and leading us to a brighter future.
The Newbuilding Market

This section accompanies the narrative to the newbuilding sector chart book at the back of this publication.

Shipbuilding

Where are we in the shipbuilding cycle?

By our estimates, the global order book currently stands at 76.5 million compensated gross tonnages at the beginning of February 2018, down from 94m-cgt at the beginning of 2017 and 171m-cgt at the beginning of 2016, following a fourth successive year of deliveries far outstripping new contracts. It is now just 38% of its 108m-cgt peak at the beginning of 2009.

Tanker and bulk carrier contracting reached a floor in 2016 with only 7m-dwt contracted, down from about 8m-dwt in 2015 and 9m-dwt in 2014. In 2017 we saw a significant increase in contracting, back to about 7m-dwt, driven by the prospect of an improving dry bulk freight market and historically attractive newbuilding prices. In the kamsarmax segment alone, around 100 new contracts were placed, with prices starting at $22m in China in Q1 2017, rising to $27m by year end. In the tanker sector, most prominent were the 50 VLCC contracts that were placed despite weak market prospects, owing to historically attractive newbuilding prices at around $80m in South Korea. This was down from $92m in 2015 (when resales cost $94m). VLCC contracting continued apap, with 31 vessels contracted in 2017, largely as fleet replacement for the elderly Polaris fleet owners looking to Vale. Ordering of gas carriers and container vessels also improved in 2017, year-on-year, but it remained weak overall.

We have seen the start of a recovery for all market sectors except tankers. Redundant shipbuilding capacity is at an all time high, despite consolidation. We have 12m, 25m and 30m-cgt of spare global shipbuilding capacity in 2019 through 2021. This is based on available newbuilding capacity being directly linked to yard output over the past two years. In fact, we would suggest that actual capacity is slightly higher, as there has been significant redundancy and weak productivity on the shipyard production lines that are still working. The 2018 delivery schedule, without slippage, is slightly higher than total deliveries in 2017. Taking slippage into account, we expect 2018 deliveries to be slightly below 2017 levels; this will help to reduce available capacity in 2019 and onwards. We expect that there are a certain number of unreported orders for delivery 2019, particularly in the dry bulk segment in Japan.

Focus On Japan

We calculate that there are 159 bulk carriers set to deliver from Japan in 2018, followed by 61 in 2019. This compares with 198 delivered in 2017 and 213 delivered in 2016. When one breaks the Japanese order book down by builder, the sector switching to value added products is very apparent at some of the major builders, but we are left with long gaps in the order books at some of the smaller more secretive builders focused on the bulk segment. We estimate that the Japanese order book contains 30 to 50 more bulk carriers than reported for delivery over the next two years.

In CGT terms, in 2012, the Japanese order book was 75% dry bulk. Where today it is 30% dry, 21% box ships, 25% tankers and 18% gas carriers. MMJ and Imabari have led the sector switch, with MMJ producing MR tankers, PCTCS and gas carriers, while Imabari has been bold enough to build a new high-tech mega facility at an estimated cost of $400m. This opened in September 2017, designed to build ultra large container vessels. As a result of sector switching Japan has done a better job than Korea or China in maintaining its market size. By our calculation, it has forward cover of just over three years, more that it had in 2011. It has delivery projections of just under 1m-cgt in 2018 which is about 2m-cgt more than in 2015, 2016 and 2017.

Imabari has been very successful but the large Tokyo listed builders, such as Mitsui (MES), Mitsubishi HI and Kawasaki HI, have been much less so. Indeed MHK and KHI are no longer actively taking new commercial vessel orders in Japan. KHI is focused on highly successful Chinese overseas business in Nantong Cosco KHI and Dalian Cosco KHI. These are the two yards where Japan has truly managed to export its engineering and productivity knowhow to China with great success. MHK has separated out other MHK business from its shipbuilding business and has fashioned an engineering cooperation with ChinaMHI. Imabari and Namura are thus lashing its engineering skills to more productive private shipbuilders.

Domestic ordering makes up around 20% of Japanese demand according to the JSEA, Japan’s captive market has been a significant driver behind Japanese shipbuilding, and is something that China is trying to duplicate. However, large Japanese owners like MOL and K-Line are trying to strip assets from their balance sheets as they struggle with their own financial challenges, selling assets to the local market and leasing them back. Demand for new orders from the large owners is likely to reduce. We also expect to see an increasing supply of second hand ships come into the sale and purchase market in 2018, as values improve and Japanese owners can sell at above outstanding book value.

Focus On Korea

There are only eight active international shipbuilders in South Korea of which only two are not reliant on bank support, Samsung and Hyundai.

Korean banks, namely KDB and KEXIM have subsidised domestic shipbuilders to the tune of $85 billion. The largest benefactor has been DSME, which is majority owned by KDB. The South Korean government, under pressure from its population, faces the difficult decision as to whether it can continue to allow KDB and other banks to support shipbuilding with public money. This form of direct financial support might best be replaced with reform of the shipbuilding sector, given the importance of this industry to the Korean economy. Specifically, it needs to decide whether to allow Sungdong to remain as a going concern. STX and Daehan are not for behind, but have at least completed recent restructuring. STX has started taking orders again this year, entirely focused on the MR segment.

Hyundai Heavy Industries, the most successful Korean builder and the largest shipbuilder in the world, is closing production lines and facilities and has spun off non-core shipbuilding elements as part of a restructuring in 2017. Hyundai Gungun, which was built and opened in 2007 at a cost of $565m, under pressure from the government to support the regional labour force at that time, has now closed. It is unlikely to re-open due to global overcapacity and high labour costs. The Government stepped in to help local business in the wake of its closure. Hyundai HI laid off about 4,000 workers in 2017; DSME closed 2 out of 7 docks and laid off 3,100 workers; and Samsung closed 2 of 8 docks and laid off 2,500 workers. In early March 2018, Hyundai HI raised Krxs1.23tn ($1.15bn) from a rights issue, the majority of which will be used to improve group finances, lowering its debt ratio from about 40% to 38%. Samsung has plans for a similar rights issue for $1.5bn in the near future.

Hyundai HI took low priced tanker orders, being quick to react and market berths early in 2017. It also secured 20 VLCCs, several VLGCs and a recent block of 14,000-teu container vessels from CMA CGM. However, it missed out on the first dual fuel 22,000-teu ultra large container vessels (ULCVs), nine of which were placed at SWS and Hudong by CMA CGM. The Korean pricing was reported to be competitive with the Chinese. However CMA CGM opted for China in order to receive financing from Chinese lessor, Bocom. It is understood there was a senior level directive in Beijing that the order should go to domestic yards if Bocom were to provide the finance. Such a political stance is increasingly common and could have a significant negative effect on Korean shipbuilders. Chinese lessors are improving their competitiveness and have considerable firepower, creating a captive market for Chinese builders that are rapidly becoming more technically advanced.

Following consolidation among the major carriers over the past two years, there are limited further consolidation opportunities and their attentions have turned back to ordering ships to gain market share. MSC placed an 11 vessel ULCV order at Samsung and DSME and Evergreen contracted 8 x 14,000-teu vessels at Samsung. There are other large orders under discussion, including Maersk options for 6 x 15,000-teu units at HH and Yang Ming looking to order 10 x 14,000-teu. The MSC deal takes the number of orders secured by Samsung this year to 12 with Samsung management suggesting it is on track to win orders worth $18bn this year. The big three Koreans are reliant on these contracts for 2018, along with an expected uptick in LNG carrier demand. Rates have improved significantly in recent months with Morgan Stanley suggesting that there is a need for up to 65 new LNGCs by 2021 to cater to LNG demand growth. A total of 12 LNGCs have been ordered in the first quarter of 2018, 4 at DSME and the most recent two orders at Hyundai and Samsung HI, with another two each in early March (not included in our charts). Hyundai have stated that this order took its year-to-date newbuilding order tally to 29 ships worth a total of $3bn.

Our forward cover calculation looks particularly low in South Korea, at just 1.6 years. However, we expect it to end up being closer to 2 years on active production lines, given reduced production and lower productivity compared with previous years. South Korean builders will continue to face a difficult period.
Focus On China

CSSC revealed a plan at the end of January 2018 to inject Rmb3.2 billion ($484m) into group operations. This involved new institutional investors all backed by Beijing and 4 CSSC builders. By comparison, CSSC received a $3.3bn injection in August 2017. These are essentially debt for equity swaps, to shore up debt-ridden shipyards within the two major state technical shipbuilding groups, and provide a strong indication of the weak state of the Chinese shipbuilding sector, mainly due to huge overcapacity. Fortunately, they believe that they have passed the nadir of this most treacherous of shipbuilding cycles. CSSC reported a 41.5% y-o-y increase in commercial newbuilding orders in 2017, and there has been a large ramp up in military vessel construction at both major yard groups. The Chinese Navy is reported to have built the equivalent of the entire UK Navy fleet in the past three years.

The famed Government White List of shipbuilders continues to be a good indicator of which builders receive financial support in China. It is reasonably unlikely that builders not on the White List would be able to receive refund guarantees for international business, as the list dictates which builders the banks should support. The list consists of 70 builders, among which more than 10 are considered to be financially unstable, closing or facing restructuring. The Yangtze River is littered with large dormant shipbuilding facilities. It is interesting to note that the famous and reputable bulk carrier builder Sinopacific, which went bankrupt in 2017, was quickly turned around. SUMEC trading house (a Sinopacific creditor) was given the green light to continue Sinopacific operations under the new name Binjiang. As the bulk carrier newbuilding market improves, there are several dormant facilities that could restart production. Shipyard supply is elastic in China, especially for bulk carriers with low barriers to entry.

For now, most profitable private builders have reduced production capacity, like Jiangsu Hantong. They delivered 19 units in 2016, followed by 17 in 2017 and 12 in 2018 to date. The exception to the rule is Singapore listed Jiangsu New YJZ which has an insatiable thirst for new business. In 2017 it took 44 orders including 33 bulkers and 11 container vessels. In January 2018, its order book stood at 110 vessels of almost 8m-dwt, whereas its maximum output at the height of the shipbuilding boom was less than 2.5m-dwt. What is more, the majority of these orders were booked at the bottom of the shipbuilding cycle, and at below shipping cost. New YJZ is very productive, commercial and flexible compared to some other shipbuilders, and it is well liked by western buyers. Its financial performance is also good on paper, but one must question its financial stability and its ability to maintain positive cash flow if new orders were to dry up.

2018 and 2019 Newbuilding Market

The key drivers for newbuilding demand are fourfold. They are: (i) growing cargo demand, (ii) higher replacement tonnage demand, (iii) rising vessel earnings and (iv) accelerating technical obsolescence. Cargo demand and earnings expectations are covered elsewhere in this report. Here we will focus on the other two factors.

We measure potential for tonnage replacement by the number of vessels in any given fleet over 20 years old, and thus reaching the end of their economic useful life. Young fleets in the bulk carrier, tanker and box ship sectors should inhibit ordering, however they each have their own idiosyncrasies. In the tanker sector, despite significant ordering in some sectors, several of the major operators such as Teekay, who typically maintain young fleets, have average fleet ages of 10 years and older and will need to rejuvenate their fleets over the coming years. In the box ship sector, the average age is very young in the 10,000-teu and larger sizes, however orders continue to roll in as the carriers compete for market share. In the bulk carrier sector, if the market continues to improve then bullish sentiment will encourage fresh ordering based on low building prices and looming IMO regulations.

The short tail of vessels over 20 years old that we can see in the bulkler, tanker and container fleets is of significant concern. If any one of these sectors were to see over enthusiastic contracting, then the time taken to bring supply into line with demand will be longer, due to limited scrapping potential. However, we expect technical obsolescence to play a much more important role over the next decade and we may have to reconsider how the fleet age profile is modelled. We should start to consider vessel efficiency and ability to conform to regulation, rather than just age. We have seen this happen to the LNGC sector market in recent years where the average useful life has declined due to the speed of change in propulsion technology and containment system demands.

The rise in second half bulk carrier vessel prices since the benchmark newbuilding to second hand price ratio for the bulk carrier sector, in 2016, 6 year old vessel prices dropped to less than 50% of newbuilding contract prices. This made the newbuilding route unattractive, even for those preferring a block of ships for fleet replacement purposes. Newbuilding contracting reduced to virtually zero in the dry bulk sector, something for which we may soon be grateful. The delivery lead time shortened to less than 18 months for many builders and they reacted by reducing prices to very low levels in early 2017, helped by low steel plate prices. The dry bulk freight market to improved over 2017 and second hand values rose. As soon as the 5 year old to newbuilding price ratio improved to 75%, we saw contracting rise 35-50 times. The same theory also applies to other sectors including tankers and smaller container vessels.

In order to avoid costly incoming regulation, the most relevant being the IMO requirement for Tier III Nitrous Oxide (NOx) emission standards in the US ECA, for all vessels with keel laid after 1st January 2015. The cost of this equipment is between $1m and $3m, and there are extra operational and through-life service challenges. As a result of this, various builders have tempted some buyers to take vessels which have been kept aloft prior to the commencement of the regulation. Similarly, some rules may have the opposite effect, such as SOx regulations and quickly advancing marine traffic scenarios, which can increase the temporal risk for younger higher value vessels. The array of technology choices and their uncertain compliance status can delay final instalment decisions. Similarly, financiers are also now starting to consider stranded asset risk as an element of debt finance risk, which could have a kick-on effect on newbuilding finance availability.

A sub-driver is the newbuilding market itself, pricing, with availability and market sentiment. It shows us the benchmark newbuilding to second hand price ratio for the bulk carrier sector. In 2016, 6 year old vessel prices dropped to less than 50% of newbuilding contract prices. This made the newbuilding route unattractive, even for those preferring to order a block of ships for fleet replacement purposes.

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The rise in second half bulk carrier vessel prices in second half 2017 as well was influenced very much onto the market for sale, often at the instigation of lenders, coinciding with a less enthusiastic pool of buyers. The rise in second half bulk carrier vessel prices is due to the fact that many vessels were not delivered when agreed, which more than 10 are considered to be financially unstable, closing or facing restructuring.

In the box carrier sector, the average age is very young in the 10,000-teu and larger sizes, however orders continue to roll in as the carriers compete for market share. In the bulk carrier sector, if the market improves then newbuilding lead time will be shorter, due to limited scrapping potential. However, we expect technical obsolescence to play a much more important role over the next decade and we may have to reconsider how the fleet age profile is modelled. We should start to consider vessel efficiency and ability to conform to regulation, rather than just age. We have seen this happen to the LNGC sector market in recent years where the average useful life has declined due to the speed of change in propulsion technology and containment system demands. The rise in second half bulk carrier vessel prices in second half 2017 as well was influenced very much onto the market for sale, often at the instigation of lenders, coinciding with a less enthusiastic pool of buyers. The rise in second half bulk carrier vessel prices in second half 2017 as well was influenced very much onto the market for sale, often at the instigation of lenders, coinciding with a less enthusiastic pool of buyers.

Here we will focus on the other two factors. Newbuilding contracting reduced to virtually zero in the dry bulk sector, something for which we may soon be grateful. The delivery lead time shortened to less than 18 months for many builders and they reacted by reducing prices to very low levels in early 2017, helped by low steel plate prices. The dry bulk freight market to improved over 2017 and second hand values rose. As soon as the 5 year old to newbuilding price ratio improved to 75%, we saw contracting rise 35-50 times. The same theory also applies to other sectors including tankers and smaller container vessels.

We expect to see a slower newbuilding demand for tankers in 2018 as poor earnings are putting downward pressure on second hand values. Also, newbuilding prices are firming on the back of higher input costs, such as steel, and rising interest in building new ships in competing sectors. Much depends upon the Korean shipbuilders and the extent that they are allowed to meet their budget targets even at unattractive price levels. This would present interesting opportunities for buyers to take advantage of a low point in the price cycle.

Shipbuilder Pricing Strategy

Shipbuilding prices are not only a function of second hand prices, they are also influenced by shipyard forward cover and material input costs. There is clear correlation between the global order book multiple (forward cover) and the Clarkson’s Newbuilding Price Index. We do not have an accurate shipbuilder cost index, but generally speaking, shipbuilders have only been able to sign loss-making contracts since 2015. Pricing power has been very much in the hands of the shipowners, with the builders often taking contracts just to keep their production lines moving.

We estimate that most tanker and bulker shipbuilding contracts signed in 2017 will lose in the range of 5-10%. In Asian shipbuilding, the pricing initiative remains with the buyer if shipyard forward cover is under two years. As soon as forward cover slips below two years, berth becomes available that must be converted to keep production lines running, and to generate some cash flow. There are still builders in China and South Korea with significantly less than two years cover and it is these weaker yards that payout pressure on the stronger builders.

Shipbuilding costs appreciated quite significantly in 2017. Using Chinese 12-20mmt steel pricing as an example, prices have appreciated from around Rmb1,900 per tonne in January 2016, to Rmb3,400 in January 2017 and to Rmb4,000 today, which is equivalent to $651 per tonne. The delivered cost to the shipowner of the bulk shipbuilding contract has doubled in dollar terms in the past two years. Labour costs have remained under control, although reduced productivity as a result of the weak newbuilding market has not helped. Machinery and equipment costs have also been under downward pressure but these are beginning to firm in recent months as foreign exchange rates impact imported parts. FX rates have worked against the large Asian shipbuilders with the Korean won appreciating 8%, the Japanese yen 6.8% the Chinese renminbi 8% against the dollar in the year to March 2018. Some equipment and licenses are imported from Europe. In the majority of construction costs are in one of these three local currencies so dollar weakness is a major burden.
Conclusions

Shipbuilding as a whole possibly had its worst year in history in 2016, with almost every main stream sector on its knees. Owners consistently delayed taking delivery and it was the lowest year for new contracting since the 1990s, when our records began. Short forward cover and vast overcapacity encouraged builders to offer attractive deals in 2017. Strong buyers reacted by purchasing new ships at cyclically low prices, particularly in the kamsarmax segment of dry bulk and the VLCC segment of tankers.

Builders in the big three Asian shipbuilding nations are likely to remain under pressure despite increased interest in the gas, dry bulk and container sectors. Asian shipbuilding is still saddled with enormous excess capacity which traps it in a competitive low price environment. With so much under-utilised capacity shippers are elastic in their response to any pick-up in demand. Only once forward cover gets well beyond two years will the builders recover some pricing power. On the buyer side, financing constraints will continue to impede the best intentions.

Looking further forward, we see significant pressure on builders to come up with new technical solutions to environmental challenges. This could benefit the stronger shipbuilders, with increased regulation leading to the need for higher engineering capacity with better margins. We have significant consolidation in shipbuilding already, and we may see more in order to cope with increasingly complex engineering demands. The announced merger of CSSC and CSIC is just one example. We could also see the useful economic lives of vessels fall as technical obsolescence rises, leading to higher demand for new ships.

Environmental Regulation Update

The drive towards zero emission shipping is gathering pace, with significant and stringent emission regulations being applied to the shipping industry by the IMO Marine Environment Protection Committee and the European Union over the next decade, and an increasing interest from some major industry players to position themselves ahead of the regulatory curve.

The immediate focus for many stakeholders is the impact of the global SOx limit, which is to come into force on the 1st January 2020. This will likely be shortly followed by market based measures, or a carbon tax on CO2 emissions, for vessels that stop at EU ports and a global IMO-led system will be in place by mid next decade, at the latest. The EU monitoring, reporting and verification regulation has come into force this year and will provide the baseline from which to calculate a fair carbon cost. The industry is at an early stage of a difficult journey to maintain shipping’s share of global carbon emissions, in line with the Paris Agreement.

Shipping will need to reduce its carbon intensity by between 60% and 100% by 2050, according to the UCL Energy Institute, depending on which demand scenario plays out. Alternative propulsion technologies are being explored, with an exponential pace of development in battery technology, as well as future fuel solutions such as the use of hydrogen and ammonia. We are entering a phase of transition over the next decade in which we will see several tiers of ship efficiency. Additional technology factors need to be considered for investment risk assessment, whereas once risk was placed entirely at the hands of the freight markets and age-based useful life criteria.

2020 Sulphur Regulations

It was confirmed by the IMO in October 2016 that there would be no delay to the introduction of a global sulphur cap, thus waiving the 2008 option to delay implementation by five years to 1st January 2025. The 0.5% cap will therefore come into force on the 1st January 2020, as originally envisaged back in 2008. The IMO has a history of delaying regulation implementation but, because SOx emissions directly affect human health and are within the general public’s sphere of understanding, it would be politically difficult to delay. The big questions for the industry are:

Will the regulation be enforceable?
How will refineries and bunker suppliers respond to a need for low sulphur fuel oil (lsfo)?
What will be the majority response of the shipping market?
How can a ship owner or ship operator comply with minimal risk and cost?
Enforcement

Enforcement is up to the individual Member States that are signed up to the MARPOL convention. It will be down to Flag and Port States to carry out enforcement procedures by checking bunker delivery notes for sulphur content of fuel against the vessel IOPP certificate, which outlines which fuels are compliant for the vessel, taking bunker samples for verification or measuring funnel emissions by drone.

Some states will have little interest or will not have the capacity to enforce the regulations, and penalties for non-compliance will vary significantly between states, as we have already seen with the Emission Control Area (ECA) 0.1% sulphur regulations in the US and Europe since 2015. Recent discussions at the IMO and between major carriers and shippers have leaned towards the idea that the best solution may be for the Member States to place a carriage ban for non-compliant fuel oils. Although not all states would enforce such rules, it is likely that a vessel will trade to a state where enforcement is active within a short period of time, limiting a vessel’s ability to avoid compliance.

Supply Side Response And Challenges

Given the limited uptake of exhaust gas scrubbers so far (industry estimates suggest less than 400 vessels were fitted with scrubbers by the end of 2017), most ship operators will need to switch to alternate fuels in second half 2019, the precise timing being subject to voyage orders and bunkering plans. The fuels used by the marine market today are (a) high sulphur marine fuel oil (HSFO), which is a residual oil product made from refinery residues and has a maximum sulphur content of 3.5%, and (b) marine gas oil (MGO) which is a middle distillate fuel with maximum sulphur content of 0.5%.

The IEA calculates that total oil-based marine fuel consumption in international shipping will be about 3.9 million barrels per day by 2040, broken down to 3.2m-bpd to HSFO and 0.7m-bpd of MGO. The IEA, in its 2018 outlook, has predicted that demand for HSFO will fall from 3.2m-bpd to 2.5m-bpd as a result of the sulphur cap. While demand for MGO will increase by about 0.7m-bpd to 1.8m-bpd total. The delta will be covered by blends of several refining streams to meet the 0.5% sulphur cap, including residual fuels and middle distillates.

Marine fuel criteria, under the ISO8217 standard, are driven by viscosity and density, with a sulphur content of 3.5%, today reached with most HSFO being in the region of 2.4-2.6% S0x. A blend is required to meet 0.5% sulphur, the lead criteria for the blend will become the sulphur content. Refiners and blenders will find different solutions to get there, particularly in the early years, depending on the refinery output and cost. Initially, there will be many alternative blends with different pour points.

This means that ship operators must get used to handling multiple bunker blends on board vessels and will be more restricted in where they can bunker, depending on which bunker terminals are offering the blend that a vessel is using. This is the main reason that there will be a large uptake of MGO in the first instance while refiners and operators adjust to the new fuels. By 2023, the IEA suggests that the blended bunker supply scenario will have settled down and blends will become the prevalent fuel. MGO usage will fall back to around 0.8m-bpd barrels per day, close to 2019 levels.

The IEA predicts that MGO prices in 2020 will rise by about 24% as a result of the demand spike. For the moment, however, the forward price curve for MGO does not show a rise after 2020. This may in part be a reflection of global refining capacity additions to 2023, which are forecast to rise by 7.7m-bpd. Overall, the global refined product demand is forecast to rise to 5.6m-bpd. This excess capacity will put downward pressure on refining margins and prices.

The refining industry is also reacting to the new regulations with increased supply of MGO in Europe where key refiners, including oil majors ExxonMobil, Total and Russian refiners, are installing deep conversion units at their plants. They will increase MGO production and stop HSFO production altogether. Meanwhile, new and modern refiners (based mainly in the Middle East, India and the Far East) are typically complex hydro crackers which are optimised to produce high value products, with limited residues.

Despite the efforts of refiners to reduce refinery residues, with the shipping market currently consuming about 60% of residues, there will still be an oversupply by 2020 and so prices are expected to fall. HSFO Rotterdam futures point to a 23% price fall by the end of 2020, while Singapore 380 CST HSFO prices are indicating a 25% drop over the same period. Declining forward curves are starting to reflect the relative value of HSFO. It is being discounted to a level that represents good value for the power supply market and it is becoming a viable alternative to coal. Middle Eastern countries alone can absorb an additional 0.4-0.5m-bpd of residual oil for power, with the lower prices compensating them for the cost of new emission abatement technology, such as scrubbers.

The leading container carriers have developed different opinions for large box ships, with a cross section of LNG, scrubber fitted and ‘do nothing’ options being taken by CMA CGM, MSC and Maersk respectively. There is the challenge of split incentive between the owner and the charterer. Reducing the fuel cost per tonne mile of transport by investing in a scrubber will directly benefit the party paying for the bunker fuel. If that party is the charterer, rather than the scrubber investor, then the investor will only see an indirect benefit from such an investment. The investor will not be able to predict what percentage of the upside benefit will be passed back by the charterer.

 Demand Side Response And Opportunities

Scrubber uptake has been much slower than the IMO had predicted in 2016. However, scrubber uptake is slowly increasing for newbuilding vessels across all sectors, as the delta between low and high sulphur fuels increases on the forward fuel curves. This is a strong pricing signal, but the newbuilding market is not sufficiently large to meet the 3,800 vessel forecast that the IMO had modelled in its 2016 fuel availability report (CE Delft). Retrofitting is unlikely to gain much traction given the extra technical complexity and loss of earnings resulting from one month or more out of service that adds to the fitting costs.

The tanker sector has seen stronger scrubber uptake than the bulk carrier or smaller container ship sectors. The leading container carriers have developed different options for large box ships, with a cross section of LNG, scrubber fitted and ‘do nothing’ options being taken by CMA CGM, MSC and Maersk respectively. There is the challenge of split incentive between the owner and the charterer. Reducing the fuel cost per tonne mile of transport by investing in a scrubber will directly benefit the party paying for the bunker fuel. If that party is the charterer, rather than the scrubber investor, then the investor will only see an indirect benefit from such an investment. The investor will not be able to predict what percentage of the upside benefit will be passed back by the charterer.

The main risk for those fitting scrubbers is partly one of HSFO availability. Refiners are designed to optimise the production of higher value, lighter products. High sulphur marine fuel, being a residual oil, is simply a by-product of distillate fuel production. If the demand for HSFO is not there due to limited scrubber uptake, refiners will find alternative ways to deal with refinery residues, and the bunker terminals will not offer HSFO. If there is limited demand for HSFO then the refiners will quickly switch to supplying 0.5% sulphur blends and they will invest in reducing residue output. Exxon has already spent $8bn on a cracking plant at its Antwerp refinery and has been upgrading Rotterdam since 2014. There will be no HSFO delivered from these refineries anymore. Instead, the residual fuels from these refineries will be consumed in the marine market as blends.

Scrubbers may make sense from a value perspective in 2020 and should pay back in fairly quick time (a projected 12 to 14 months depending on vessel consumption and the fuel price delta). However, it may be necessary to strike long-term bunker supply contracts to reduce the risk of HSFO not being available. This perceived need to fix future supply is limiting the uptake of scrubbers. Exxon and other oil majors with simple refineries, that are long on residues, are offering supply contracts priced at a discount to on 85/15 blend of MGO and HSFO. They report that they have seen significant interest but it is still limited to large operators and traders with cargo contracts.
Owners and operators must also decide upon the most suitable scrubber technology for their fleets. There are three types: open loop, closed loop and a hybrid of the two. Open loop scrubbers are the most common, being cheapest to fit and operate. They use salt water to spray the exhaust gas and discharge the processed water back into the sea. Closed loop systems use caustic soda to treat the exhaust gas and continuously re-circulate the same water through the scrubber system.

Open loop scrubbers discharge higher levels of contaminants back into the aquatic environment. The EU member states are assessing whether open loop systems should be allowed in their coastal waters, risking that vessels fitted with open loop systems may be required to burn MGO within the EU ECA. Such a ruling would likely be extended to other coastal regions. A hybrid system may be the best solution technically, but it requires greater space on board and comes with additional costs.

The availability of finance is also a limitation for retrofitting, as a scrubber does not have a direct positive impact on the asset value in line with the retrofitting cost. It may protect or enhance the value of the ship in future but this will only become apparent in many years’ time. It is another unquantifiable risk for the owner and so it is hard to take a long-term view on how this will play out.

To summarise, any significant capital investment should be considered as an opportunity cost, alongside any other capital deployment decision. The potential benefits of scrubbers seem to be outweighed by uncertain future HSFO supply, limited financing options for retrofits and a lack of clarity over the best type of scrubber technology for future compliance.

It makes most sense to fit scrubbers to large vessels that consume high quantities of fuel (such as VLCCs, VLCCs and ULCVs) during construction, especially if their trading patterns give them access to the main bunkering hubs of Rotterdam, Gibraltar, Fujairah and Singapore that are likely to have availability of HSFO. The biggest owners, operators and traders will likely opt for a mix of scrubber fitted and non scrubber fitted vessels in their owned and chartered fleets, in order to hedge their fuel cost and compliance risks. An all-in approach one way or the other might be unwise.

Shipping Market Impact

The shipping market is likely to become three tier. The first tier of vessels will be scrubber fitted with the lowest running cost. The second tier will be non scrubber fitted eco vessels with lower grams of fuel consumption per tonne mile. The third tier will be inefficient, higher consumption, non scrubber fitted vessels which will face more of a challenge, possibly leading to increased scrapping.

In this sense, scrubbers are not helpful as they give a life extension to HSFO when really it should be banned completely. The ultimate decision rests with the refineries, not the IMO. We repeatedly hear the industry argument that there is little point in retrofitting scrubbers to less efficient vessels more than 10 years old. We disagree, but it all depends on the ship. If the fuel price delta is large and the scrubber payback time is short, as expected, then there is more operational value in retrofitting a scrubber to a less efficient vessel with higher consumption. This could also extend the life of such a vessel which would otherwise be found at the tail end of the fleet in terms of its charter appeal.

With an increase in fuel cost per tonne mile, we will see a further reduction in average vessel speeds where possible. The steaming speed is a function of fuel cost, freight cost and the time value of the cargo. So we expect, as fuel prices go up, steaming speeds will come down or remain constant in sectors where slow steaming is already deployed. This could be a very positive outcome for the shipping markets as it will reduce effective tonnage supply and increase effective vessel utilisation across all sectors.

As an example, in the dry bulk sector, if the average speed drops by 1 knot from 13 to 12 knots, then vessel utilisation will increase by around 5%, assuming that the dry bulk fleet spends on average 240 days per year at sea. As things stand, average bulk carrier speeds have been marginally increasing from a multi-year low in 2016. In contrast, average container vessel speeds continue to fall and tanker speeds are also down.

The global trade in crude oil and refined products is likely to face some disruption from the IMO 2020 sulphur cap but, at this stage, it is hard to predict how this will manifest itself. It may end up being rather marginal and just add to the arbitrage windows that routinely open and close, so just a bit more of the same. However, as all regions with the exception of Europe are middle distillate (MGO) exporters, we may see some fundamental changes in product trades.

The global sulphur cap is expected to be the most disruptive of any environmental rule changes affecting shipping to date. But it may turn out to be the first in a wave of new efficiency regulations that will shake up and reform the shipping market as we finally address airborne and seaborne pollution. We can thank David Attenborough and Blue Planet for that.
Conclusion

We still face headwinds from the embedded oversupply in each main sector after the heavy ordering that took place in the last boom years between 2006 and late 2008.

The order book of bulk carriers was at an all-time record of 80% of the fleet in October 2008; today it is just below 10%. Similarly, the tanker OB/FL ratio peaked at a record 48% in August 2008, and now it is just 11.5%. Finally, the containership OB/FL ratio was at an all-time peak of 6% in 2007, and today it is just 11.5%. With the occasional exception, such as the temporary demand side plunge in 2009 in the wake of the global financial crisis, seaborne demand continues to grow at a steady, if unspectacular, pace.

We now face the best opportunity in many years for the demand side to outshine the supply side. This should see vessel earnings increase and vessel asset values rise.

The demand side should be underpinned by what many market commentators view as a rare synchronised global economic recovery, with GDP growth forging ahead around the world. We should divorce this growth from the frothy valuations in asset markets such as equities, bonds and property. They have all done well from a prolonged period of near zero interest rates and from quantitative easing policies. Now that rates are set to rise and stimulus be tapered, asset markets face a challenge in justifying their current high valuations. Low unemployment, modest wage growth, subdued inflation and rising corporate earnings will provide some underpinnings to these vulnerable asset classes. Finally, there is the prospect that solid and synchronised global economic growth will provide a better and more even distribution of benefits and rewards than central bank policy did.

The shipping forecast tells us that we will see demand getting the better of supply over the next few years, promising to deliver much better results and providing relief to both war-torn ship owners and embattled lenders. From 2020, further relief may come from IMO emission and ballast water exchange restrictions, both of which will shorten the lives of some ships at the margin. The pace of technological change, and the undeniable need to reduce harmful airborne and waterborne pollution, will quicken the pace of ship obsolescence. Far from being an enemy of shipping markets, and investors, IMO regulations could become their friend, if properly enforced. China will no doubt continue in its role as lead underwriter of global seaborne demand, lifting its imports and exports of all manner of goods as it climbs the value chain. We believe that a few good years lie ahead of us.
Global Macro Environment

1. 2017 appears to have brought the desired synchronised global growth...

2. ...enabling world trade growth to exceed GDP growth.

3. Despite all the major fears about 2017, investors showed solid nerves until end January 2018...

4. ... turbo-charging financial asset prices.

5. Improved business conditions pushed the global manufacturing PMI to a 7 year high...

6. ...and unemployment rates extended their descent across the board...

7. ...despite signs of tight labour markets, wage growth still remained rather tepid.

8. Although inflation targets have yet to be achieved, expectations are on the rise.

9. Some countries have started to raise interest rates...

10. ...to finally tackle the reduction of their balance sheets.
11. Meanwhile uncertainty remains on the impact of trade policy negotiations...

12. ...creating a perfect bonanza for the new enigmatic “crypto asset class.”

17. China’s growth has been widely underestimated...

13. In the US, fiscal stimulus is expected to provide a lift to activity and investment...

14. ...testing the US bond market response to higher inflation and borrowing costs.

19. ...and consumer expectations rose to record levels.

15. Whereas a weaker US dollar environment...

16. ...has played a part in continued high commodity prices.

20. China has accelerated the intensity of its shift from investment-led growth.

18. ...while trade flows recovered significantly over the past year.
23. …seeing as new mortgages growth rose significantly.

24. Stricter environmental controls on polluting industries...

25. …coupled with supply-side structural reform, pushed industrial producer prices higher...

26. …as well as aiding revenue growth especially in the coal sector...

27. …which correlates with higher demand for coal-fired power...

28. …and faster growth in rail freight volumes.

29. Industrial strategy in China is rapidly evolving...

30. …whereas government-led stimulus growth rose at a slower pace.

31. …in an effort to deleverage debt levels...

32. …with private sector debt relative to GDP expanding to a greater degree.

33. Overall, among the various challenges ahead, brighter prospects suggest that the global economy is on track to draw on growth momentum.
Dry Bulk Market

The long-awaited recovery was highlighted by a 3-year peak in the BDI in December 2017 and gradually increasing asset values.

Contracting has picked up again, although it is still low historically. VLOC orders have pushed the fleet order book ratio up, but smaller segments have seen fewer orders.

Following a more positive market sentiment, demolition activity has slowed down, causing scrap prices to rise as the breakers bid for tonnage.

The fundamental contest between fleet growth and seaborne demand growth is turning in favour of demand growth, a positive sign for a recovering market.

1. After last year’s record low, the BDI hit a 3 year high...

2. ...a positive trend echoing across all size segments.

3. This timely recovery gave way to another year of sprightly S&P activity.

4. Resale prices gained more ground than newbuildings...

5. ...but the 5-yr benchmark values remained steady despite higher earnings from 2Q17 onwards.

6. Attractive newbuilding prices inched up marginally.

7. ...nearly doubling contracting levels compared to last year.

8. Still, the FL/OB ratio is at a record low...
9. ...because both slippage rates and order book levels are falling.

10. Therefore deliveries keep slowing down...

11. ...but scrapping has disappointed thanks to improved sentiment...

12. ...even as a recovery in scrap prices has had little impact.

13. However, new orders will only come online by mid 2019...

14. ...implying modest fleet growth for this year.

15. Drybulk seaborne trade strengthened significantly in 2017...

16. ...again thanks to the Red Dragon gulping down the lion's share of additional demand.

17. Exports of steel products from China took a nose dive...

18. ...even as record levels of steel have been churned out...
19. …due to an increase in Chinese steel prices...

20. …and tightly enforced production cuts...

21. …led steel mills to switch their grade preference...

22. …generating extra iron ore demand from main producers...

23. …and ultimately boosting capesize demand.

24. …and ultimately boosting capesize demand.

25. …along with a relaxation of the coal-burning ban...

26. …as a gas shortage translated into a coal price rally...

27. …opening a window to non-traditional coal exporters and adding ton-miles.

28. Elsewhere, Indian domestic coal production is still rising, albeit more slowly...

29. …and a serious logistics bottleneck drove inventories to critical lows...
30. ...giving a temporary boost to coal seaborne demand.

31. Strong demand for grains translated into falling stocks for the first time in five years...

32. ...and seller competition gave buyers opportunities to diversify their purchases.

33. Looking ahead, grains trade projections are expected to reach new highs.

34. Overall, demand growth is set to exceed supply growth for the first time in many years.

**Tanker Market**

- Oil prices have been on the rise again after the oil production cuts by the OPEC and Russia have changed the pattern of seaborne oil movements.
- With a growing fleet and a changing pattern of oil demand, earnings have been under pressure in 2017 and 2018 has been even worse so far.
- Deliveries started to take off from Q4 2017, although demolition has picked up with a good number of VLCCs rumoured to be heading for the beaches.

**1. OPEC & Russia have stuck to their commitment over production cuts.**

**2. ...and are getting closer to eliminating the global inventory hangover.**

**Drybulk seaborne trade vs fleet growth YoY %**

**Global oil supply by producer**

**OECD, crude and product commercial inventories**
3. ...a necessary intervention which has helped to rescue oil prices...

4. ...but also helping the US to surpass the 10m bpd mark in domestic output.

5. The rig count naturally rises in response to higher WTI oil prices.

6. ...coupled with lower production costs.

7. However, a slowdown in productivity per well suggests that technology may be reaching its limits.

8. Weather disruptions in the US provided a temporary boost for crude oil exports.
9. However, last year’s long-haul trades to Asia remained marginal...

10. Although there is room for US oil exports to increase this year...

11. ...and it will partly depend on the spread between Brent and WTI.

12. Looking ahead, supply and demand should balance over the next 12 months.

13. However, higher prices are likely to remain in stock draw down mode, albeit at a slower pace.

14. This has translated into an unwinding of floating storage...

15. ...and higher deliveries...

16. ...have put pressure on average earnings...
27. ...which in turn could not feed into higher asset values

20. ...attractive prices caused contracting to pick up again.

18. Although weak market sentiment increased crude tanker demolition in the 2nd half of 2017...

21. ...resulting in a substantial crude tanker...

19. ...as also with product tankers...

22. ...and product tanker order book.

23. The OR/FL ratio is at the lowest level since 1997, but the fleet has more than doubled since then!
24. However, improving supply and demand fundamentals give hope for better days ahead.

25. ...just as long as the supply side demons are kept under control.

Earnings and asset values have gradually increased in 2017, although there is still a way to go before breakeven levels are within range.

Through mergers, acquisitions and consolidation the top-5 operators have increased their market share over the last 3 years and some smaller players have disappeared.

The order book is shrinking and we now have the lowest order book to fleet ratio in a long time.

1. The annual average SCFI Comprehensive index improved further in 2017.

...also the TC rate index turned back up.
3. Mergers, acquisitions and consolidation have reshaped the landscape over the last 2 years. …

4. …a trend that is likely to continue with new alliances being formed. …

5. Deliveries have picked up again and demolitions have come down compared to last year's record numbers.

6. The average age has moved up compared to the unusual low average scrapping age of last year.

7. …and obvious scrapping candidates are declining with fewer vessels above 20 years.

8. The order book to fleet ratio is at the lowest since 1991.

9. …with the largest ships adding all the weight.

10. Although there have been less vessels ordered compared to last year, in terms of volume there has been a sharp increase due to more ULCVs being ordered.
11. This shows on the order book, while the medium sizes are out of fashion...

12. ...although the classic Panamax strongly recovered in terms of earnings and values.

13. The supply and demand outlook is improving, but it is a slow process.

The LNG Market

- Rising demand in Asia, and new US and Australian projects, is expected to soak up the 80% of the total order book that is scheduled to deliver over the next two years.
- As part of its on-going policy of tackling air pollution, China has surpassed South Korea as the world’s second largest LNG importer and is certain to increase its import volumes this year.
- Strong trade growth looks set to outpace fleet growth over the next few years, suggesting that the poor earnings environment of 2015-16 should now give way to brighter prospects.
3. As part of coal-to-gas conversion, seaborne imports grew strongly compared to China's domestic production...

4. ...with most of it coming from Australia.

5. Strong demand pushed Asian LNG spot prices to a 3 year high (latest reading 11.3mmbtu).

6. ...however spot time charter rates remain low...

7. ...and one-year time charter rate increased marginally from 2016.

8. Newbuilding deliveries are set to be higher this year...

9. ...83% of the total order book is scheduled to be delivered over the next two years.
10. On the bright side, prospective strong demand growth should soak up overcapacity over the next few years, paving the way to better earnings and rising asset values.

LNG carrier supply-demand growth forecast

2.7 3.1 3.6
1.6 0 0.5 1.0 1.5 2.0 2.5 3.0 3.5 4.0
-5 0 5 10 15 20 25 30

China Japan South Korea RoW

Years
Million CGT
Deliveries (RHS)
Contracts (RHS)
OB Multiple (LHS)

1. Deliveries have outpaced orders by 2:1 in 2016 & 2017 in Asia, leading to low builder utilisation and forward cover...

2. ...with large spare shipbuilding capacity from next year onwards.

The Newbuilding Market

- 2017 saw a notable increase in newbuilding contracting as a result of attractive pricing. This correlates with shipbuilders having limited forward order cover, consequently seeking quick deals to keep production lines running.

- Despite rising interest in bulk carriers, VLCCs, containerships and gas carriers in 2017, the global order book had shrunk to 77.3m-cgt by the end of March 2018, down 10% year-on-year and at only 35% of its peak in 2008.

- Confidence that the shipbuilding cycle has passed its nadir has been reflected in rising input costs (particularly steel), strengthening Asian currencies and improving forward cover, encouraging shipbuilders to lift prices.
3. Builders have been switching to alternate sectors to find business.

4. Fleet age profile is a good indicator of which sectors may have new construction demand.

5. ...along with the ratio between modern second hand and newbuilding prices.

6. Shipbuilding prices are normally a function of forward order cover.

Fleet replacement
Source: CRS, Hartland Shipping

Builder sector switching
Source: CRS, Hartland Shipping

5yr old/newbuilding price ratios against contracting
Source: CRS, Hartland Shipping

Yard Forward cover and newbuilding index
Source: CRS, Hartland Shipping
Shipping Markets Outlook 2018: Containership Market

7. ...and input costs, of which steel plate price is a major factor...

Average price of 12-20mm Chinese steel plate
Source: Thomson Reuters, Hartland Shipping

8. ...while Asian currencies strengthening against the US Dollar are further stretching shipbuilders balance sheets.

8. Exchange rates index
Source: Thomson Reuters, Hartland Shipping

Shipping Markets Outlook
2018 Edition
Appendices
Appendices

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Information in this document was prepared as of 15 March 2018.

A Note on Sources


We gratefully acknowledge all of these.

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We are Hartland Shipping Services Limited. We began in Hong Kong in 1981 as Wardley Shipping Services, a wholly owned subsidiary of Wardley Limited, the merchant banking arm of the Hong Kong and Shanghai Banking Corporation. In 2001 we became HSBC Shipping Services, a wholly owned subsidiary of HSBC Bank, one of the world’s leading financial services companies. In August 2012 an agreement was reached with HSBC for the business to be sold to members of the senior management team, and the company was renamed Hartland Shipping Services Limited. As part of the sale Hartland has been retained to provide shipping consultancy services to the HSBC Group worldwide.

Our services

Our shipbroking services include:

- Newbuilding contracting
- Second-hand sale and purchase
- Dry cargo chartering
- Tanker period chartering

Our research and consulting services include:

- Market research
- Vessel valuation and fleet analysis
- Commercial due diligence, corporate and asset restructuring
- Feasibility studies and business risk assessment
- Bespoke consultancy projects

We welcome you to contact us with regard to any of the services we offer.

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