"There are no IMO approved scrubber systems. We must remember the first BWTS, though IMO approved, are not in compliance with the latest IMO and USCG standards. We should not be surprised if scrubbers suffer a similar fate"
Panos Kourkountis

Our Key Performance Indicators:

The results, audited by EY Office Ltd., show you the latest financial position of the Company. The earnings per day per ship during Q4 came in at USD 11,274, taking the annual figure to USD 11,063. Please take a look at the Market Segmentation report that shows you the relative performance of the PSL fleet's earnings per day per ship compared to the Index ships. In this quarter, daily operating costs were USD 4,785, which has taken the annual costs to USD 4,621 per day per ship, or higher than our target of USD 4,500 for the year and higher than the actual of the previous year. The EBITDA was USD 17.77 million during Q4 and USD 68.20 million for the year. In Q4 we made a net profit of USD 4.56 million, with earnings per share of Baht 0.10. This is the fifth consecutive quarterly profit since Q4 2017. In Year 2018, we made a net profit of USD 14.10 million, with earnings per share of Baht 0.29.

THE HARD FACTS	2017	2018	Q4 2017	Q4 2018
Highest earnings per day per ship in USD	21,557	20,557	21,557	20,557
Average earnings per day per ship in USD	9,486	11,063	10,728	11,274
Av. earnings per day per Handysize ship in USD	9,812	10,355	10,503	10,461
Av. earnings per day per Supramax ship in USD	8,269	11,038	9,658	11,242
Av. earnings per day per Ultramax ship in USD	10,091	12,772	12,469	13,239
Operating cost per day per ship in USD	4,355	4,621	4,451	4,785
EBITDA in million USD	53.18	68.20	17.15	17.77
Net Profit/(Loss) in million USD (excluding Exchange gain (loss) and Non-recurring items)	(1.13)	14.26	3.63	4.64
Net Profit/(Loss) in million USD	(3.76)	14.10	3.32	4.56
Earnings (Loss) Per Share in Thai Baht (excluding Exchange gain (loss) and Non-recurring items)	(0.03)	0.30	0.08	0.10
Earnings (Loss) Per Share in Thai Baht	(0.08)	0.29	0.07	0.10

NO GIFT POLICY: At PSL we are committed to applying the highest standards of ethical conduct and integrity in our business activities. In our existence of over three decades in this industry, **PSL has earned a reputation for its zero tolerance towards any form of corruption or unethical behavior**. PSL has signed a Declaration of Intent to be part of the Private Sector Collective Action Coalition Against Corruption (CAC) and we are now committed to the CAC's aim to fight corruption in any form at all levels. **We have joined the CAC's "No Gift Policy"** campaign as we feel that this will not only strengthen our existing Anti-Corruption Policy, but, will also demonstrate our strong commitment against any form of corruption. As such, we encourage all PSL personnel NOT to directly or indirectly accept any gifts on any occasion from any current or potential vendor, supplier, agent, business partner and/or any other person.

Market Segmentation: During Q4, the Baltic Handy Size Index (BHSI) averaged 643 points derived from the average Time Charter (TC) rate of USD 9,305. Compared to that, **our Handies earned USD 10,461 and beat the BHSI TC rate by 12.42%.** During Q4, the Baltic Supramax Index (BSI) averaged 1,049 points derived from the average Time Charter (TC) rate of USD 11,579. Compared to that, **our Supramaxes earned USD 11,242 and underperformed the BSI TC rate by 2.91%. Our Ultramaxes earned USD 13,239 and outperformed the BSI TC rate by 14.34%** (as there is no special index for the Ultras, we have compared them with the BSI). Our target has been to outperform both the indexes.

The SET Opportunity Day will be held at the SET building at 10:10 hours on Wednesday the 13th February 2019. We hope that many of you will attend this event where the Company will get a chance to thoroughly discuss the 2018 results and the prospects for 2019. For those of you who cannot attend physically, the SET live web casts the presentation giving you a chance to be present via the web.

Ship recycling has had a slow year with a total of 5.25 MDWT of ships being recycled during 2018 across all sectors in the dry bulk market as compared to 15.16 MDWT in 2017. The existing age profile at the end of the year 2018 (58.17 MDWT or 6.95% of the world fleet being greater than 20 years old), together with low levels of the order book to fleet ratio (10.52% up to end 2022), should result in the world dry bulk fleet growing at the slowest pace since the turn of the century. **Healthier recycling is expected in 2019 and 2020 due to the number of 20+ year old ships in the world fleet as well as regulatory pressures (BWTS and IMO 2020.)**

Long Term versus short term Charters: The long term charters already booked as of 31st December 2018 are shown in the chart below. As can be seen, our forward four year (2019 to 2022) rolling book is currently at the 16.75% level with a visible revenue stream of USD 121.88 million.

Year	2018	2019	2020	2021	2022
Total Available Days	13,140	13,140	13,176	13,140	13,140
Fixed T/C Days	2,366	2,409	2,196	2,190	1,992
%age Fixed T/C Days	18%	18%	17%	17%	15%
Av. T/C Rate/Day in USD	13,664	13,585	13,875	13,875	14,211
Contract value in million USD	32.33	32.72	30.47	30.39	28.30

It is our intention to continue to charter out our ships on long term period contracts whenever practical and economically viable.

BDI Developments and our read of the market:

China has been the stellar performer and this has helped to drive time charter rates higher. However with the **onset of Chinese New Year weakening demand**, the BDI will follow the traditional seasonality script of a sharp decline, ending about a week after Chinese New Year. This decline would normally be followed by a sharp upturn in rates thereafter making a traditional V shape movement. **With the new directives on restricted manufacturing** in key industries in 4 provinces in 2018 being **extended to 14 provinces from 2019 through to 2021**, we had predicted, at this time last year, that **the BDI in these future years would reach a peak in mid October followed by a decline till end February before the V shaped recovery manifests itself in a straight line all the way to mid October**. Welcome to the new seasonality of the BDI.

We have done some regression analysis on data from the IMF (world GDP growth rates) and Clarksons (tonne mile growth rates) starting from 2000 to the end of 2018 and found that **over the 19 year period, these two time series of data have a 98% correlation factor**. In simple English it means that **tonne mile demand is a derived demand from world GDP growth rates**. The other interesting statistical fit that we found was **a good heuristic or rule of thumb that if you add 115 basis points to world GDP growth rates you would arrive, more or less, at tonne mile growth rate for that year**. This means that more often than not, you would be right when you use this rule of thumb to determine tonne mile growth rate.

The latest pronouncements from the **IMF indicate that world GDP growth rates for 2019 would be 3.5% and for 2020 would be 3.6% hence tonne mile growth rates would be about 4.5%+** in each of these two years if we were to apply the rule of thumb heuristic that we have got from the 19 years data that we have analyzed. **DNB Markets state in their report on 4th January (see below), that tonne mile growth rate would be 3.9% for 2019**.

Our read of the **growth in supply based on Clarksons data (see below) we have a net fleet growth rate of 3.06% for 2019 and 3.26% for 2020**. Please note that we have NOT assumed any real pressure on recycling due to the BWTS and IMO 2020 in our supply side calculations.

So **if our conservative reading of both the demand growth rates and the supply side turns out as per our predictions, then 2019 and 2020 should be reasonably good years**.

None of the above factors in any settlement of the current trade war between the USA and China. The latest news on the settlement of the trade war from Bloomberg (see below) indicates that **China has offered to increase purchases from USA by USD 1 trillion over 6 years till the end of 2024, whilst the Americans are demanding that this be done in 4 years time**. If an agreement is reached, whether it is USD 1 trillion of extra purchases spread over 4 or 6 years it means that **China would be buying an additional USD 160 billion to USD 250 billion of American goods each year over the next 4 to 6 years**. The three raw materials that China could easily buy from America would be grain, coal and oil/gas. In 2018 China imported 120 MMT of coal from Indonesia which is about 6 days away from China. **If this 120 MMT was substituted by American coal then it would take 42 days or be 7 times more tonne mile intensive than the same volume of coal from Indonesia.**

On the supply side we expect **net supply to increase at about 3.06% during 2019 and 3.26% during 2020 whilst demand should be growing at around 4.5%+,** very similar to the demand growth seen in 2018, when supply grew by 2.8%. **This gap between expected demand growth**

and expected supply growth in 2019 and 2020 should make for an increasingly robust secular recovery. If, as suggested under the heading 'regulatory pressures', **the supply side gets a dividend by the recycling of the very old ships**, slow steaming by the rest of the owners who are using LSFO, and forced down time in dry docks for those owners who are fitting scrubbers, then **the market would further benefit from this tightening on the supply side**.

If geopolitical problems, sanctions, Brexit and trade tariffs are resolved then it would assist on the demand side by removing the overhang of uncertainty that has crippled decision-making. That will make demand climb back to where it would have been had these trade tariffs/geopolitical tensions not been there to begin with.

As always, the dry bulk market will have the same macro issues of supply/demand balance dominating the narrative. The fact that almost all dry bulk ship owners are profitable today suggests that **demand has certainly been stronger** throughout the year 2018 but recycling has been so weak that supply has grown by 22.93 MDWT or 2.8% well above levels anticipated at the start of the year. **As supply and demand balance is very close, the secular recovery would be characterized by extreme volatility as any small change in demand or supply would have a disproportionate impact on the BDI**.

The current state of the BDI (634 points on 4th February 2019) should not have come as a surprise to anybody that has been reading our quarterly newsletters or our Annual Reports of the last few years. We have been consistently saying that the demand supply balance has almost been reached or is very close by. But with ship recycling having come to, more or less, a complete halt **it has been the demand side that had been holding up the market and the BDI**. And we kept warning anyone that would listen that **though the fundamentals look good, ship owners weren't helping their cause by bringing ship recycling to a virtual halt**. We had all along, suggested that the dry bulk recovery would be solely demand led and would, therefore, be extremely volatile, prone to any movement, no matter how small or large, in the demand side of the cycle. **The net supply** growth rate has been impressive in the interim years since Q1 2016 and **appears set to grow at around 3% per annum** based on relatively conservative assumptions. The reason for that growth has been the strength of the market. The stronger the market, the weaker the recycling of ships, as a result, net fleet growth has been stronger than anticipated over the last two/three years **as recycling was much weaker than anticipated**. On the demand side, with the trade war between the USA and China continuing to grow, it has **hurt sentiment around the world and slowed down economic growth rates, resulting in lower tonne mile growth rates for all cargoes**. Weaker demand, due to the economic slowdown in world GDP growth rates, being exacerbated by the seasonal slowdown in demand due to the approaching Chinese New year and the anti pollution drive in China via forced reduction in manufacturing reducing demand for raw materials in the Steel/Cement/Aluminum industries in the winter months, **clashing head on with the faster net growth in tonnage, due to ridiculously low recycling rates has resulted in the current sharp correction in the BDI** and its component sub indices. The solution has always been there but **ship owners are their own worst enemies and their refusal to get on with recycling has led us to the current situation where the demand side of the market is no longer able to absorb all the ships that haven't been recycled**. So is there a fundamental problem on the demand side? We don't think so. **The demand side has been hit by a confluence of factors** starting with the trade wars, slowing world GDP growth rates, traditional Chinese New year slowdown, accidents at various iron ore entities in Brazil and Australia - all **colliding with the accumulated growth in the net supply of ships over the last few years due to the virtual stop of ship recycling. The perfect storm, you could say. And yet the solution is staring ship owners in their collective faces. Recycle more ships; stop ordering additional new ships; delay new ships already ordered. Simple, but apparently impossible to get done.**

Others' reading of the market:

After much pressure on rates in 2016, the Baltic Supramax and Handysize TC averages have since recovered, averaging around 11,500 USD/day and 8,600 USD/day respectively in the first 10 months of 2018. In the first 10 months of 2018, we recorded the delivery of 130 units, for a total of 6.4 MDWT sized 20,000-64,999 DWT, down 48% in DWT terms compared to the same period in 2017. However, **demolitions have slowed significantly in 2018, with only 18 vessels amounting to 0.7 MDWT reported recycled in the first 10 months of 2018, down 84% in DWT terms compared to the same period in 2017**. Improved market sentiments have pressured recycling levels this year, although this **could increase in future with implementation of the ballast water and sulphur regulations.** In the first 10 months of 2018, 62 units were ordered sized 20,000-64,999 DWT for a total of 2.6 MDWT, compared to 30 units (1.4 MDWT) ordered during the same period in 2017. The popularity of units between 60,000-64,999 DWT continues to be reflected in the orderbook, with its orderbook/trading ratio being the highest at approximately 27.0% in terms of units. The total **handy & supra orderbook/fleet ratio is currently 6.4% in unit terms, and 7.3% in DWT terms. The supply-demand balance continues to improve even as demolitions slow, with deliveries remaining relatively stable at lower levels, and trade growth generally continuing at decent levels**. However, renewed Chinese coal import restrictions could keep their import volumes more bearish in the near term, on top of already slow Japanese and South Korean import volumes. While **the US-China trade war is expected to reshuffle commodity trades such as for steel, coal, and soybeans rather than halt trade routes**, further escalations and safeguard measures could still undermine key trades and market sentiments, which may negatively impact global economies and dry bulk demand over time. (Banchero Costa –29 Nov 18)

A weaker Q4 for smaller dry bulk tonnage should be followed by a stronger Q1 and Q2 as seasonality returns amid trade disruption, writes William Tooth from Maritime Strategies International. MSI expects a shift to the seasonality seen in US Soybeans exports with slower trade over the next three months, but greater trade in Q2 as Latin American exports get going. **MSI is forecasting Supramax rates of USD 12,400 a day in January and USD 13,300 a day in April 2019**. (Splash247.com – 29 Nov 18)

Though 2018 has not lived up to its optimistic billing, **the yearly time charter averages reflects improved earnings across all the four dry bulk sectors** (Capesize-Panamax-Supramax-Handysize). Indeed a glance at Baltic Exchange time charter rates sees the annual Supramax average up 23% at around $11,500, Panamax up 19% at $11,650, Handysize up 14% at $8,700 and even the Capesize which has seen the greatest volatility up 9% at $16,500. Overall in 2018 net fleet growth at 23 MMT (2.8%) has roughly matched trade growth of around 160 MMT (2.7%). **So what are the prospects for 2019?** On the face of it a much larger nominal order book at around 49 MMT and considerable economic and political uncertainty would suggest a year of limited expectations. However, newbuilding inflow in Q1 for once appears modest. Thus, **should there be any easing of USA-China trading tensions in the early months of 2019, the market in Q1 could surprise on the upside**. With the ramifications of upcoming IMO 2020 legislation so uncertain, however, to make anything more than a short-term forecast is likely to be somewhat perilous! (Howe Robinson Research – 21 Dec 18)

Clarksons Platou Securities called a **new dawn for shipping equities** in 2019, tipping stocks to recover from a year in which Donald Trump's trade war with China dented pricing. It comes as analysts led by Frode Morkedal believe **the arrival of IMO 2020 rules, coupled with orderbooks at the lowest in around two decades, could make this year when the stars align for the industry**. (TradeWinds – 2 Jan 19)

Alphabulk, part of AXS Marine, is warning dry bulk is a long way away from being a healthy investment. In its latest weekly report Alphabulk points out that while the Baltic Dry Index averaged 1,352 points in 2018, a decent improvement over 2017's 1,142 average, it is still not a comfortable figure. "Taking a 10-year perspective has an instant cooling effect: yes the trough was in 2016 but we are far away from having made it to the other side of this crisis," Alphabulk observed, pointing out how **despite last year's 18% improvement, the BDI's 2018 average was still 50% below 2010 levels**. (Splash 24/7.com – 4 Jan 19)

We expect a YOY improvement in dry bulk. We forecast **0.7% fleet growth for 2019** when adjusting for recycling and IMO disruptions, well below our **3.9% tonne-mile growth forecast**. Capesize rates averaged USD16.4k/day in 2018, up 8% YOY, and we forecast USD24k for 2019e. We forecast China to respond to the escalating trade war (the US will raise tariffs on the USD200bn tranche to 25%) with public infrastructure spending, which would positively impact dry bulk. (DNB Markets - 4 Jan 19)

Chinese trade data, released early this morning, show **December coal imports were a huge disappointment** after 10 months of strong import growth for the commodity. 2018 YTD YOY growth was as high as 14% in August and 11% as late as October, before November (-13.2% YOY) and now December (-55.0% YOY) lowered YTD growth to end 2018 at just 3.6%. Average YOY growth for Q4 2018 was in fact down 20.6% - in hindsight **explaining the weak development for dry bulk spot rates towards the end of the year**. Iron ore, the other major dry bulk commodity, posted 3.0% YOY growth for December and ended 2018 –with a decline of 1.0%. **The import demand for iron ore has been surprisingly weak considering strong steel production numbers** reported so far (up 12.1% YTD as of November with December numbers scheduled for release next week). Iron ore inventory levels at ports in China have thus declined from the 162 MMT peak in June to 136 MMT by the end of November (before building slightly to 141 MMT entering 2019). Also worth noting, Chinese soy bean imports rounded off the year with December volumes down 40% YOY and ended the year –declining by 7.9%. This marks the largest negative soy bean import growth since 2002 and joins just two other years of negative import growth in the statistics (2011: -4.0%, 2004: -2.5%). (DNB Markets - 14 Jan 19)

Once more the dry bulk equities demonstrated their notorious volatility in Q4, with macro uncertainty and weaker capesize-rates resulting in complete share price mayhem. As global equity markets are recouping some of the losses we have seen a small rebound so far in 2019, with initial signs Chinese fiscal stimulus also emerging. Still, the unpredictable volatility in the sector demands significant risk premiums in our view, and as such we **lowered our medium term outlook on the back of weaker demand expectations – but finding comfort in continued low fleet growth**. (Pareto Securities – 15 Jan 19)

Strong coal exports from Indonesia provided a significant boost to the Pacific Panamax and Supramax market during 2018. Indonesia benefited from strong demand from China (up 18 MMT y-o-y to 120 MMT), India (up 9 MMT to 100 MMT) and other South East Asian destinations (up 13 MMT to 71 MMT). However, current economic headwinds and the present Chinese government directives to limit imports to support their domestic coal production would suggest slowing sales in the early months of 2019. **The current mix of negativity coupled with the disruption to logistics usually encountered during Indonesia's upcoming rainy season would suggest little prospect of increased Indonesian coal movement providing the catalyst for an improvement in short term Pacific sub-Cape freight markets**. (Howe Robinson Research – 18 Jan 19)

With improved market rates in 2018, **newbuilding activity has continued at a decent level** compared to 2016's low: In 2018, 216 units totaling 23.8 MDWT were ordered, compared to 26.5 MDWT in 2017 and 7.3 MDWT in 2016. On the demand side, the outlook for **Chinese iron ore imports** in 2019 is worrying as the steel industry struggles with lower steel margins and weaker domestic demand, which have also been encouraging steel mills to increase consumption of lower-grade ores in place of the more expensive, imported medium to higher grade ores. However, the government's pledge to increase infrastructure spending could help to avert a sharp slowdown. The outlook for **Chinese coal imports** in 2019 is also uncertain as China's National Development and Reform Commission (NDRC) is said to be considering monthly coal import controls this year, although stricter crackdowns on illegal production in Shaanxi following a major accident in January could potentially aid coal import volumes. The **global soybean trade** is also expected to contract by 0.7% in 2018/19, mainly as lower Chinese imports due to US-China trade tensions outweigh an increase in European imports. However, **India's coal imports** continues to remain strong, due to production shortfalls, domestic logistical bottlenecks, regulatory changes targeting pollution cuts, and surging power demand from household electrification. There has also been a surge in demand from the steel industry as they ramp up crude steel production, and petcoke restrictions imposed last year have also led small industrial users to shift their energy mix to include coal. (Banchero Costa – 23 Jan 19)

The precipitous fall in Chinese coal imports over the past two months has clearly had the most detrimental effect on the Pacific freight market. Indeed a trade that has provided significant support for the shipping market over the past two years seemingly evaporated as the Chinese government imposed restrictions on thermal coal imports from mid-November onwards. Monthly imports, which peaked at a record 26.2 MMT as recently as July and were still running at 19.3 MMT in October, fell to a mere 7.3 MMT in December, the lowest monthly total since March 2009 and 12.5 MMT lower than December 2017 (representing a 65% y-o-y fall). There has been no respite during January with imports perhaps set to fall even lower once official data is available, and though most of the previous restrictions related only to thermal coal, an industrial website reported last week that some ports in north eastern China have stopped customs clearance on imported coking coal (which accounted for 65 MMT of imports in 2018).

These shocks to the international coal trade are in part **an attempt by China to support its own domestic coal prices** (production runs at 3.5 BMT annually) but are perhaps a reflection of **falling energy demand in the wake of weaker industrial output data**. Chinese seaborne coastal coal movement dwarfs imports by comparison (we estimate 740 MMT in 2018). However, should this trade also diminish in 2019, some of the 1,650 Chinese-flagged vessels involved in this trade will inevitably re-enter the international market, a move which will undoubtedly limit the extent of any possible recovery should some international coal imports resume after Chinese New Year. (Howe Robinson Research – 1 Feb 19)

The stunning drop of dry cargo rates in the first month of 2019 has bulk carrier owners perplexed as they try to figure out what is going on. The BDI fell from 1260 at the start of January to 645 today and the BCI sank from 2003 in early January to close at 1014 today (both about 50% lower). **The market fears of reduced Chinese growth and slowing iron ore demand are major factors along with trade war/tariff issues**. Chinese demand for high quality iron ore imports fell last year due to a significant increase in China's use of Domestic scrap steel, as well as draw downs of lower quality domestic iron ore inventories. It was reported that **China had renewed buying soybeans from the USA however we understand that only 5-6 vessels were chartered for this business so far**. Some bulk carrier owners point out that in the past few weeks we have **seen a number of backhaul fixtures at zero per day (i.e. "bunkers only") which did not happen during the dry cargo market bottom of early 2016**. (Compass Maritime – 1 Feb 19)

Asset Value Developments:

Nikolas Martinos-led Thenamaris has pocketed a huge gain after selling one of the kamsarmax bulkers it bought at the bottom of the market in 2016. Brokers say Thenamaris has **sold the 81,600-dwt Seatribute (built 2012) to a Chinese buyer for between $20m and $21m. This marks a huge premium on the $12.4m the Martinos family company spent on the DSME built vessel in March 2016**. (TradeWinds – 17 Dec 18)

Key Supply Side Developments:

Supply Side developments disappointed in the world bulker fleet. We started 2018 with 813.53 MDWT and have increased to 836.46 MDWT for a 2.8% net fleet growth during 2018. A further 5.0% (41.96 MDWT) is scheduled for delivery in 2019. If we were to apply a slippage factor of 20% (it was actually 18.15% in 2018) to these scheduled deliveries and further assume that recycling reaches 8 MDWT (it was 5.25 MDWT in 2018) per annum due to regulatory pressures (BWTS and IMO 2020) we would be left with a net fleet growth of 3.06% (862.03 MDWT) in 2019 and another 3.26% (890.13 MDWT) in 2020.

When do ship owners recycle their ships? When they **are very old** or when they are not so old BUT they **do not make ends meet** AND regulatory pressures will **require capital expenses** to be incurred in the immediate future. The freight markets are therefore the single largest driver of ships to the recycling yards. The lower the freight markets the greater the number of ships ending up at the recycling yards. 2016 is the perfect example of this inverse relationship. Q1 was a disaster with the BDI touching a new historic low every day before bottoming out at 290 points in February. The Q1 total for recycled ships was 14.22 MDWT, compared to 5.25 MDWT of ships being recycled in all of 2018 (average BDI during the year being 1,353 compared to 673 in 2016) reaffirming the inverse relationship of recycling with BDI. Net supply of ships, therefore, grew in dry bulk from 813.53 MDWT at the start to 836.46 MDWT by the end of 2018. But despite similar percentage growth in the supply side in 2017 and 2018, the time charter rates have risen from the ashes, just like Phoenix, to reasonable levels by the end of 2018. This suggests that **supply demand balance is within striking distance.**

The question is **how will owners react to the market conditions during 2019 to 2020?** If the markets remain reasonably strong, as anticipated, then recycling will slow down, however due to **the very low forward order book (10.52%) net increase in supply in 2019 and 2020 would be approximately 3.16% per annum whilst demand is scheduled to grow at around 4.5% per annum**. If that happens and 'forced' recycling increases the rate of assumed recycling due to the regulatory pressures in 2019 and 2020, we could have a few very interesting years ahead!

What others' say about Supply Side Developments:

Gross deliveries in 2018 will be at their lowest for a decade but with recycling forecast to be a meager 5 MDWT, net fleet growth will be similar to 2017 (24 MDWT) and in fact more than 2015 and 2016 when Demolition of 29 MDWT and 31 MDWT respectively saw net growth dip below 20 MDWT. The significantly larger **nominal orderbook for 2019 is much more evenly spread with the greatest number of quarterly deliveries slated to come out in Q4. As tonnage deliveries have a lagged effect on cargo carrying capacity it may be that the full effect of this larger orderbook in 2019 will not be felt until the end of next year and into 2020**, exactly at the time when there is expected to be some **reduction in spot market supply as a greater proportion of the current fleet will be either in drydock or undertaking fuel tank transfer plans to comply with the forthcoming IMO Regulations**. (Howe Robinson Research – 16 Nov 18)

Key Regulatory Developments:

Regulatory impacts should see many more ships heading for the recycling yards in 2019 and 2020. The Ballast Water Treatment System (BWTS) convention came into force on the 8th of September 2017. All new vessels with keel laid after this date are required to be fitted with IMO approved ballast treatment plants. All existing vessels are required to retrofit such plants in a phased manner along with surveys associated with first renewal of IOPP (International Oil Pollution Prevention) certificate after 8 September 2019. Any ship that is older than 20 years of age would then become a potential recycling candidate when the next five year renewal of the IOPP certificate becomes due after the effective date. The cost benefit to retrofit an expensive BWT system would be too great a risk to run, especially when 20 year old ships are valued around recycling levels, besides IMO 2020 will ensure such older ships will find it impossible to get regular employment. **This will make the 'recycling' decision easier**.

IMO 2020 will result in 'cleaner low sulphur' oil being burnt by ships from 1st January 2020, except those owners who fit/retrofit scrubbers on their ships, and thereby reduce the level of pollutants reaching the air that we breathe as well as the 'acid' rain that results from such emissions. **The impact of IMO 2020** would essentially be as follows:

- **Older ships would struggle** to either retrofit scrubbers, due to their high capital cost as well their high running costs, or struggle to burn 'cleaner low sulphur' oil in their engines. Those older ships that would have their 20th, 25th or 30th birthday in the next 8 quarters, starting from Q1 2019 and ending in Q4 2020, would have to struggle with the **extremely expensive special survey costs** associated with special surveys of such older ships together with the **costs of retrofitting a Ballast Water Treatment System (BWTS)** as well as the impending IMO 2020 deadline. The world Dry Bulk fleet had 38.5 MDWT of ships in this 'older' ship category of which 14.6 MDWT were in the 'geared' ships sector where PSL operates. **Some or all of these ships will certainly end up in recycling yards**. Others will experiment with burning 'compliant low sulphur' blends of fuel oil and diesel oil in these old engines designed to burn 'high sulphur' residue oils. Such experiments could **result in a lot of breakdowns/delays to such ships** and clients would be hesitant, to put it mildly, to place any of their cargoes on such ships.

- **Ships that are burning 'compliant low sulphur' fuel oil would operate at more economical slower speeds** if, indeed, the price differential between HSFO and LSFO is as high as the scaremongers/scrubber pushers have been proclaiming. This would result, combined with the impacts associated with the effect of IMO 2020 described in the preceding paragraph, **in a supply side dividend with supply shrinking enough to cause some sort of a freight rate spike**. How high would the freight rate spike be or how long it would last is any ones guess.
- The number of ships that are fitting/retrofitting scrubbers **in the Dry Bulk fleet** by numbers are 577 (471 retrofits and 106 new buildings as per Clarksons data base end of 2018) out of a total of 12,234 dry bulk ships in the world fleet, including all the new buildings in the order book, or **4.71% of ships with scrubbers** that would be pumping soluble Sulphur/Nitrogen/particulate matter and only God knows what else into the waters of the oceans and **transferring the pollution from the sky into the seas**.
- **The total number of ships fitting/retrofitting scrubbers** in the world fleet, not just dry bulk ships, including those from the order book would be a measly **2,067 ships** out of a total world fleet that would be 99,184 ships **or just 2.08% of the world fleet**. The question is, **will the oil majors/refineries produce HSFO to cater to this small minority of ship owners?** If they do, then it means that they would have to dedicate certain refineries/storage tanks/pipe lines/delivery vehicles (barges/small tankers) to service these 2.08% of owners who have opted to burn HSFO. The cost benefits of doing this would be something that the refineries would have to consider and, just maybe, HSFO would not be sold at any appreciable discount to LSFO but possibly at a small premium?
- The ships that are planning to or actually **fitting scrubbers would face their own set of challenges** that would include, **bans from using open loop scrubbers in ports**, extraordinary **scrutiny of their exhaust gasses** to ensure that their scrubbers, for which I understand there are no standards, are actually emitting minimal Sulphur oxides into the atmosphere, **corrosion of the piping system** within the scrubbers as well as at their **outlet pipes** (Hydrex.com, the underwater welding specialists, state that there has been a rash of such underwater welding requirements from scrubber fitted ships), **installation of heavy duty pumps** to handle the constant high pressure flow of water in the scrubber piping system **requiring the use of two generators at sea** instead of just one, **spares/repairs/maintenance of scrubber systems, manpower needed** to operate and handle scrubbers, etcetera.

- During 2019 and 2020 a lot of these 'scrubber' ships will be in dry docks fitting these 'refineries' to enable them be compliant with IMO 2020 emission rules. That will take away some supply from the market. **Various reports have suggested that this would reduce overall supply in the dry bulk world fleet by as much as 1.5 to 2%.** This reduction in supply will not necessarily be a challenge in that it would assist the freight market and not act as a detriment to it.
- For those ship owners taking the **sensible route of not installing scrubbers and instead burning LSFO** they will face the future **worrying about availability of LSFO** (more or less every major oil producer, and nationalized oil company in almost every country, has confirmed that they will have as much LSFO as is needed available in their countries/ports that they regularly service), **compatibility of various different blends of LSFO** (currently almost all ship owners do NOT mix any fresh HSFO with existing HSFO onboard their ships but take fresh supplies in 'empty' tanks and only start using such fresh supplies after their contracted laboratories have confirmed that the fresh HSFO that they have bunkered is suitable to be burnt in their ships), **getting their ships tanks 'cleaned'** by bunkering small quantities of MGO in 'empty' tanks to 'clean' them of any residues of HSFO, **Bunkering LSFO starting sometime in SH 2019** (Q3 or Q4) in all available 'empty' tanks, **having clear guidelines for ship staff** on how to store receive and use LSFO, etcetera.
- Deserts in the Ocean, an article written in 2008 gives you a look at how mankind has been **destroying the ocean beds and creating deserts in the seas** by the pollution that humans happily dump there.
- 'The Sixth Extinction – An Unnatural History' a 2014 non-fiction book written by Elizabeth Kolbert argues that man's activity has **caused the oceans to become acidified resulting in a grave threat to the coral reefs of the world**. The reefs are the apex species of the ocean's ecosystem. If the reefs fail, so does the entire marine ecosystem.
- At some point in time, **dumping toxic/sulphuric waste water from 'open loop scrubbers' into the oceans will come back to haunt us with such ships being banned from pumping their toxic waste water into our oceans/seas**. MPA Singapore, and now China, has banned the use of 'open loop scrubbers' in their territorial waters as have a host of other countries from Europe to the Americas and from Asia to Middle East. How long will it be before the **world realizes that it would be best to ban the dumping of waste water generated by 'open loop scrubbers' *anywhere* in the oceans/seas? It's like saying that a small portion of an aircraft (territorial waters of any country/port) is declared as a 'non smoking' zone whilst the rest of the aircraft (oceans/seas) are designated as an unrestricted smoking zone, and we know how *that* ended!**

What others' say about Regulatory Developments:

Proposed **new legislation intended to reduce emissions and discharges from ships sailing in Norway's world heritage fjords is now expected to be even stricter than first proposed** earlier this year, **including a ban on scrubber use**. The Norwegian Maritime Authority (NMA) has proposed the amendments relating to the Nærøyfjord, Aurlandsfjord, Geirangerfjord, Sunnylvsfjord and Tafjord, and interested parties have six weeks to submit comments. Based on comments received, the NMA is now proposing that **fuel being used on ships in the world heritage fjords must have a sulfur content of maximum 0.10% by weight. Additionally, a prohibition against the use of exhaust gas cleaning systems in these areas is being proposed,**

including both open, closed and hybrid scrubber systems. In practice, this means that the use of heavy fuel oil in the world heritage fjords will be banned, and that ships that currently use heavy fuel oil combined with an exhaust gas cleaning system will have to use marine diesel instead when sailing in the world heritage fjords. (Maritime Executive – 6 Nov 18)

A court in Marseille fined an American master mariner, Capt. Hoyt, $110,000 for using fuel with a sulfur content measuring 0.18 percentage points above a disputed limit. The judge ruled that P&O parent company Carnival Corporation should pay $90,000 of Capt. Hoyt's $110,000 fine. (Maritime Executive – 26 Nov 18)

In the latest sign that **owners fitting open loop scrubbers to their vessels to comply with the 0.5% sulphur cap will face increasing restriction on their operation the Maritime & Port Authority of Singapore (MPA) announced their ban on Friday**. "To protect the marine environment and **ensure that the port waters are clean, the discharge of wash water from open-loop exhaust gas scrubbers in Singapore port waters will be prohibited**. Ships fitted with open-loop scrubbers calling at Singapore will be required to use compliant fuel," Andrew Tan, chief executive of the MPA told the Singapore Registry of Ships (SRS) Forum. In a clear statement of Singapore's position he took the time to repeat the remark to an audience of around 300 senior industry executives. (Seatrade Maritime News – 30 Nov 18)

Mediterranean Shipping Company (MSC) has been forced to pay $630,625 in penalties to the California Air Resources Board (CARB) for violating the Ocean-Going Vessel At-Berth regulation. The violations were discovered during a routine audit of the company's 2014 visits to the Port of Oakland and the twin ports of Los Angeles and Long Beach. (Splash247.com – 7 Dec 18)

China has decided to press on with its national sulphur cap from 2019, following a draft plan announced in August. The Ministry of Transport has released a **formal scheme to implement its shipping emission areas, which cover nearly all of the country's territorial sea and a large part of the Yangtze River and Pearl River. From January 1, 2019**, ocean-going vessels entering the coastal ECAs will have to switch to fuels with no more than 0.5% sulphur content. When sailing within the internal water ECAs, they must meet a 0.1% sulphur limit. From March 1, 2019, ships without onboard exhaust gas cleaning devices will only be allowed to carry compliant fuels, according to the scheme. (Lloyd's List – 12 Dec 18)

Denmark has said it will publish the names of repeat violators of its sulphur emissions limit, beginning next year. The country is part of the North Sea Emissions Control Area where the sulphur content of emissions has been limited to 0.1% since 2015. The global sulphur cap in non-ECA regions is currently 3.5%, but will drop to 0.5% from the start of 2020. Gross violators are **companies that have been fined in excess of DKr 200,000 ($30,385)**. Such fines are issued to companies whose vessels' sulphur emissions are recorded as between 0.5% and 0.99%. Danish fines generally range between DKr 30,000 and DKr 300,000. Sulphur emissions of 1% and above could earn companies a DKr 300,000 fine. (Lloyd's List – 14 Dec 18)

Taiwan's CPC Corporation has started supplying 0.5% sulphur content fuel oil after the local government lowered the permissible sulphur content in ship fuels one year before the

International Maritime Organization's 2020 sulphur cap begins. CPC confirmed to Lloyd's List that since January 2, it has made available a low sulphur fuel oil grade that is compliant with Taiwan's 0.5% sulphur limit and the IMO global sulphur cap **at ports in five cities, Kaohsiung, Taichung, Keelung, Suao and Hualien**. (Lloyd's List – 7 Jan 19)

Our read of Trade Sanctions/Tariffs:

Nothing has changed in our views on this subject as stated in our last quarterly newsletter, which we are repeating. **Trade sanctions/tariffs**, in and of themselves, **cannot destroy demand so long as the sanctioned commodity is either available from some other supplier/country or is substitutable by a similar priced commodity with similar/identical attributes. All sanctions/tariffs** do is to make shipping of such commodities more inefficient. If this change in supplier/country **results in congestion; slower loading of ships** (compared to the original supplier/country); and **an increase in ton-mile,** then that is **best for the dry bulk markets.**

The **meeting between President Trump of USA and President Xi Jinping of China** on the sidelines of the G-20 meeting in Buenos Aries on 1st December 2018 **resulted in a firestorm of media coverage with statements ranging from *everything* has been sorted out to *nothing* has been sorted out** and every conceivable variation in between these two extremes. Then there was **the arrest, and possible extradition, of the CFO of Huawei in Vancouver** whilst changing aircraft with another barrage of news media attention. In this case, **Ms Meng Wanzhou, the daughter of the owner of Huawei, was finally granted bail** whilst her extradition hearing proceeds in court. **In the meantime, a Canadian business man and an ex diplomat were detained/arrested in China.**

If indeed there is a settlement within 90 days in which **China agrees**, as they have often indicated, **that they would reduce the trade deficit by USD 160/250 billion per year, then it would be great news for Shipping.** Grain, Coal and Oil/Gas are the three raw materials that the US can export in large quantities and which China can easily import in equally large quantities. Currently **China imports a lot (120 MMT) of Coal from Indonesia which is barely 6 days away as against the US which is about 42 days away and that could result in a huge ton-mile increase in demand for Dry Bulk shipping.**

Others' read of Trade Sanctions/Tariffs:

The US-China trade war is the "most stupid thing in this world," Jack Ma, the chief of Asia's most valuable public company, Alibaba Group Holding Ltd (BABA.N), said on Monday. (Reuters – 5 Nov 18)

An economist who accurately predicted the rising trade tensions between the US and China in 2018 now sees a likely resolution of the dispute in 2019. A trade deal may be reached at some point in 2019 as tariffs will start to hurt the US, Danske Bank A/S chief analyst and **China economist Allan von Mehren** wrote in a report last week. The strategist now sees a 60% chance of a positive outcome from a planned Trump-Xi meeting at the G-20 summit in Argentina, up from 50% earlier, he said in an email response to questions on Thursday. A positive outcome would mean "**a clear framework for negotiation with a list of demands and a plan to go work on them one by one." A trade deal may end up resembling a Chinese offer in May**, Mehren said. This may include:

-China will buy a further $70 billion to $100 billion of U.S. goods
-Take steps to strengthen intellectual property rights
-Reduce tariffs further
-No longer demand transfer of technology in joint ventures
-Further open up direct investments
-Improve conditions for foreign companies in China
-Invite US companies to play a bigger role in the Made-in-China 2025 strategy through investment
(Bloomberg – 6 Nov 18)

As **IMO's 2020** global sulphur cap approaches, its **impact on petcoke**, a by-product at refineries using cokers to convert heavy residual oils into products, has not been discussed. To meet the demand of the majority of vessels without scrubbers, **refineries without coking capacity will have to increase purchases of low sulphur crudes** in order to produce compliant bunker fuels. As low sulphur crude prices are driven up, **refineries with coking capacity** are likely to increase processing of cheaper, heavy sour crudes in their production of MGO/MDO, which will also result in **increased production of high sulphur petcoke**. Petcoke has 2 main applications – around 30% of global petcoke production is used as an industrial carbon source, while the remainder is used as a solid fuel. In 2016, **India became the largest importer of US petcoke purchasing 8.6 MMT of petcoke**, equivalent to around 23% of total US exports. However, due to rising pollution levels, **usage of petcoke as a fuel in India has been banned**, with imports now only allowed for aluminium companies and calcined petcoke makers. As a result, **US petcoke exports to India have fallen 54% year-on-year to 2.2 MMT in the first 9 months of 2018**. China and Japan have now replaced India as the largest Asian importers of US petcoke. However, petcoke has also been included in **the 25% import tariffs China imposed on US goods since 8 August, putting an annual US-China petcoke trade volume of 3.6-3.8 MMT at risk**. While China's customs data show substantial increases in Chinese petcoke imports from other sources such as Saudi Arabia, India, and Russia, **the substitution of US exports with these supplies would have a negative impact on tonne mile demand due to their shorter distances**. (Banchero Costa – 9 Nov 18)

US farmers finishing their harvests are facing a big problem - where to put the mountain of grain they cannot sell to Chinese buyers. Across the US, **grain farmers are plowing under crops, leaving them to rot or piling them on the ground**, in hopes of better prices next year. It's **one of the results of a US trade war with China** that has sharply hurt export demand and swamped storage facilities with excess grain. (Reuters – 21 Nov 18)

In the wake of trade war uncertainties and China's subsequent imposition of a 25% tariff on imports of US coal in August, **Chinese imports of US coal have fallen 5.5% year-on-year to 2.1 MMT** over the first 9 months of 2018. This stands **in contrast to overall positive growth in China's total coal imports, which has increased 11.1% year-on-year to 251.4 MMT** over Jan-Oct 2018. To deal with the loss of the Chinese market, the US has tried to increase coal sales to other Asian destinations. **India imported 13.5 MMT of coal from the US** over Jan-Oct 2018, **an increase of 36%** year-on-year. India's growing steel industry may also have contributed to growing imports from the US, which also supplies high value coking coal. **Trade data from Japan shows imports from the US increasing a strong 28.4%** year-on-year in the first 9 months of 2018 **to 8.0 MMT**, even as Japan's total coal imports decreased 1.0% to 140.8 MMT. (Banchero Costa – 23 Nov 18)

Argentina has become the epicenter of soybean trading dynamics -- at least for now. The South American nation has risen to become **the top buyer of US beans in the last three months as China looks elsewhere in an escalating trade war with the Trump administration**. Almost 1.3 MMT of US oilseed have been inspected for export to Argentina from Sept 1 through Nov 22, according to the USDA. That compares with none in the same year-ago period, USDA data show. (Bloomberg – 27 Nov 18)

The Fortune Global Tech Forum got underway this morning, and first on stage was Sequoia China's Neil Shen, who is either one of the top, or the top venture capital investor of 2018. Shen believes the **Chinese tech economy still has a long way to go before meeting its full potential**. Shen says that a trade war doesn't threaten the future of Chinese tech. For one thing, he says, the **Chinese economy is in the midst of a long-term transition from an export-led to a consumer-led economy, and that is going to continue to drive economic growth**. And second, the disruptive companies he is investing in are taking share from traditional companies, so they can grow faster than the overall economy. His bottom line, which was shared by other experts here today: **the trade war may hurt China more than the US in the short term, but it will hurt the US more in the long term**. "What we have now is Chinese entrepreneurs going global with Chinese business models," Ben Harburg of MSA Capital told the group. As a result, **China is defining the future of globalization, and the US, because of its protectionist push, is in danger of being left behind**. (Fortune CEO Daily – 29 Nov 18)

US President Donald Trump and Chinese President Xi Jinping agreed to keep their trade war from escalating with a promise to halt the imposition of new tariffs for 90 days as the world's two largest economies negotiate a lasting agreement. The truce between the US and China emerged after a highly anticipated dinner Saturday between Trump and Xi on the sidelines of the Group of 20 summit in Argentina. (Bloomberg – 2 Dec 18)

Export data shows US soybean exports to Argentina rising to 1.4 MMT to 22 November this year, from virtually no shipments the same period a year ago. Other destinations which have also seen an increase in US shipments this year include the **EU and Egypt, whose shipments increased 78% and 274% respectively year-on-year to 7.3 MMT and 3.0 MMT**. The rise of such trade flows has been attributed in large part to the cheap prices of US beans. Since July, **US soybean prices have fallen sharply in direct response to the 25% tariff levied on US soybeans entering China**. Argentina also needs US beans to feed their domestic soy-crushing industry, after a punishing drought reduced their harvest volume. Coupled with the fact that **Chinese buyers are paying a premium for South American soybeans, the case for Argentina increasing US soybean imports makes all the more sense as it allows them to free up their own soybeans to ship to China**. While the recent trade truce between the US and China had initially sparked hope of trade tensions de-escalating, details of any concrete consensus have been scant. **The truce now hangs in balance following the arrest of Huawei's chief financial officer in Canada, which China believes to be politically motivated**. Last week, Reuters reported that China had agreed to buy 300,000 to 400,000 tonnes of soyoil from Argentina. This compares to 120,000 tonnes of soyoil sent to China over the last three years. **The**

soyoil agreement is good news for Argentina's crushing industry, and may lay the ground work for US-Argentina soybean shipments to increase further. (Banchero Costa – 7 Dec 18)

China made its first major purchases of US soybeans since President Donald Trump and his Chinese counterpart Xi Jinping struck a trade war truce earlier this month. The purchase of over 1.5 MMT of beans is the most concrete evidence yet that China is making good on pledges the US government said Xi made when the two leaders met on 1st December. But the **arrest in Canada of a top Chinese executive from technology giant Huawei Technologies Co Ltd also stoked concern in markets that the trade war could worsen**. The purchases will, however, provide a goodwill gesture before the next round of US-China talks to change their terms of trade. **Traders said China was seeking to buy a total of 2.5 to 3 MMT of US soybeans**. One US trader with direct knowledge of the deals said Chinese state-owned firms bought at least 12 cargoes **for shipment from January to March**. Another trader with direct knowledge of the deals, and one who sells beans to exporters involved, said **around 30 cargoes had traded by Wednesday afternoon**. The soybeans are expected to be **shipped mostly from grain terminals in the US Pacific Northwest**, the most direct route to Asia. The Chinese evidently want the beans quickly as they have not been able to cover all their needs in South America. (Reuters – 13 Dec 18)

The US and China are planning to hold meetings in January to negotiate a broader truce in their trade wars but are unlikely to have any face-to-face contact before then. Treasury Secretary Steven Mnuchin, speaking in a roundtable interview Tuesday at Bloomberg's Washington office, said **the two sides had held several phone conversations in recent weeks** and were still in the process of planning further formal discussions. "We're in the process of confirming the logistics of several meetings and we're **determined to make sure that we use the time wisely, to try to resolve this**," Mnuchin said. **Both sides are now focused on trying "to document an agreement" by a March 1 deadline.** (Bloomberg – 19 Dec 18)

China bought US soybeans for the first time in six months after US President Donald Trump and his Chinese counterpart Xi Jinping met on Dec. 1 and set a 90-day negotiating window to resolve their trade differences. More than 2 MMT of additional purchases are likely before the Christmas holiday on Dec. 25, according to one of the sources, **bringing total US sales to China to more than 5 MMT in December**. Chinese importers bought only around 4 MMT of US soybeans last December, according to USDA data, but season-to-date sales coming into the month last year were 40 times greater at 20.6 MMT, compared to about 515,000 tonnes at the beginning of this month. In its weekly export sales report, the USDA on Thursday confirmed a net 1.561 MMT in US soybean sales to China last week. The agency, via its daily reporting system, cited private sales of another 1.403 MMT to China this week, along with 257,000 tonnes to undisclosed buyers, which are often Chinese importers. Separately on Thursday, China's state-run **Sinograin confirmed recent purchases of a few batches of US soybeans, without specifying volumes**. The purchases have been seen as a goodwill gesture before the next round of US-China talks. The United States has a long list of complaints against China on intellectual property, forced technology transfers and industrial subsidies. (Reuters – 20 Dec 18)

The Trump administration expressed optimism it can reach a "reasonable" trade deal with China as President Xi Jinping dispatched one of his top aides to negotiations in Beijing on a lasting truce to a conflict that has roiled financial markets. "There's a very good chance that we'll get a reasonable settlement **that China can live with, that we can live with, and that addresses all the key issues**," Commerce Secretary Wilbur Ross told CNBC Monday. Such a deal could involve the **Chinese buying more American soybeans and liquefied natural gas**, while agreeing to deeper "structural reforms" on issues such as intellectual-property rights and market access, Ross said. (Bloomberg – 7 Jan 19)

China has offered to go on a six-year buying spree to ramp up imports from the US, in a move that would reconfigure the relationship between the world's two largest economies, according to officials familiar with the negotiations. By increasing goods imports from the US **by a combined value of more than $1 trillion** over that period, China would seek **to reduce its trade surplus** -- which last year stood at $323 billion -- ***to zero by 2024***, one of the people said. The officials asked not to be named as the discussions aren't public. The offer, made during talks in Beijing earlier this month, was met with skepticism by **US negotiators** who nonetheless asked the Chinese to do even better, **demanding that the imbalance be cleared in the next two years**, the people said. Economists who've studied the trade relationship argue it would be hard to eliminate the gap, which they say is sustained in large part by US demand for Chinese products. (Bloomberg – 19 Jan 19)

Key Demand Developments:

China

China's GDP growth numbers averaged 6.6% for the year 2018, marking the lowest growth since 1990. (National Bureau of Statistics – 21 Jan 19)

China's Iron Ore import, according to preliminary Custom's data, was 1,064 MMT in 2018 or about 1.0% lower than the 1,075.3 MMT in 2017. This is the first annual decline since 2010 according to NBS statistics. (Reuters - 14 Jan 19)

Chinese crude steel production figure for 2018 increased to 928 MMT or 6.6% more than the 870.5 MMT in 2017. (Shanghai Metals Market – 21 Jan 19)

China's Coal imports totaled 282 MMT in 2018 or 3.4% higher than the 272.7 MMT imported in 2017! Coal imports are contingent on import pricing parity versus domestic coal production/transportation costs AND the Government's anti pollution policy that has targeted the shutdown of 800 MMT of mining capacity by 2020 (520 MMT was shuttered between 2016 and 2017, with 150 MMT in 2018). In a country that currently produces and consumes some 3.7 BMT of Coal per annum even a small change in China's coal imports could have a significant impact on the Dry Bulk freight markets. (Argus Media – 22 Jan 19)

Chinese steel exports have slowed significantly to 69.3 MMT in 2018 compared to the 75.4 MMT in 2017 all of which is carried by geared ships from the Handy to the Ultramax sectors. (Argus Media – 14 Jan 19)

China, the world's largest steelmaking country, has phased out a total of 150 MMT steel capacity since 2016, fulfilling the government's target 2 years ahead of schedule. (My Steel Global – 21 Jan 19)

Coal production at Chinese coal mines has reached 3.6 BMT of coal in 2018, 5.2% more than the 3.38 BMT achieved in 2017. (Platts – 21 Jan 19)

China imported $1.84 trillion of goods in 2017, up 16%, or $255 billion, from a year earlier. Of that total, **China imported about $130 billion of goods from the United States**. The Chinese government's top diplomat, State Councillor Wang Yi, said in March that **China would import $8 trillion of goods in the next five years**. (Reuters – 5 Nov 18)

The pace of growth in world iron ore shipments is slowing with total seaborne trade totalling 1.15 BMT in the nine months to September, up a mere 6 MMT y-o-y. Though Q4 usually provides a peak in yearly shipments, **only Vale of the major miners is likely to achieve a significant surge in exports. Strong Chinese demand for Vale's higher grade ore (65fe) has seen China's share of Brazilian exports rise to 58.1% (56.8% - 2017),** whilst the price has risen continually during the year to nearly $100 per ton. Record Brazilian monthly exports have failed to prevent the recent sharp falls in Capesize rates principally because **almost all the incremental cargo is being carried on newly delivered dedicated ore carriers into the Brazilian-Asian trades**. (Howe Robinson Research – 23 Nov 18)

Coal imports into China are set to decrease in December as government officials plan to restrict imports until next year. Coal imports by the world's largest consumer, rose in the first 10 months of 2018 to 252 MMT, up 11% y/y. However, even though the winter months represent the peak of Chinese demand, **domestic coal prices have been declining. Local production has grown and Inventories at China's power plants have increased considerably in 2018**, mainly due to a shift in policies from a year prior. The government wants to avoid a repeat of the coal shortage experienced in 2017 whereby below average winter temperatures led to a shrinking of inventories. Coal inventories at Chinese ports currently total 16.5 MMT 0.8 MMT above the yearly average to date, and 0.9 MMT above last year's average. **China has previously imposed coal import restrictions, which consequently led to an increase in local prices**. Earlier this year China banned smaller ports from receiving coal and implemented stricter inspections on low-quality coal. (Maersk Brokers – 30 Nov 18)

Chinese imports of Iron ore and coal present more interesting reading as both fell in November from October, despite weaker prices. **Iron ore imports slipped 2.4% to 86.25 MMT, while coal purchases from overseas dropped 17% to 19.15 MMT. But the weakness in these imports is almost entirely policy driven. In other words, it's the deliberate choice of Beijing to import less, rather than a sign of domestic economic weakness**. This mean that November and December coal imports will be well below potential. Iron ore is struggling along with steel as winter production curbs aimed at lowering air pollution start to have an impact on the market. Overall, the volume of China's commodity imports offers more insight into the real state of the economy than looking at just the value. **There are solid reasons to be cautious about the outlook for the Chinese economy and the impact from the trade dispute** with the United States, and there are also question marks over whether the relatively robust commodity imports will sustain. **But there is also a risk in turning too bearish too quickly by not accounting for the impact of weaker commodity prices on the value of imports by the world's biggest buyer of commodities**. (Reuters – 11 Dec 18)

Industrial production numbers from China show November electricity production posting record 12.3% YOY growth compared to last year, which brings YTD growth up to 7.9%. The **main source of growth for November was in Thermal electricity generation, which had YOY growth of 14.5%** compared to last year and lifted YTD growth to 7.8% with just one month remaining. Hydro generation grew by just 0.9% YOY with YTD now at 1.9%, while other sources (nuclear, wind and solar) grew 15.1% YOY and slowed YTD growth to 20.5%. With **thermal electricity being 73% of the total YTD (broadly in line with the energy mix for 2017**), it remains the main contributor to growth adding 320bn kWh of the 450bn kWh growth in YTD production. **Coal is the dominant source of thermal electricity production**, and hence underpins a strong demand for coal in China this year reflected in high import demand. November trade data lowered YTD coal import growth to 8.9%, which is considerably below the 14.2% reported as of August. The **slowdown in imports is explained by Chinese domestic production picking up substantially since August with September-November YOY growth above 12% on average**. October coal production was up 16.6% versus the same month last year, while today's November data was up 11.3% YOY. Accordingly, what for six months looked to be a year of negative growth in domestic coal production has turned to 2.5% YTD growth with only December remaining. We have a **long-term view that cutbacks in Chinese domestic production (as was the case from 2013 to 2016) in favour of imports should drive continued growth for dry bulk trade volumes when combined with Chinese electricity production growth**. The recent increased production slows dry bulk demand, and continues to highlight **dry bulk demand growth is fragile to fluctuations in Chinese energy policy going forward**. (DNB Markets – 14 Dec 18)

Key highlights from Chinese President Xi Jinping's address at a party gathering marking the 40th anniversary of China's "Reform and Opening Up", spearheaded by former Chinese leader Deng Xiaoping in 1978.

Highlights:

- China's **anti-corruption campaign has achieved overwhelming victory**. Xi emphasized that China must maintain and improve party's leadership over all matters and will resolutely clean up corruption.
- On China's journey of reforms and opening up, Xi said it has not been easy and it could face unimaginable storms. He highlighted that **China will support the state economy while guiding development of the private sector.**
- **China will ensure implementation of major reform measures, improve economic structures and actively expand domestic demand**.
- "**China's development needs the world and the world needs China**". Xi added that **China will not develop at the cost of other countries and China's development will not threaten other countries**.
- **China, as a big country, should have lofty ideas and high aspirations, and that China's development has reached a stage where it can only move forward**.
- Xi reiterated that "**Opening brings progress while closure leads to backwardness**"

(DNB Markets – 18 Dec 18)

Recent steps by **China's local governments to ease restriction on the real estate market, have led to an expectation of firmer demand for steel**. Earlier this week one of China's largest cities, Guangzhou, along with the smaller city of Heze, relaxed restrictions on the cities' real estate markets. **Last year many of China's local governments implemented a wide range of restrictive policies in a move to cool the booming property market**. Guangzou for instance took measures that prevented individuals from purchasing commercial real estate, a rule that will now be loosened according to the city's local government. The move to ease restrictions in one of China's largest cities has **spurred hope that other cities will follow suit and lead to a rise in real estate development**. Recently, some of China's largest steel producing cities have increased the winter restrictions, spurring a rise in steel prices, as expectations of supply tighten. Steel prices have grown to a one-month high, with the rebar price at Shanghai Futures Exchange currently trading at USD 549 per tonne, up 6.7% since last week. In the past six months, China's steel mills have considerably run down the iron ore inventories at the country's ports, from a top of 162 MMT in early June to a current level of 137 MMT. This process cannot continue in the long run and **China will eventually start restocking, increasing the demand for imported iron ore**. (Maersk Brokers – 21 Dec 18)

Chinese statistics for coal production in December set a new all-time high at 332 MMT, which was up 7.2% YOY from the 310 MMT produced last December. **2018 total Coal production of 3,546 MMT was up 2.9% from 2017**. This acceleration in coal production was somewhat more than we had expected and the actual 2.9% YOY growth compares to our forecasts of 2%. We expect **Chinese domestic coal production to grow 1% in 2019e before a 1% and 2% decline in production for 2020e and 2021e,** respectively. **Chinese electricity production continues its strong growth trajectory with 2018 up 8.2% up on last year** compared to our 5.5% estimate. The high pace of growth fuels demand for coal, as **2018 thermal electricity production has more or less grown in line with total electricity production** (8.0% YOY vs DNBe 4%) to maintain its 73% share of the total energy mix from last year. Our forecasts for 2019-2020e are that **electricity production will grow ~4% YOY, slowing to shy of 3% growth in 2021e**. **Steel production growth** has surprised to the upside through the year **to end 2018 at 11.6% - an impressive growth** rate indicating strong demand for raw materials. Isolating pig iron production, which better reflects the raw material intensity in steel production and hence iron ore demand, full-year growth at 8.5% for 2018 comfortably overtook our estimate of 4%. **Domestic iron ore production was cut drastically the past year and we await release of December data to round off the year**. Going forward, our outlook for Chinese steel production is more or less flat for 2019-2021e. (DNB Markets – 21 Jan 19)

Americas

Sharp rises in USA coal exports over the past two years have been beneficial to the freight market especially as market share to Asia continues to increase. All but 4 MMT has stemmed from the US East Coast ports with **India now the USA's largest export market with shipments doubling Q1-Q3 to 12.4 MMT.** Rising Indian steel production has seen increased demand for metcoal whilst a ban on petcoke imports for the cement industry has stimulated shipments of higher calorific value thermal coal. In addition, **Japan's imports of USA coal are up 1.5 MMT y-o-y to 6.7 MMT whilst South Korea remains an important export market at 6.8 MMT up to Q3**. USA has also expanded exports to more traditional Continental markets such as **Netherlands, up nearly 1 MMT to 7.8 MMT, whilst UK has registered a 600k tonne increase to 2.4 MMT.** However, **significant growth areas such as Egypt tripling imports from USA so far this year to nearly 3 MMT, Ukraine up 1 MMT to 3.2 MMT, Morocco to 2.8 MMT (up 1.2 MMT y-o-y) and Turkey at 2.4 MMT have all provided additional**

tonne:miles as well. Ballasting tonnage to USEC for Asian destinations is almost exclusively sourced from the Continent or Med and has been a contributory factor for the growing tonnage imbalance between Atlantic/Pacific. (Howe Robinson Research – 9 Nov 18)

Iron ore miner Vale has announced plans to halt 40 MMT of production — about 10% of its annual output of the steelmaking ingredient — so that it can decommission dams similar to the one that burst last week, killing at least 84 people and leaving hundreds missing. The tailings dam used to store waste material at the Córrego do Feijão mine was built in the 1970s using the "upstream construction" method. This design is banned in Chile, Peru and other earthquake-prone countries because tailings, or waste, are used to progressively build the embankment walls. That can make the dam more susceptible to damage and cracks than more modern designs such as the downstream and centreline methods. In order to carry out the decommissioning of the upstream dams safely and quickly, Vale said it would halt production at 10 mines, all in its so-called southern system. They include the Vargem Grande and Paraopebas complexes. Vale said the estimated impact of the move would be to reduce group output by about 40 MMT a year, although some lost production would be offset by using spare capacity in its other mines. Goldman Sachs said the move by Vale to decommission its upstream tailing dams would add to "an already tight market" and was likely "to drive iron ore prices significantly higher". It reckoned the net loss of the decommissioning would be 10 to 15 MMT once Vale ramped up production from other mines (Financial Times – 1 Feb 19)

China imported 16.6 MMT of soybeans from the US in 2018 close to half of 2017's 32.9 MMT. (Maersk Brokers – 1 Feb 19)

Asia

India is expected to become the largest coking coal importer through sea route by 2022 as the country pushes for more steel production, a Tata Steel official said on Tuesday. **India currently imports about 85% of its coking coal demand and by 2022, the demand of coking coal is projected to grow to 67 MMT from about 56 MMT now**. (PTI – 28 Nov 18)

Pacific minor bulk trade received a significant boost in 2018 from the re-emergence of Indonesia as a source of supply for nickel ore. Having exported just 3.8MMT in 2017 following the government's decision to permit the transport of lower grade nickel ore to China, Indonesian shipments to November 2018 have strongly accelerated to 13.6 MMT (up 10.3 MMT yoy). Fears that the Philippines might limit the mining of nickel ore have as yet proved unfounded with exports to November being 27.8 MMT, up 5% yoy. The only other country shipping nickel ore in any quantity is New Caledonia, which will top 1.2 MMT in exports to China in 2018. China's demand for nickel ore (a key component in certain grades of stainless steel) shows no signs of slackening as stainless steel production is predicted to rise to 30 MMT in 2019 (estimated 28 MMT in 2018). **China now produces over 50% of the world's stainless steel**. (Howe Robinson Research – 4 Jan 19)

Rest of the World

Ukraine's agriculture ministry expects an 11.0% increase in grain harvest this year, with the full season coming **to a total 68 MMT**. Most of Ukraine's grain exports go to the Med and the Middle East, and are likewise expected to increase. According to the agriculture ministry, as much as **47 MMT of grains could be shipped out of Ukraine this season, an increase of 19% y/y**. (Maersk Brokers –23 Nov 18)

The warning signs are multiplying and becoming clearer: global trade growth is slowing, which will pose an increasing threat to the world economy and financial markets next year. Cross-border commerce is in its poorest health since the Great Financial Crisis 10 years ago, or even in decades, depending on which measure you look at, and the **incoming data point to further deterioration next year**. In the last week alone a batch of figures from economic and exporting powerhouses in Asia, including China, showed that global trade is losing steam. And it couldn't be coming at a worse time for investors. **Wall Street and stock markets around the world are falling**. Major names in tech (Apple) and banking (Goldman Sachs), sectors that are pivotal to the global flow of goods and services and which had led the market boom of recent years, are among the biggest losers on the way down. (Reuters – 19 Dec 18)

Will a recession hit in 2019? Sorry to start the New Year on a downer, but there are more than enough reasons to think it will — a sinking stock market, a flattening yield curve, declining profits, waning fiscal and monetary stimulus, a slowing Chinese economy, a trade war, etc… As we reported shortly before Christmas, **the majority of economists still think we'll avoid a downturn this year and more likely face one in 2020**. Typical is the new report from Goldman Sachs, shaving its growth prediction for 2019 to 2% from 2.4%. But if there is one thing we know for certain, it is this: **economists have a uniformly lousy record of predicting recessions**. That's because recessions are usually precipitated by the unpredictable. (Fortune CEO Daily – 2 Jan 19)

The outlook for the global economy in 2019 has darkened, according to the World Bank's January 2019 Global Economic Prospects report. International trade and investment have softened. Trade tensions remain elevated, and several large emerging markets underwent substantial financial pressures last year. Growth in emerging markets and developing economies is expected to remain flat in 2019 as a result. **Risks are growing that growth could be even weaker than anticipated**. The pickup in economies that rely heavily on commodity exports is likely to be much slower than hoped for, and growth in many other economies is anticipated to decelerate. **Advanced-economy central banks will continue to remove the policies that supported the protracted recovery** from the global financial crisis 10 years ago. Also, **simmering trade disputes could escalate**. Higher debt levels have made some economies, particularly poorer countries, more vulnerable to rising global interest rates, shifts in investor sentiment or exchange rate fluctuations. (Maritime Executive – 12 Jan 19)

Following a record growth of 35% in 2017, **grain exports out of** Russia continued to grow in 2018. During the calendar year of 2018, the throughput of grains at **Russian ports has totalled 55.7 MMT, an increase of 16.3% y/y**. Firm demand from Egypt and Turkey has particularly supported the rising exports. However, a series of droughts through 2018, that also hit large parts of northern Europe, have hit the latest harvest hard. Russia harvested a record 135 MMT of grains in 2017, including 85.8 MMT of wheat. In 2018 that number dropped by 16%, bringing the total wheat harvest to 72.1 MMT. As a result, **exports for the 2018/19 marketing year**, which began in July, **are expected** to fall short of the record set in the year prior. The Russian

Ministry of Agriculture expects **42.0 MMT of grains** to be exported this marketing year, **of which 37.0 MMT stems from wheat**. (Maersk Brokers – 18 Jan 19)

While **global growth in 2018 remained close to postcrisis highs**, the global expansion is weakening and at a rate that is somewhat faster than expected. This update of the World Economic Outlook (WEO) projects **global growth at 3.5% in 2019 and 3.6% in 2020, 0.2 and 0.1 percentage point below last October's projections**. The downward revisions are modest; however, we believe the risks to more significant downward corrections are rising. While financial markets in advanced economies appeared to be decoupled from trade tensions for much of 2018, the two have become intertwined more recently, **tightening financial conditions and escalating the risks to global growth**. (IMF – 21 Jan 19)

The global economy is stumbling but not falling over. That's the analysis of investors, bankers and former policy makers attending the World Economic Forum in Davos, Switzerland, as they argue **the expansion is weakening but not by enough to generate a recession**. "We're slowing, but we're still growing," said Philipp Hildebrand, vice chairman of BlackRock Inc. and a former Swiss central banker. "**The chances of a recession short of a major mistake or accident this year are limited**." (Bloomberg – 23 Jan 19)

China's economy can maintain sustainable rates of growth despite global uncertainties, Vice President Wang Qishan said on Wednesday, days after the world's second-largest economy posted its weakest expansion in nearly three decades. In a remark apparently aimed at the United States, Wang also **urged countries to uphold multilateralism and "respect the independent choices" of each other on technological innovation**. "There will be a lot of uncertainties in 2019, but **China's economy will continue to achieve sustainable growth**," Wang told delegates at the World Economic Forum in Davos. (Reuters – 23 Jan 19)

Sincerely,

Khalid Hashim