Ref.: 2019-015

7 November 2019

To : The President of the Stock Exchange of Thailand

Subject : The 3rd Quarter of 2019 Management Discussion and Analysis (MD&A)

Our Key Performance Indicators:

THE RESULTS reviewed by EY Office Limited, show you the latest financial position of the Company. The net loss for Q3 was USD 0.96 million compared to a net profit of USD 3.25 million in Q3 2018. The earnings per day per ship during Q3 came in at USD 9,617, 14% lower than that in Q3 2018. Average daily operating costs per ship were USD 4,576 in this quarter, which is lower than our target of USD 4,750 and lower than the actual of Q3 2018. EBITDA was USD 12.08 million during the quarter compared to USD 17.36 million in Q3 2018. The loss per share (eps) in Thai Baht stood at Baht 0.02 for this quarter.

The Hard Facts	Q3, 2019	Q3, 2018
Highest Earnings per day per ship in USD	26,812	19,803
Average Earnings per day per ship in USD	9,617	11,239
Average Earnings per day per ship in USD (Handysize)	9,464	10,267
Average Earnings per day per ship in USD (Supramax)	8,947	10,973
Average Earnings per day per ship in USD (Ultramax)	10,735	13,846
Operating cost per day per ship in USD	4,576	4,695
EBITDA in million USD	12.08	17.36
Net Profit/(Loss) in million USD (excluding Exchange gain (loss) and Non-recurring items)	(0.98)	3.26
Net Profit/(Loss) in million USD	(0.96)	3.25
Earnings (Loss) Per Share in Thai Baht (excluding Exchange gain (loss) and Non-recurring items)	(0.02)	0.07
Earnings (Loss) Per Share in Thai Baht	(0.02)	0.07

Market Segmentation: During Q3, the Baltic Handy Size Index (BHSI) averaged 575 points derived from the average Time Charter (TC) rate of USD 8,415. Compared to that, our Handies earned USD 9,464 and beat the BHSI TC rate by 12.47%. During Q3, the Baltic Supramax Index (BSI) averaged 1,100 points derived from the average TC rate of USD 12,511. Compared to that, our Supramaxes earned USD 8,947 and underperformed the BSI TC rate by 28.49%. Our Ultramaxes earned USD 10,735 and underperformed the BSI TC rate by 14.20%. Our

performance in Q3 2019 was affected by our preparations for IMO 2020, which required repositioning a significant number of vessels for drydock in China in the weaker Pacific market. Thus earnings, relative to the BSI, were impacted. (As there is no special index for the Ultras, we have compared them with the BSI). Our target has been to outperform both the indices.

The next SET Opportunity Day will be held at the SET building at 10.10 hours on the 13th November 2019 where we will be presenting and discussing our Q3 results. For those of you who cannot attend physically, the SET webcasts the Opportunity Day presentation live, giving you a chance to be present via the web.

Long Term versus short term Charters: The long-term charters already booked as of 30th September 2019 are shown in the chart below. As can be seen, our current and forward four-year rolling book is currently at the 16.1% level with a visible revenue stream of USD 148.5 million.

Year	2019	2020	2021	2022	2023
Total Available Days	13,140	13,176	13,140	13,140	13,140
Fixed T/C Days	2,409	2,196	2,190	1,992	1,825
%age Fixed T/C Days	18%	17%	17%	15%	14%
Av. T/C Rate/Day in USD	13,585	13,875	13,875	14,211	14,550
Contract value in million USD	32.7	30.5	30.4	28.3	26.6

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

PSL celebrated **'World Maritime Day (26 Sep 19): Empowering Women in the Maritime Community'** by employing a woman, our latest hire in the week before this historic date, increasing the total number of women working ashore at PSL to 78 or 53% out of a total staff of 148! Three out of our 10 Board members, our Corporate Secretary, as well as our Heads of Legal, Finance, Accounts, HR and Internal Audit are women!

Getting to Zero Coalition: In the first week of September at the Fortune Global Forum in Yunan sponsored by McKinsey, the impression left on the minds of every delegate was that Climate Change had already arrived! McKinsey's statistic on "CO2 in the atmosphere having veered from historical norms to a degree not seen since the last ice age", was eye-opening. The IMO has sensibly stated that Shipping must reduce our CO2 footprint in 2050 by no less than 50% of what it was in 2008 even though cargo volumes would have grown by 2.5 times by that date. This can only be achieved if the Shipping industry transits to zero CO2 emission vessels. PSL is one among 15 shipping companies that originally signed onto the 'Getting to Zero Coalition.'

BDI Developments and our read of the market:

The Baltic Dry Index averaged 798 points in Q1; 995 points in Q2; and 2,030 points in Q3; ending at 1,823 points on the 30th September 2019. Though demand has grown as can be seen from the cargo numbers for China, net increase in supply has accelerated to 24.44 MDWT to take the quarter end number to 865.3 MDWT. Only 5.15 MDWT of dry bulk ships have been scrapped up to the end of Q3 this year compared to last year's 4.43 MDWT. The order book at the end of Q3 at 90.65 MDWT, however, is near historically low levels. This has helped reduce the pressure from the Supply side of the equation in the forward position with the order-book hovering at just 10.48% of the existing fleet at the end of Q3 (90.65 MDWT to be delivered up to and including end of 2022). Negative sentiment has started to dissipate from the market resulting, unfortunately, in ship-owners refusing to scrap their older ships. This has allowed an overall net fleet growth of 2.91% in the 9M of this year. If scrapping doesn't accelerate, the BDI will continue to remain very volatile, solely dependent on what the demand side does. In other words, ship-owners are not helping their cause by not scrapping ships, making the recovery in 2019 and onwards slower, extremely volatile, and totally dependent on demand continuing to outperform.

To understand the Dry Bulk Freight Market during 2019 we looked at the average daily Time Charter rates of the Capes. On the 25th of January 2019, the day that the infamous Brumadinho mining disaster took place in Southern Brazil, Capes were averaging USD 13,288. This incident which resulted in the loss of more than 250 lives, effectively shut down all mines in Southern Brazil that annually exported approximately 100 MMT of iron ore out of an annual total export volume of about 400 MMT. At the same time, there were two major back-to-back tropical storms, Veronica and Wallace starting on 18th March and ending on 16th April, in Australia that reduced Iron Ore supplies from that country. As a result, the daily Cape rates collapsed to USD 3,460 by the 2nd of April. Cape owners then took two steps. More Capes were scrapped in the FH of 2019 than in all of 2018. Secondly, Cape owners reduced their ship speeds by 6% to about 10.3 knots an hour. Due to these two steps, despite the lack of Iron Ore cargoes being available in 'normal' volumes from either Brazil or Australia, supply of Capes tightened enough so that these ships were earning USD 13,258 per day by the 3rd of June! Cape rates stood at USD 18,539 on 25th June, which is when Brazil's Brumadinho mine recommenced normal operations. The storm impact in Australia had reversed by this time as well. Cape time charter rates went up like a rocket, thereafter, resulting in daily rates reaching USD 37,519 by the 3rd of September! Of course, by then owners of Capes increased the speed of their ships to 11.4 knots an hour or by 10.67% from the low on 2nd April, adding a lot of 'extra' supply of ships into the market. Cape rates then started a slow decline to reach USD 24,918 by the 31st October. The two clear takeaways from these time charter rate changes are: supply demand balance has almost been reached; and, any small changes in cargo availability or supply of ships can have an extraordinary impact on the daily Time Charter rates.

Now coming to IMO 2020 and its possible impact on the geared Dry Bulk sector (10K to 70K DWT). In our sector of the market, just 4% of ships by DWT are scheduled to fit Scrubbers whilst most owners (96%) are sticking with burning compliant low sulphur fuel oil (LSFO). In this sector, at the end of Q3, there were 311.64 MDWT of ships of which 32.16 MDWT were over 20 years

of age. When these older ships were designed and built between 1989 and 1999, the average price of oil was just USD 19.7 per barrel, with the price dipping to as low as USD 10 per barrel during the throes of the Asian crisis in 1998/2000. The average price of oil from 2000 to 2019 has averaged USD 61.8 per barrel with a peak of USD 147 per barrel reached in 2008. In the era of cheap oil ships were designed for power rather than for fuel economy. The reverse has been true since 2007 with power being the proverbial sacrificial lamb on the altar of fuel economy. From 1st January 2020, all ships will be forced to consume LSFO which will be much cleaner but certainly more expensive. To minimize this higher cost of LSFO, ships speeds will be slowed. As explained in the above paragraph on the Capes, any slowing down of ships reduces or tightens the supply of ships. Besides, the 10.32% of ships older than 20 years of age that consume more LSFO per day, as they were designed in an era of cheap oil, will find it increasingly difficult to get gainful employment, further tightening the already tight supply side of ships in the geared sector. One way or another, through increased scrapping of the older and more fuel-thirsty ships built 20 or more years ago or from slowing down of the younger ships to minimize the burning of higher cost LSFO, we would get a pleasant supply side dividend starting from January 2020 onwards. With the forward order book in the geared sector representing just 6.22%, new deliveries will not be able to match the reduction in supply due to increased scrapping and slow steaming. The freight market may therefore have strong enough legs to keep running in the coming years!

BDI Developments and others' reading of the market:

The Baltic Exchange Dry Index has done something it has not done in years — cross the 2000 mark twice in one month. The last time the BDI was over 2000 before mid-July was back on 3 January 2014 when it fell to 2036, but it has not surpassed that number twice in one month since late 2013. Scrubber installations are limiting supply and the order book is low. So, yes, the micro is trumping Trump's trade war with China. On 11 February, about two weeks after Vale's tailing dam at its mine in Brumadinho, Brazil collapsed, the catastrophe forced the Brazilian iron-ore giant to close 50 tailing dams in Brazil — a drastic measure that took 93 MMT of iron ore off the market. Cape rates bottomed out at $3,460 per day on 2 April before cresting at $32,963 per day on 22 July. They slipped to $23,782 per day by 8 August but have returned to $29,102 per day today. The US-China trade war has affected shipping stocks but has not impacted physical markets. Equities got crushed on fears about future impact on the market, but the near-term day-to-day shipping fundamentals are driven by available cargoes versus ships. The entire dry bulk sector is on fire as a result of other factors besides Vale alone, such as very few deliveries on the supply side and peak scrubber retrofits during the third quarter. Rates are so high right now that some dry bulk shipowners would earn half their market capitalizations in 2020 if they stayed at this level. (TradeWinds – 16 Aug 19)

We find it highly encouraging that rates have rebounded and remain at attractive levels ahead of the strong season. This reflects a tight market balance, in our view, and with more iron ore supply coming to the market and vessels being taken out of service for scrubber installations, we continue to expect a strong H2 for dry bulk shipping. (Arctic Shipping – 21 Aug 19)

We estimate the average speed of the Cape fleet is nearing 11 knots, which is up 5% from 10.3 in April and marginally below the speed in January prior to the Vale dam disaster. The responsiveness of the dry bulk fleet to the prevailing market conditions has proved invaluable this year. Roughly 90 MMT run rate annual Brazilian iron ore volumes were removed from the shipping market at a time when Australia struggled to keep up iron ore exports. The detrimental impact on trade volumes was softened by shipowners hitting the breaks, and despite iron ore trade volumes still below last year the Capes managed to reach the highest rates seen since 2010 other than December 2013. The number of Capes retrofitting scrubbers rose from 17 (1% of the Capes fleet) in Q1 to 71 in Q2 (5%) and further to 97 in Q3 (6%) as rates went from USD8.6k/day to USD11.4k/day and USD29.4k/day. The latest numbers for October and November show just 9 and 10 according to Clarksons data, but an impressive 100 are currently booked for December that are likely to be spread out over the coming months ahead of the implementation of IMO 2020 which would bring Q4 to 119 retrofits (8% of the Cape fleet), before an additional 51 (3%) in Q1 2020. Our freight rate forecasts for the Capes in 2020 are USD18.2k/day and the FFA market is expecting USD16.0k/day, both telling a more sobering tale than the recent bull-run. (DNB Markets – 4 Oct 19)

Spot charter rates started very poorly in 1Q19 but rallied in 3Q19. In the first 9 months of 2019, the Baltic Supra TC index averaged 9,695 USD/day, -14.8% y-o-y, whilst the Baltic Handy TC index averaged 6,867 USD/day, -19.4% y-o-y. Indicative 1-year time charter rates in Sep were estimated at about 11,250 USD/day for a Supra, -7.8% y-o-y, and about 9,650 USD/day for a Handy, -1.8% y-o-y. (Banchero Costa – 16 Oct 19)

Key Supply Side Developments:

Supply Side developments in the world bulker fleet paint a rather pessimistic picture. We started 2019 with 840.82 MDWT and have increased to 865.26 MDWT by the end of Q3 for a 2.91% net fleet growth. A further 1.8% (15.65 MDWT) is scheduled for delivery in the balance of 2019 and another 5.83% (50.46 MDWT) scheduled for delivery in 2020. If we were to apply a slippage factor of 5% (actual slippage to end of Q3, was 5.84%) to these scheduled deliveries and further assume that scrapping reaches 10 MDWT (5.15 MDWT was scrapped to end Q3) we would be left with a net fleet growth of 4.1% (+34.46 = 875.28 MDWT) in 2019, net fleet growth of 4.42% (+38.67 = 913.95 MDWT) in 2020 and net fleet growth of 1.42% in 2021 (+12.96 = 926.91 MDWT).

What others' say about Supply Side Developments:

With another 40 potential Kamsarmax new-buildings on the nominal order book for Q4, deliveries in the Panamax sector look set to be at their highest level since 2014; net fleet growth also seems likely to top 5% by the end of the year as current earnings give little incentive for owners to scrap tonnage, despite changes in regulations governing ballast water treatment and emissions. Clearly all this recently delivered additional tonnage plus the further 128 vessels on the 2020 orderbook may provide a challenge on the supply side to the Panamax market going forward, however with

the prospect of China agreeing this coming week to certain agricultural concessions (including further tariff free imports of soybeans from USA) and the likelihood that Chinese annual import quotas on coal may be relaxed, there is certainly some cause for further optimism. By the end of Q3, there were 1,081 Kamsarmax and 896 conventional Panamax on the water. (Howe Robinson Research – 11 Oct 19)

Benchmark newbuilding prices in Sep were estimated at about USD 27m for a Supra, +0.0% y-o-y, and about USD 24m for a Handy, -2.0% y-o-y. Indicative 5-year old secondhand prices in Sep were estimated at about USD 17.6m for a Supra, -4.5% y-o-y, and about USD 16.3m for a Handy, -2.0% y-o-y. Deliveries in 2019 are expected to increase to around 190 units of 20,000-64,999 DWT, for a total of about 9.9 MDWT, up from 145 units/7.2 MDWT in 2018. In the first 9 months of 2019, we recorded the delivery of 137 units, for a total of 7 MDWT, +18% y-o-y in DWT terms. This included 75 units of 60,000-64,999 DWT (4.7 MDWT) and 57 units of 30,000-39,999 DWT (2.1 MDWT). Demolition activity in 2019 is expected to remain modest, with just about 15 units of 20,000-64,999 DWT, for a total 0.6 MDWT, slightly less than 2018, despite disappointing market conditions and the impact of the implementation of the ballast water and sulphur regulations. In the first 9 months of 2019, we recorded the demolition of just 9 units, for a total of 0.4 MDWT, -37% y-o-y from the 14 units in the same period last year. Net fleet growth for bulkers of 20,000-64,999 DWT is expected to accelerate to about 4% y-o-y in 2019, up from 3% in 2018. Contracting activity has been modest so far this year. In the first 9 months of 2019, only 48 units of 20,000-64,999 DWT were reported contracted, for a total of 2.5 MDWT (excluding back-dated Tier2 contracts). (Banchero Costa – 16 Oct 19)

Average vessel operating speeds have dropped significantly since 2008. The average speed across the world bulker fleet declined by 16% between 2008 and 2018. Capacity oversupply and generally tough market conditions following the financial crisis, high oil prices pre-2014, and new (more efficient) vessel designs optimized for slower speeds all had an impact. Today, the IMO 2020 regulations and the need for most of the fleet to move to compliant fuel in 2020 are upon us. With the premium for VLSFO over HFO currently projected at c.$240/t across 2020, the industry fuel bill is set to rise, and speed again could be critical to the potential mitigation of increased fuel bills. In fact, average speeds in the bulker sector is already down in the year to date by 1%. (Clarksons – 25 Oct 19)

Our read on Regulatory Pressures:

IMO 2020 and its possible impact on the geared Dry Bulk sector (10K to 70K DWT) where just 4% of ships by DWT are scheduled to fit Scrubbers with most owners (96%) sticking with compliant low sulphur fuel oil (LSFO). At the end of Q3, there were 311.64 MDWT of ships of which 32.16 MDWT were over 20 years of age. These older ships were designed and built between 1989 and 1999 when the average price of oil was just USD 19.7 per barrel. The average price of oil from 2000 to 2019 has averaged USD 61.8 per barrel with a peak of USD 147 per barrel reached in 2008. In the era of cheap oil ships were designed for power rather than for fuel economy. The reverse has been true since 2007 with power being sacrificed on the altar of fuel economy. From

1st January 2020, all ships will be forced to consume LSFO which will be much cleaner but certainly more expensive. To minimize this higher cost of LSFO, ships speeds will be slowed. As explained in the paragraph on Capes, any slowing down of ships reduces or tightens the supply of ships. Besides, the 10.32% of ships older than 20 years of age that consume more LSFO per day, as they were designed in an era of cheap oil, will find it increasingly difficult to get gainful employment, further tightening the already tight supply side of ships in the geared sector. One way or another, through increased scrapping of the older and more fuel-thirsty ships built 20 or more years ago or from slowing down of the younger ships to minimize the burning of higher cost LSFO, we would get a pleasant supply side dividend starting from January 2020 onwards. With the forward order book in the geared sector representing just 6.22%, new deliveries will not be able to match the reduction in supply due to increased scrapping and slow steaming. This will result in a tightening of the supply of ships between now and end of 2022 and would result in the market reacting strongly in favour of ship owners.

Others' read on Regulatory Pressures:

The new IMO regulations are designed to slash the amount of sulphur that ships release into the atmosphere. However, several companies are relying on a technicality or 'loophole' in the regulations in order to continue using the higher sulphur fuel oil and bypass the true intent of the new rules. These companies are installing exhaust gas scrubber systems to 'cheat' and avoid compliance with the sulphur limits. This allows unethical companies to avoid their environmental responsibilities. (Environmental Protection Alliance – 12 Aug 19)

Lawyers are set to be one of the main early beneficiaries from the start of the global sulphur cap with Splash receiving multiple reports from across the world of shipyards falling far behind in their scrubber retrofitting schedules. The retrofits have taken longer than anticipated with many owners and managers confiding that they have experienced unforeseen technical glitches as they get their exhaust gas cleaning systems installed ahead of the January 1 start of the sulphur cap. What was marketed as taking less than a month off-hire is now regularly seeing ships in Chinese yards waiting for up to 60 days to get the new funnel equipment installed. With installations entering their peak phase for the coming three months, delays are expected to worsen. Of concern for owners, some shipyards have committed to accept more scrubber retrofits than they can accommodate, which will most probably result in greater delays. (Splash247.com – 16 Aug 19)

Shipowners could be making a costly mistake if they take Middle East crude as the basis for calculating fuel costs under IMO 2020, according to a research report. Using low-sulphur crude to refine and blend marine fuel oil could slash the price spread between high-sulphur fuel oil (HSFO) and low-sulphur fuel oil (LSFO). China possesses ample stocks of naturally low-sulphur crude, and thus could be the missing factor in shipowners' scrubber calculations, Shanghai shipping analyst Liu Xunliang said. Liu calculated that the introduction of Chinese low-sulphur stocks for production of LSFO could deflate the spread to $100 per tonne. In that case, it would take around six years for the scrubber to pay for itself, which could be longer than the lifetime of the equipment. (TradeWinds – 20 Aug 19)

Oldendorff Carriers told TradeWinds that work on the 209,000-dwt Helena Oldendorff (built 2016) is expected to be completed soon. Pressure group Environmental Protection Alliance (EPA) had earlier claimed the scrubber system failed and flooded the engine. Oldendorff did not confirm this but said: "As scrubbers are not required until January 1, 2020, a scrubber failure now would not delay the vessel. (TradeWinds – 6 Sep 19)

Tsakos Energy Navigation is reporting delays in scrubber installations. The New York-traded gas and oil carrier told investors exhaust gas cleaner retrofits ahead of IMO 2020 were "longer than initially forecasted. Shipyards [are working] at full capacity to meet retrofitting requirements, which could keep longer a big part of the global fleet in shipyards, rather than trading". (TradeWinds – 6 Sep 19)

Leading climate change scientist Anders Hammer Strommen suggested greenhouse gas emissions from international shipping must be cut 50% by 2030 and reach zero by 2050 if global average temperatures were to rise no more than 1.5°C. The 50% cut is some 20 years earlier than agreed at the International Maritime Organization last year. Norway-based Mr. Strommen contributed on the Intergovernmental Panel on Climate Change that assessed the difference between a 1.5°C rise in global temperature over the next generation versus an increase of 2°C. He said a 2°C rise equated to once-a-decade summer when Arctic ice completely melted, accelerating global warming, versus a once-a-century summer of no ice under a 1.5°C scenario. (Lloyd’s List – 12 Sep 19)

Scrubber pipework is having to be replaced less than six months after installation because of corrosion problems that experts have told Lloyd’s List is almost impossible to predict, and not widely understood by either shipowners or installation teams. Several major classification societies are tracking an uptick in scrubber-related issues and while no class society is prepared to reveal hard numbers, experts within societies have confirmed there have been several instances of corrosion related to quality issues traced back to the installation. “Piping is being eaten by corrosion because it is handling acidic residue… the problems we are seeing are quite astonishing and the speed of the corrosion is like nothing I’ve seen before,” said Boud Van Rompay, chief executive of Hydrex, an underwater repair and corrosion specialist. (Lloyd’s List – 13 Sep 19)

For any company with a reputation to consider, the risks of switching fuels and being caught is likely to be a worse prospect than the potential fines in many countries. However, fines can be heavy: a cruise ferry that entered two fjords in Norway with sulphur values well beyond the limits was fined a record $80,000, and Chalos cites the US Coast Guard record of heavy fines in its policing of the country’s ECA. (TradeWinds – 16 Sep 19)

Bloom Energy Corp the fuel cell maker will collaborate with Samsung Heavy Industries, to develop cargo ships powered by fuel cells, which use an electrochemical reaction to generate electricity. Cargo ships typically burn heavy fuel oil. Bloom and Samsung estimate that powering a cargo ship with fuel cells, fed by natural gas stored on board, could slash emissions 45%. Switching to hydrogen would virtually eliminate them. (Bloomberg – 26 Sep 19)

Capes rates are at a 10-year high with weak PMI (China PMI and BDI 10-year R2 of 0.90) and weak iron ore volumes YTD YOY and in the past month YOY, showing the impact scrubber retrofits have on effective dry bulk supply growth (we calculate 1.7% annualized effect). (DNB Markets – 26 Sep 19)

We estimate that the fuel consumption and the carbon output of the world fleet is lower today (~820 MMT of carbon) than in 2008 (~1,000 MMT), despite moving 35% more cargo and there being 60% more tonnage on the water. The primary driver has been speed (down 15-20%, source Sea/net) but a new generation of fuel-efficient vessels have helped. We now grade around 30% of the world tonnage as "eco" and estimate these vessels produce ~20% less carbon. For example, based on the same voyage assumptions we use for our earnings calculations, a modern "eco" Capes produces ~85t of carbon per day compared to ~112t for a "non-eco". (Clarksons – 27 Sep 19)

Spread between HSFO and LSFO on 1st October 2019 at Rotterdam was USD 185 PMT, (+17); at Fujairah was USD166 PMT (-63); and at Singapore was USD 140 PMT (-11) (Banchero Costa – 1 Oct 19)

An average 12.6m dwt of the >100k dwt fleet was off hire over September, as we see scrubber retrofit activity intensify. At the end of September, we recorded over 14m dwt in yards, representing 4.1% of the trading fleet >100k dwt. The tonnage currently in yard is made up of 14 VLOCs and 55 Capes and is almost exclusively in shipyards in the Far East. Some of these yard visits are likely special surveys, but we believe a substantial portion of these ships are fitting scrubbers, with 92 days to go before January 1st, 2020. Through September, for cases where we suspect a scrubber is being installed the average time spent in yard for a VLOC was 26 days while for Capes it was 41 days, as some owners report delays in the retrofitting process. We expect this squeeze on supply to provide a healthy base to utilization through Q4 as more vessels leave the market to retrofit. (Braemar ACM – 2 Oct 19)

When vaping first came out it was a healthier, safer transition from smoking. And now we are learning it puts a lot more in your lungs, and it may lead to fatalities and sickness. When open loop scrubbers first came out some of the banks gave green loans for scrubbers because they wanted to be called sustainable lending banks. But nobody puts open loop scrubbers on their ships to clean the environment. They do it to capture a fuel spread for a period. They profit by putting sulphur and perhaps other toxic material in the water. (TradeWinds – 8 Oct 19)

New global rules forcing ships to reduce air pollution by using cleaner fuels will see more sulphur and nitrates dumped into the oceans, analysts and civil society leaders say. Closed-loop scrubbers keep most of the water used for sulphur removal onboard for disposal at port. Open-loop systems, however, remove sulphur coming through a ship's smokestack with water that can then be pumped overboard. "Were open-looped scrubbers ever a really good idea?" Bill Hemmings of the Clean Shipping Coalition told industry figures at the IMO's headquarters in London. "It's a bit of a blind spot, and the optics of it are not great," Alan Gelder, vice president of refining at consultancy

Wood Mackenzie, told Reuters. “Though some studies suggest the impact of open-loop scrubbing is going to be very small given the great volume of seas, which already contain many sulphates, what it’s doing is solving air pollution by producing a marine pollutant instead.” (Reuters – 21 Oct 19)

IMO 2020 happens to be a gamble. Most listed shipping companies have been politely pressured by their investors to order scrubbers. One important assumption in all these calculations has not so much been on the brilliant technology built into the scrubbers but a differential of roughly $200 per tonne between HFO and MGO. Having invested in a scrubber for a vessel, you are obliged to buy HFO. And you will buy it if it is somewhat cheaper than the only alternative, MGO. You may even buy it if it is occasionally a little more expensive than MGO because of operational costs associated with a change. In an almost perfectly inelastic market, the suppliers can then put the price of HFO as close to the price of MGO as they want. If there is a minimal price differential, ships with scrubbers will be supplied with HFO. The narrowing of the gap to $100 in September was an indication. A further drop to a $10 differential is more likely. But that may be just the theory. (TradeWinds – 22 Oct 19)

Ship equipment manufacturers have a new lucrative sulphur cap side business – repairing corroded scrubber apparatus. Hydrex, the Belgian underwater repair specialists, has detailed how it is handling a growing number of scrubber pipe repair cases with plenty of reports of corrosion leading to water ingress on ships in as little as six months of installation. Hydrex gave details of two shuttle tankers that were berthed in Rotterdam and Skagen respectively last December and experienced water ingress as a result of corroded scrubber cooling pipes. “This is an issue that we at Hydrex encounter regularly with our customers,” a spokesperson for the company told Splash. (Splash247.com – 23 Oct 19)

Our read of Trade Sanctions/Tariffs:

Possible resolution of trade sanctions and tariffs are reported almost daily in the mainstream media, with stock markets, sentiment and economic growth reacting positively or negatively depending on the spin that the negotiators and Trump put on the outcome of such meetings. The truth of the matter is that no one really knows when we will get to a partial or a complete resolution.

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.

Others' read of Trade Sanctions/Tariffs:

Does the trade war matter? China's exports rose by 3.3% in July, much more than expected, while exports to the US fell by 6.5%. It's possible the impact of the trade war is moderating, or that it was over-stated to begin with thanks to some seasonality. Or maybe we've been overestimating the impact of the trade war this whole time. Laban Yu, the Jefferies analyst, is digging into that last possibility. He sees the resilient export figure as illustrative of some longer-term trends in China: namely, a shift from an export-led economy (exports fell by 16% back in 2009, when they accounted for almost a third of China's GDP), plus a long-running reduction in exports to the US. He points out that while year-to-date exports to the US have fallen by $21 billion, that figure has been more than offset by increased exports to Europe, Africa and other parts of Asia. Or as he puts it, even after the US raised tariffs to 25% in May, we've yet to see a "discernible effect." (Bloomberg – 12 Aug 19)

S&P Global Ratings' chief economist Paul Gruenwald wrote in early July that the so-called second-order effects of the trade dispute, which were working through the indirect channel of confidence rather than directly through tariff-related price increases, are new. "Where once we had identified them as a downside risk, they have now begun to move into our baseline forecast. These risks are slower moving and cumulatively larger than the first-round effects," Gruenwald said. S&P Global Ratings expects global GDP growth to slip to 3.4% in 2019 and 3.6% in 2020, from 3.7% in 2018. (Platts – 4 Sep 19)

The escalating US-China trade war is unwinnable by either side, according to new research shown exclusively to TIME. The bruising trade tussle has roiled bourses and upset supply chains for over a year, hastening fears of a global recession. Nevertheless, there is no sign of a resolution in sight, with Trump tweeting on Aug. 23, "We don't need China and, frankly, would be far better off without them." Economists at the China Europe International Business School (CEIBS) and Open University of Hong Kong disagree. A new number-crunching analysis says only China has the manufacturing capacity to satisfy the US's huge appetite for products, meaning American consumers must continue to buy from China or US retailers will suffer. Conversely, American demand far outstrips the rest of the world combined, meaning China cannot replace its American customers with those elsewhere for the foreseeable future—or at all. "Replacing the [US-China trade] relationship with any other country is impossible in the short to medium term and possibly in the long term also," says Professor Bala Ramasamy, associate dean at CEIBS. "It is the relationship between a very large and insatiable market and a very well-oiled production machine. Our research findings may offer a basis on which to cool recently increasing tensions and rhetoric". (Time Magazine - 6 Sep 19)

Privately run Chinese firms bought at least 10 boatloads of US soybeans on Thursday, the country's most significant purchases since at least June, traders said, ahead of high-level talks next month aimed at ending a bilateral trade war that has lasted more than a year. The soybean purchases, which at more than 600,000 tonnes were the largest by Chinese private importers in more than a year, are slated for shipment from US Pacific Northwest export terminals from October

to December. The purchases were another indication that trade tensions between Washington and Beijing could be easing, after hitting a low last month when China suspended all US farm product purchases in response to threats by President Donald Trump to impose more tariffs on Chinese goods. (Reuters – 13 Sep 19)

China has granted new waivers to several domestic state and private firms exempting them from retaliatory tariffs on soybeans imported from the US, Bloomberg said, citing unidentified sources familiar with the matter. It said the waivers would apply to between 2 MMT and 3 MMT of US soybeans. Some of the companies have already bought at least 20 cargoes, or about 1.2 MMT of soybeans, on Monday, it added. (Reuters – 24 Sep 19)

Some steelworkers who cheered President Donald Trump's tariffs on foreign steel last year are now being laid off, an unintended consequence of his America First policy as United States Steel Corp reacts to sagging demand from automakers reeling from higher steel prices. Steel prices rallied following the tariffs imposed in March 2018, feeding optimism in US steel towns. But higher prices later hurt demand from automakers already squeezed by slowing demand for traditional gasoline-powered sedans. Trump's tariffs still enjoy support in the Rust Belt communities that helped elect him in 2016. But US Steel's layoffs, first reported by Reuters last month, demonstrate some of the risks he faces as he seeks re-election in 2020. (Reuters – 26 Sep 19)

Prior to the latest US-China trade talks, August had seen further escalation in the dispute, with both countries imposing new tariffs and raising previously introduced tariffs. Estimates of the direct impact of the 'trade war' on global seaborne trade have increased over the year so far but are continuing to be moderated by some clear substitution trends and limits to price sensitivity. The latest estimates suggest that the trade war is on track to reduce global seaborne tonne-mile trade by a 'manageable' 0.5% in 2019 (mainly impacting the dry bulk and container sectors), up from estimates of 0.3% in early 2019. That is still a less significant impact than other factors (e.g. the Vale dam collapse) and could be limited further if trade relations improve significantly in the rest of 2019. Nevertheless, the dispute has clearly negatively impacted the world economy and global investor sentiment, with increased trade tensions one key contributor to further downgrades to the world economic outlook. (Clarksons – 18 Oct 19)

Key Demand Developments:

PROSPECTS over the next 12 months can be better understood if one were to examine the macro environment. We have given you a selection of such information from various publicly available sources.

China

China's GDP growth numbers slowed to 6% year-on-year in the third quarter of 2019, after a 6.4% growth in the previous quarter. (National Bureau of Statistics of China – 23 Oct 19)

China's iron ore imports for the first nine months at 785.6 MMT, dipped 2.12% from year-ago levels. (Reuters – 14 Oct 19)

China boosted coal imports in the first nine months of 2019 by 9.2% to 249.4 MMT over the previous year. (Reuters – 14 Oct 19)

China, in the first nine months of 2019, mined 2,740 MMT of crude coal, up 4.5 % year on year. (National Bureau of Statistics of China – 21 Oct 19)

Chinese steel production in the first nine months was 746.8 MMT, up 8.04% y-o-y. (Reuters – 23 Oct 19)

China's steel export in the first nine months of 2019 slowed significantly and was down 7.5% year-on-year to 49.3 MMT. (Metalbulletin – 15 Oct 19)

Iron Ore stocks at Chinese ports troughed in June this year at 115 MMT after a 23% stock draw following the dam disaster in Brazil and supply disruptions out of Australia and have since increased by 10% as imports have again picked up. However, YOY growth in pig iron production was above 11% through Q1 but has since dropped to 5.8% in Q2 and July noted 0.3% YOY growth. Similarly, Chinese steel production growth for July was also weak at 3.9% YOY compared to H1 averaging above 9% growth. (DNB Markets – 6 Sep 19)

Chinese coal production surged in YOY terms for Jun-July at 15% and continued strong with 6.8% for August landing YTD growth at 5.7%. YTD electricity growth has been 5.0%, but strong growth in renewable energy sources has placed thermal electricity production growth at 2.3% so far this year. This has replenished Chinese coal stocks and put downward pressure on coal prices in recent months. (DNB Markets – 16 Sep 19)

China is on track to defy expectations and produce a record steel output this year of just shy of 1bn tons. China produced 664.87m tons of steel in the January to August period, up 9% year-on-year. On an annualized basis, the 664.87 million tons for the eight-month period is equivalent to a potential 997 million tons for the year. (Splash247.com – 20 Sep 19)

Chinese crude steel production increased 2.4% MoM (and 8.6% YoY), with 87.25m tonnes produced in August (85.22m produced in July). Steel production has remained high and China's manufacturing PMI rose to 50.4 in August from 49.9 in the previous month. China has relaxed its infrastructure project funding rules in effort to maintain growth in its economy. It achieved this by allowing the sale of 'special local government bonds' to fund projects that meet official investment criteria. (Braemar ACM – 25 Sep 19)

Beijing Daxing International Airport has opened, just in time for the People's Republic of China's 70th birthday on Oct. 1. The starfish-shaped, 80 billion Yuan ($11.2 billion) facility is designed to

eventually handle more than 100 million passengers a year. Hailed by state media as a “new gateway” to the country, it’s symbolic for President Xi Jinping, who faces a raft of challenges, including a trade war with the U.S., a slowing economy and mass protests in Hong Kong. Xi has identified aviation as a key strategic industry. China wants to have 450 commercial airports by 2035, almost double the number at the end of 2018. (Bloomberg: Five Things to Start Your Day – 26 Sep 19)

Iron ore and Coal make up around three-quarters of China’s bulk imports. But behind the scenes there has been some pretty decent growth across the other bulk goods that China imports, even as the trade war continues and the headline economic numbers hit multi-year lows. The data coming out of China so far this year has presented a bit of a conundrum. GDP and industrial production growth have fallen to decade lows, as the trade war and broader economic woes have suppressed activity. And the manufacturing PMI remains below 50, indicating the sector is contracting. But at the same time steel, aluminum and electricity production have all been hitting all-time highs, and imports across a broad range of mineral and agricultural bulk products have been accelerating since the second half of last year. Excluding the bauxite trade (a lot of which is on Capes coming from Guinea) combined imports for the other nine commodities (Steel, Maize, Sorghum, Alumina, Manganese concentrates, Copper concentrates, Nickel ore, Soybeans and Cement) through the first seven months of this year were up 5% year-on-year. Slower growth in relative terms than had been seen in the past, but not bad considering the economic context. A new trade that has developed over the past two years has been Chinese imports of cement. This was almost non-existent prior to Q4 2017 but has now picked up to an average 1.7 MMT a month through the first half of this year, peaking at over 2.5 MMT in May. Most of the volume has come from Vietnam, though there is some longer haul trade coming in from the UAE. This trade marks an interesting development. Cement production is energy intensive and polluting, and production in China has stalled over the past few years as pressure has come from above for Chinese industry to reduce its environmental impact. This new trade could represent China outsourcing its cement production to Vietnam. As it stands imports are a drop in the ocean compared to domestic cement production (imports of 21 MMT in the latest 12 months we have data for, compared to production of 2.3 BMT) so it represents a huge potential growth market should it continue. Vietnam is already ramping up its coal imports, which doubled in the first 7 months of the year to over 23 MMT. Further expansion of cement production and exports would likely require additional coal imports, on top the growth created via power generation. In total that could see imports of up to 100 MMTPA of coal by 2030, ten times last year’s level. What is behind this growth in Chinese imports that runs counter to the picture painted by the broader economic activity? Part of the explanation is in the way that economic stimulus has been applied to the economy by the government. In the past, investment booms in residential property have spurred investment and consumer behaviour elsewhere, helping boost GDP and the broader economy (at the cost of higher debt). But this year the focus of stimulus has been more specifically on some financial measures (e.g. bank reserve ratios) and the development of infrastructure. The focus on the latter would help explain why industrial demand has kept up (steel production, cement, ore imports) but we haven’t seen the economic performance of the past that came with residential construction and investment. With overall imports having performed relatively well, it’s easy to overlook the impact of the US-China trade war, but it is

clearly there when looking at impacted trades. Sorghum was one of the first victims of the escalation in tension between the US and China, quickly followed by soybeans. Sorghum is used in China as animal feed and to produce baijiu (a locally produced white spirit), with total imports in 2017 of 5 MMT, 4.8 MMT of which came from the USA. In early 2018 trade was hit by a Chinese anti-dumping investigation and for the past 14 months imports all but disappeared. But it has started to make a return, with 200kt shipped from the US to China in July, with trade coming back as part of the increased agricultural purchases China has committed to as part of its negotiations with the US. More important for the market will be if we start to see the same happening in soybeans. China's trade negotiating team has apparently offered to boost Chinese purchases of US beans to 30 MMT, up 50% from current commitments, as part of its efforts to reduce tension and perhaps avoid the next hike in tariffs that come in on October 15th. That would be a positive step for the market but would still leave a shortfall relative to volumes seen in 2016 and 2017. (Braemar ACM – 10 Oct 19)

Australian iron ore exports are now expected to end the current year with roughly the same total volumes as in 2018. This is quite surprising, given how turbulent a year this has been for the iron ore markets. The Brumadinho dam disaster in Brazil in January 2019 led to significant shortages of iron ore on the market, and led to a spike in iron ore prices, which essentially doubled between January and June. One would have expected Australian miners to capitalize on this opportunity, but a mix of limited spare capacity, weather-related disruption in North-West Australia, and poor demand from traditional buyers have prevented any significant gains in volumes. In the first 9 months of 2019 Australia exported 634.0 MMT of iron ore, which was down -2.0% year-on-year. In fact, export volumes in the first quarter of 2019 were down by as much as -7.5% year-on-year, to 189.9 MMT. The main problem was the hit by Tropical Cyclone Veronica in March 2019. As a result of the disruption to the mining and export operations, Rio Tinto estimated that its iron ore production would suffer reductions of approximately 14 MMT during 2019. In March 2019, Australia managed to export just 57.6 MMT of iron ore, down -18.6% year-on-year compared to the same month last year. Exports have been steadily recovering since then. Between April and September 2019, Australia exported 444.1 MMT of iron ore, which was +0.5% compared to the same period last year. Of the total 634.0 MMT exported in January-September 2019, as much as 511.8 MMT (81%) were shipped to Mainland China. About two-thirds of these volumes, and about half of loadings, have been done on Capes or VLOC ships. The biggest cut this year was to volumes to Japan, which declined by -9.2% year-on-year. Shipments to China declined by -1.2% year-on-year, whilst volumes to South Korea increased marginally this year by 3.6% year-on-year. (Banchero Costa – 11 Oct 19)

September trade data from China shows the third highest volume of iron ore imports of all time at 99.4 MMT, 6.3% above last year and taking YTD import growth to -2.2% after a tough H1 (-5.7%). At the same time, we see signs of iron ore stock levels at port increasing, as they have built 13% since the trough in June. September exports from Brazil were low, and down 6.8 MMT or 20% from last year, still showing signs of weakness post Vale's dam accident. Vale also reported Q3 production numbers today at 86.7 MMT, which is 35% up from Q2 but still 17% below Q3'18 which means the first nine months total production is down 21% YOY. It released guidance on

resumption of capacity of 12 MMTPA at the Vargem Grande complex (5 MMTPA in 2019 and another 7 MMTPA in 2020) and remaining capacity of c50 MMTPA to come back online in 2020 (c23 MMTPA) and 2021 (c25 MMTPA). The September surge in iron ore imports helped drive Capes spot rates to average USD33k/day, in addition to disruptive effects from scrubber offhire. We estimate 42 Capes got scrubbers retrofitted in August and another 31 in September. We still see 116 Capes scheduled for retrofit during Q4 (up from 100 in Q3) which we believe should keep freight rates elevated into 2020, before the effects are reversed (51 in Q1 2020 and just 7 in Q2). (DNB Markets – 14 Oct 19)

China's coal imports in September fell by 8% MoM but were still 20% higher than September volumes last year. This brings Jan-Sep coal imports 9.8% higher YoY to 250 MMT, despite China's mandate of zero YoY growth in coal imports being in place. Sliding seaborne coal prices have encouraged end-users within China to restock with imports. If the zero-growth policy is adhered to, this leaves only 30 MMT of import quotas through Q4, averaging just 10 MMT per month. This compares with average monthly imports of 28 MMT year to date. There has yet to be an official statement from Beijing on how strictly quotas will be enforced, though it is looking increasingly unlikely that zero volume growth will be achieved. (Braemar ACM – 14 Oct 19)

Chinese iron ore imports totaled 99.4 MMT for September, an increase of 4.8% MoM and 6.3% YoY. This brought imports over Q3 19 to 285 MMT, the highest quarterly volume ever recorded. This comes amid sustained high levels of steel production and restocking of iron ore inventories. Meanwhile port stocks have edged higher 4% MoM to just over 131 MMT. We see this as partly down to mills making up for lost imports during weather related supply issues at the start of the year. Imports have rebounded strongly from June's low of 75.1 MMT imported. YTD, imports are still down 2.2%. (Braemar ACM – 22 Oct 19)

China, the world's top coal buyer, is on track to boost imports of the fuel by more than 10% this year, traders and analysts said on Tuesday, countering earlier expectations that shipments would be capped by Beijing at the same level as 2018. China's coal imports have already surged 9.5% in the first nine months of 2019 to 250.57 MMT, customs data shows, and at least 18.84 MMT of seaborne coal are due to arrive this month. Last year's total was 281.23 million tonnes. "Signs are emerging of a modest recovery in coal import volumes into China, which has led to recent market speculation that the Chinese government may allow a relatively modest uplift in annual imports to around 300 MMT," said Whitehaven Coal Ltd, Australia's largest independent coal producer, in a note on Tuesday. Energy consultancy IHS Markit expects that China may bring in around 320 MMT of coal this year. Some Singapore-based coal traders forecast Chinese coal imports could reach at least 305 MMT. (Reuters – 22 Oct 19)

China on Tuesday offered 10 MMT of tariff-free quota to major Chinese and international soybean crushers to import soybeans from the United States, according to two people briefed on the matter. The quota to import US soybeans was offered to state-owned crushers, privately owned crushers and major international trading houses with crushing plants in China at a meeting called by the state planner, said the sources who were briefed by people that attended. The meeting comes after

US President Donald Trump said China had agreed to buy up to $50 billion of US farm products annually during trade talks earlier this month. (Reuters – 22 Oct 19)

China's hog apocalypse may be making a turn for the better. The country's larger scale pig farms are now beginning to rebuild their herds and might see a recovery in their number of sows by as early as next year, according to government researchers. A pickup in pork production would be welcome relief for local consumers, who've seen the price of China's staple meat double. The international impact could be significant as well. China's shortage has already fueled a surge in U.S. exports and pushed up prices from Auckland to Vancouver. But with a possible recovery in herd sizes still off on the horizon, supplies remain constrained and prices high. (Bloomberg – 25 Oct 19)

Americas

Brazil's iron ore exports rose 16.6% in July from the previous month to 34.3 MMT, the highest level in nine months, as Vale resumed production at its largest mine in the state of Minas Gerais, official data showed on Thursday. July's exports were the highest since October 2018, when Brazilian foreign sales of iron ore reached 37.2 MMT, according to data compiled by the Foreign Trade Secretariat (Secex). Brazilian ore exports were severely hit this year by the breach of a Vale ore tailings dam in Brumadinho, in Minas Gerais, on Jan. 25, which led to several mines being closed for safety reviews. Vale, which accounts for most of the country's exports, was authorized in June to restart work at Brucutu, its main mine in Minas Gerais, with a capacity of 30 MMT per year. Vale expects the increase in exports, amid higher prices, to contribute to a recovery in the third quarter, after the company suffered two quarterly losses in the first half of the year. (Reuters - 1 Aug 19)

Brazilian corn exports shot up in July to 6.3 MMT, a monthly record, and a massive 5.1 MMT more than In July 2018. Drought limited last years' Brazilian corn crop to 82 MMT but with more favorable climatic conditions this season the harvest is expected to be around 100 MMT. Brazil's largest export market is Iran at 3.5 MMT (up 0.4 MMT y-o-y) but demand from Asia has dramatically increased. Strong demand for Brazil's new crop has been responsible for pushing up fob corn prices from $3.80 per bushel in mid-May to a yearly high $4.79 this week but this is still nearly 40 cents cheaper than USA prices enabling Brazil to also make inroads into Atlantic markets. Line ups suggest Brazilian corn shipments for August may well be equally strong which is positive for the sub cape market. (Howe Robinson Research – 12 Aug 19)

After two boom years, America's factories are starting to suffer. Rising uncertainty has put a damper on capital expenditures, and a range of data points are starting to look ugly. From his trade policy to tax cuts and deregulation, President Donald Trump's grand economic vow was to bring factories home. But as he bids for a second term there are signs, he may have shot his own manufacturing recovery in the foot and undermined his own best argument for reelection — a strong economy. (Bloomberg – 10 Sep 19)

After a bumper harvest both Argentinian and Brazilian corn exports have spiked over the past few months. For Argentina this has culminated in July's shipments being a monthly record at 4.2 MMT. Argentina is one of the countries together with Brazil and Ukraine to take advantage of a sharp fall in USA corn exports (down 14.2 MMT at 29.3 MMT in the seven months to July) as unattractive global prices and logistical disruption from flooding in the mid-west and issues with the Mississippi River draft saw a larger proportion of their crop absorbed domestically. Shipments to Asia are up strongly at 8.6 MMT. Exports to the Middle East have also increased to 1.94 MMT. Argentinian corn shipments within the Atlantic are largely carried on Handy/Supra tonnage principally due to port limitations in Algeria and Morocco, whilst a significant amount of cargo to Egypt is transported on larger Ultramax vessels totaling 5.5 MMT. Smaller vessels have also carried most of the short haul cargo to Peru and Chile totaling 2.2 MMT, leading to shortage of tonnage and inflated freight rates ex East Coast South America in July-August. Although corn exports from Argentina look set to remain strong in September and into October, shipments usually taper off rapidly in November/December, though with Argentina's current economic crisis (the OECD recently predicted GDP at minus 2.7% this year) and a devalued Peso, Argentina will be keen to export every available ton of surplus corn. (Howe Robinson Research – 20 Sep 19)

Corn exports from South America have hit record levels this year, with volumes already surpassing last year's total. This has displaced some supply from the US and has offset the dip in soybean trade due to African Swine Fever (ASF). Following a record 2018-19 corn harvest, Brazil and Argentina have shipped a combined 49 MMT of corn over the first nine months of the 2019. This already tops total exports over 2018, which were 42 MMT, and YTD, marks a 75% YoY increase according to AIS data. This contrasts with what we have seen in the soybean market this year: Soybean volumes out of South America are down 8% YoY as demand from China has been hit by ASF. Corn accounted for 30% of South American Agri bulk exports over Jan-Sep this year, versus 18% over the same period in 2018. By switching the focus from soybeans, Brazil and Argentina have boosted agricultural sales to destinations other than China. Despite the dip in soybean trade, surging corn exports have pushed total Agri bulk shipments from Brazil and Argentina 8% higher YoY. Increased demand for ships from South America has been benefitted all the bulker segments in the grain trade, drawing on tonnage in the region. So far this year Handy and Supra ships loaded 228 more cargoes than last year, with volumes jumping 48% YoY to 21 MMT. Strong corn supply from South America weighed down on export prices there, pricing out supply from the US. Over Jan-Aug, exports from the US were 17 MMT, down 41% on the same period last year. This year we saw key US export markets such as Japan and South Korea switch to competitively priced Brazilian or Argentinian corn during the US' seasonal exporting period. Shipments to East and South East Asia from ECSA over the first 8 months of this year reached 14.6 MMT, a 230% YoY jump. Meanwhile US shipments to these countries halved over the same period, standing at 7.4 MMT. Amid the spread in corn prices across the Americas, we even saw a handful of Panamax and Ultramax cargoes making their way from Brazil to the US, despite it being the largest producer of corn globally. However, with Asian buyers replacing these volumes with South American supply, we see an upside for the bulker fleet. Supply from the Atlantic basin outpacing that of the Pacific means that corn being shipped to these countries is travelling greater distances and generating more tonne-mile demand for the fleet. 2019 has also been a bumper year for Ukrainian

corn exports, which have almost doubled YoY to 25 MMT over Jan-Sep 2019. These extra shipments from the Black Sea have largely headed to Ukraine's traditional trading partners in the Mediterranean and Northern Europe, providing a lift to regional trade. We also recorded an uptick in long-haul Ukrainian corn shipments to China, which have surpassed 3 MMT so far this year, a 57% YoY increase. US and South American corn prices have aligned in recent weeks, and US supply is again competitive in the market. Swelling stocks in the US are weighing on prices and Brazil and Argentina's corn sales are slowing as the soybean planting season commences. As such we expect US exports to pick up over the next few weeks, though volumes will likely remain below average for the season. (Braemar ACM – 17 Oct 19)

Asia

Indonesian coal exports have been very strong the first half of 2019. Between January and June, Indonesia exported an impressive 228.5 MMT (+8.8% y-o-y), which is their largest first half exports of all time. This compares to 210 MMT over the same period last year. South Korea's coal fired generators remain under pressure on multiple fronts as the government is taking measures to improve air quality, nuclear generation is returning, and overall power production is on a downturn. Consequently, coal's share in the energy mix has dropped by 14% during the first half of 2019 compared to same period last year, which is why we see such a notable drop in imports. The second half of 2019 looks far more uncertain for Indonesian coal exports. China, which is determined to keep import levels same as last year's 281mt, remains a wildcard. With no sign of increased appetite from South Korea, it is unlikely that this potential loss will be recovered by strong Indian and South East Asian second half imports. However, if the current export trend continues, Indonesia looks to outstrip last year's total of 429 MMT and make 2019 Indonesia's greatest export year of all time. (Howe Robinson Research – 16 Aug 19)

Indian Prime Minister Narendra Modi wants a $5 trillion economy by 2025. But the country's slowdown and a simmering shadow banking crisis mean that target is at risk and global investors are heading for the exit. Growth hit 5% in the three months to June: The weakest since March 2013, and well below the 8% plus annual expansion needed to achieve Modi's 2025 goal. Unemployment at a 45-year high has hurt demand for everything from soaps to 7-cent cookies, while external shocks from trade wars to surging oil prices are exacerbating the economy's woes. "For the economy to reach $5 trillion, it will take the types of reform that were long promised: massive reductions in regulations, streamlining of labor laws, privatization of state entities, investments in infrastructure," said Vivek Wadhwa, a distinguished fellow and professor at Carnegie Mellon University's College of Engineering at Silicon Valley. (Bloomberg – 19 Sep 19)

South Korean coal imports were running significantly below expectations in the first half of 2019, but now appear to be recovering quite strongly in the third quarter of the year. In the first 6 months of 2019, South Korea imported 59.4 MMT of coal, including both thermal and coking grades. This was a disappointing -4.9% year-on-year from the 62.4 MMT which arrived in the same period of 2018. However, the last two months – July and August – have shown significant improvement. In these two months, the nation imported 23.6 MMT of coal, up +8.6% year-on-year from the same

two months in 2018. The total for the first 8 months of 2019 is hence 83.0 MMT, just -1.3% year-on-year, and if current trends continue, we could even see 2019 end roughly in line with last year. In 2018, total coal arrivals to South Korea reached 124.7 MMT, which was -4.1% down on the record 130.0 MMT of 2017, but still nevertheless higher than the 123.1 MMT of 2016. The reasons for the poor activity in the first half of the year stem from both a weak economy in South Korea this year, and renewed government efforts to tackle air pollution in the country. South Korea's trade-dependent economy has been battered by falling exports, which tumbled a worse-than-expected 9.4% in May, a sixth-straight drop, as slowing global growth, a trade spat with neighbour Japan, and a downturn in the semiconductor industry take a toll on Asia's fourth-largest economy. However, the Bank of Korea still expects the economy to recover in the second half of the year and expand 2.5% in 2019. (Banchero Costa – 20 Sep 19)

Indonesia's decision on 2nd September to bring forward an export ban on nickel ore from 2022 to the end of this year will have significant implications for this important trade into China. In the 8 months to August, China has imported 12.3 MMT from Indonesia up from 9 MMT this time last year and accounting for almost all the incremental growth in this trade. Prices for nickel ore have risen 15% since the Indonesian announcement but though this trade will be active for the balance of the year, it is unlikely that China's largest supplier, The Philippines, can make up anything like the 18 MMT expected to be exported from Indonesia to China this year. The Philippines annual exports have been static for the past 4 years at around 30 MMT after record shipments 36 MMT in 2014 and though officials expect shipments to increase by 2.5% in 2020, this will only be a fraction of what is required by China's burgeoning stainless steel industry that consumes around 70% of all imported nickel ore. As this trade is predominantly carried on Supras the implications of a potential shortfall of around 300 shipments may have a potentially negative impact on rates in the pacific in this sector during 2020. It will be most keenly felt in Q1 when due to the rainy season The Philippines ships very little nickel ore; only 2.5 MMT for the whole of Q1 for the past two years, compared to the 4 MMT shipped in August this year. (Howe Robinson Research - 27 Sep 19)

Despite all the doom and gloom about the coal industry and about the world economy in general, it is interesting to note how Indonesian coal exports have kept on growing steadily. In the first 9 months of 2019 Indonesia exported 291.8 MMT of coal (excluding Lignite). This was 8.5% more, or 22.9 MMT more, than in the same period last year. Most of the growth was observed between March and May, with the month of May seeing a record of 36.4 MMT. Shipments to China and India kept growing this year. In the first 9 months of 2019, Indonesia sent 91.1 MMT of coal to China, up 9.3% year-on-year. China was the destination of 31.2% of Indonesia's coal shipments this year. Another 13.8 MMT of coal were shipped to Taiwan, which was an increase of 18.9% year-on-year, with Taiwan accounting for 4.7% of volumes this year. In the same period, 64.4 MMT of coal were shipped from the archipelago to India, up 6.1% year-on-year. India was the destination of 22.1% of Indonesia's coal exports. Of the total volumes exported so far this year by Indonesia, 26% were shipped on Panamax vessels, 35% on Supramax or Ultramax vessels, and 29% on vessels smaller than 50,000 DWT. Only 10% were shipped on Post-Panamaxes or Capes. Indonesia's 2018 coal production stood at 528 MMT, up from 461 MMT in 2017, data from the

country's Energy and Mineral Resources Ministry showed. The realised output surpassed the ministry's production target of 507 MMT after the government raised coal output quotas. Domestic use of coal rose to 115 MMT last year from 97 MMT in 2017. (Banchero Costa – 27 Sep 19)

New outbreaks of African Swine Fever (ASF) have been reported across Vietnam, the Philippines, South Korea and several other Asian countries, according to the UN Food and Agriculture Organization. Vietnam, which first reported outbreaks in February, has seen cases across all provinces, with several fresh instances noted in September. 5 million pigs have been culled so far in Vietnam, which is likely to put a dent in the country's soybean demand. ASF news is more encouraging in China, where new reports of ASF are significantly down from the first half of the year, though an estimated 39% of pigs have been culled to achieve this. As China invests in restoring pig numbers and farms are consolidated, we could see a recovery in Chinese soybean import growth from the world's largest soybean consumer next year. (Braemar ACM – 2 Oct 19)

Indian coal imports are poised to reach new heights in 2019 following a record Q2, predicts Simpson Spence & Young (SSY). The shipbroker said this 'underlines their importance" as a driver of seaborne trade across various dry bulk carrier sizes. Australia has been India's dominant supplier of coking coal in 2019, while Indonesia has been the main supplier of steam coal with over 60%. Meanwhile, South Africa has emerged as a growing supplier of steam coal to Indian with a 25% share of the market, with Russia assuming a smaller, but rapidly expanding, share. Key factors likely to contribute to India's increased appetite for coal imports are two-fold: monsoon rains and strikes by coal workers, according to SSY. State-owned mining company Coal India Ltd (CIL), which is responsible for around 80% of domestic coal output, reported September production was down by some 23.5% to 30.8 MMT. "Reports indicate that heavy rains have hindered operations at a number of high-yield open-cast mines, and an incidence of severe flooding at the 30-35 MMTPA Dipka coal mine – one of the country's largest open-cast facilities – is expected to hamper output for at least one month, according to estimates from owner CIL," said SSY. (TradeWinds – 21 Oct 19)

Coal trade in the Pacific basin has been generally positive so far this year, and this has benefitted not only Indonesian exporters but also Australia, although to a slightly smaller extent. In the first 9 months of 2019 Australia exported 290.6 MMT of coal (including both metallurgical and thermal). This was +3.5% year-on-year, i.e. 9.8 MMT more than in the same period last year. As such, Australia has now fallen marginally behind Indonesia, whose coal exports jumped by 8.5% to 291.8 MMT in the first three quarter of this year. (Banchero Costa – 25 Oct 19)

Rest of the World

Financial markets are often accused of complacency. However, the mood just now is not complacency but anxiety. And it is deepening by the day. Angst is evident elsewhere, too. The safe-haven dollar is up against many other currencies. Gold is at a six-year high. Copper prices, a proxy for industrial health, are down sharply. Despite Iran's seizure of oil tankers in the Gulf, oil prices have sunk to below $60 a barrel. The true problem is that firms and markets are struggling

to get to grips with uncertainty. And that is the result of the trade war between America and China. This, not tariffs, is the greatest harm from the trade war between America and China. In July the Federal Reserve lowered interest rates for the first time in a decade as insurance against a downturn. It is likely to follow that with more cuts. Central banks in Brazil, India, New Zealand, Peru, the Philippines and Thailand have all reduced their benchmark interest rates since the Fed acted. The European Central Bank is likely to resume its bond-buying program. Three warning signals are worth watching. First, the dollar, which is a barometer of risk appetite. The more investors reach for the safety of the greenback, the more they see danger ahead. Second come the trade negotiations between America and China. This week President Donald Trump unexpectedly delayed the tariffs announced on August 1st on some imports, raising hopes of a deal. That ought to be in his interests, as a strong economy is critical to his prospects of re-election next year. But he may nevertheless be misjudging the odds of a downturn. The third thing to watch is corporate-bond yields in America. Financing costs remain remarkably low. But the spread—or extra yield—that investors require to hold risker corporate debt has begun to widen. If growing anxiety were to cause spreads to blow out, highly geared firms would find it costlier to roll over their debt. That could lead them to cut back on payrolls as well as investment in order to make their interest payments. The odds of a recession would then shorten. It is a strange thought that a sudden easing of today's anxiety might lead to violent price changes—a surge in bond yields; a sideways crash in which high-priced defensive stocks slump and beaten-up cyclicals rally. Eventually there might even be too much exuberance. But just now, who worries about that? (The Economist – 17 Aug 19)

Despite subdued Russian wheat exports during the first half of the year, August's shipments at 4.9 MMT are a monthly record. Though yields are marginally down the quality of the crop is improved on the past two years so indications are that the busy export season seen in August and September will continue into Q4. Most short haul wheat to Turkey and Egypt as well as African destinations is carried on Handy and Supra vessels which has been particularly supportive of those markets over the past two months. Russia is now the world's largest exporter of wheat. Due to persistent drought Australian y-o-y shipments have dropped back 3.5 MMT to 6.6 MMT whilst Argentina and Ukraine at 6.3 MMT are both down on last year's shipment figures. Overall seaborne wheat trade is down around 13 MMT y-o-y at 85 MMT in the first eight months of 2019. (Howe Robinson Research – 18 Oct 19)

Finance ministers and central bankers from around the globe gave momentum to the idea of fiscal stimulus as the way to revive a sagging world economy. But there was little agreement on how to do so. A synchronized slowdown across almost 90% of the world economy dominated talks at the International Monetary Fund and World Bank's annual meetings in Washington. Intensifying downside risks like trade conflicts were also a major topic of discussion. The warnings were loud and clear. Tharman Shanmugaratnam, senior minister in Singapore's government, warned of "profound uncertainty" and of denial over the scale of problems facing policy makers. Billionaire hedge-fund founder Ray Dalio said the economy is in a "great sag." With central bankers low on ammunition, the IMF said there is little room for policy error. (Bloomberg – 20 Oct 19)

Iran is expected to import 4-6 MMT of wheat in the next marketing year due to devastating flash floods and insufficient rainfall. This would represent a significant increase in volume, as Iran only imported 360 tonnes in 2018. Iran has for several years kept a tight grip on wheat imports to support local farmers and encourage national production, however the environmental catastrophes have forced Iran to lift its restrictions on wheat imports. Likewise, it is projected that Iran will have to increase imports of barley and corn to respectively 3 and 7 MMT in order to keep up with domestic demand. It is expected that the Black Sea region (Russia and Kazakhstan) will benefit from Iran's poor farming conditions. (Braemar ACM – 25 Oct 19)

Yours Sincerely,

Precious Shipping Public Company Limited

____

Khalid Hashim
Managing Director