

The 4th Quarter of 2021 Management Discussion and Analysis



Our Key Performance Indicators

4th Quarter 2021 Financial Performance (US Dollar Terms)

The results, audited by EY Office Ltd., show you the latest financial position of Precious Shipping Public Company Limited and its subsidiaries ("the Company"). The earnings per day per ship during Q4 came in at USD 26,429, taking the annual figure to USD 20,338. Please 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 5,241 which has taken the annual costs to USD 5,090 per day per ship, or higher than our target of USD 4,750 for the year and higher than USD 4,705 for the actual of the previous year. The EBITDA was USD 62.42 million during Q4 and USD 175.17 million for the year. In Q4 we made a net profit of USD 53.01 million, with earnings per share of Baht 1.14. This is the fourth quarterly profit for this year. In the year 2021, we made a net profit of USD 136.96 million, just shy of our all-time high net profit of USD 148.14 million made in 2008, with earnings per share of Baht 2.87 for the year.

THE HARD FACTS	2021	2020	Q4 2021	Q4 2020
Highest earnings per day per ship in USD	50,336	20,500	50,336	20,500
Average earnings per day per ship in USD	20,338	8,332	26,429	10,022
Av. earnings per day per Handy size ship in USD	18,804	8,214	25,062	10,033
Av. earnings per day per Supramax ship in USD	19,378	7,477	22,823	10,211
Av. earnings per day per Ultramax ship in USD	25,062	9,575	33,734	9,782
Av. earnings per day per Supramax/Ultramax ship in USD	22,053	8,464	27,958	10,009
Operating cost per day per ship in USD	5,090	4,705	5,241	5,067
EBITDA in million USD	175.17	36.25	62.42	13.79
Net Profit (Loss) in million USD excluding exchange gain (loss) and non-recurring items	132.76	(13.24)	52.68	2.10
Net Profit (Loss) in million USD	136.96	(40.80)	53.01	0.90
Earnings (Loss) Per Share in Thai Baht excluding exchange gain (loss) and non-recurring items	2.79	(0.27)	1.13	0.04
Earnings (Loss) Per Share in Thai Baht	2.87	(0.83)	1.14	0.02

Consolidated Financial Performance (Thai Baht Terms)

For the year ended 31 December 2021, the Company earned a net profit of Baht 4,474.93 million as compared to a net loss of Baht 1,294.85 million in 2020. The main reasons for the changes are as follows:

- 1. The Net Vessel Operating Income (Vessel Operating Income net of voyage disbursements and bunker consumption) for the year 2021 was 153% higher than the figure in 2020. This is mainly due to the increase in the average earnings per day per Vessel from USD 8,332 in 2020 to USD 20,338 in 2021. In 2021, the dry-bulk freight markets continued their uptrend driven by further economic expansion in major economies and supported by benign vessel supply. The fleet size as of 31 December 2021 and 2020 was 36 vessels.
- Vessel running expenses are 14% higher than the figure in 2020. The average operating expenses (Opex) per day per Vessel (including depreciation/amortisation of Drydocking/Special Survey expenses) increased from USD 4,705 for 2020 to USD 5,090 for

- 2021, mainly on account of higher crew expenses related to covid-19 restrictions and store/spares expenses.
- 3. Administrative expenses (including management remuneration) for 2021 came in Baht 245.24 million higher than the figure in 2020, mainly due to the increase in variable compensation expenses.
- 4. Exchange gain of Baht 194.37 million was mainly because favorable currency movement led to a reduction in the US Dollar equivalent figure for Thai Baht denominated debt.
- 5. Loss on derivative of Baht 68.67 million was mainly from the one-time settlement of an interest rate swap contract following a loan prepayment.
- 6. Finance costs in 2021 were Baht 181.92 million lower than the figure in 2020, due to lower interest expenses. This was driven by a lower LIBOR rate as well as due to a reduction in overall debt.

Update on the Chayanee Naree drug smuggling incident

- On 5 August 2021, Precious Visions Pte. Ltd. which is a subsidiary of the Company and the owner of M.V. Chayanee Naree (the "Vessel") signed a voyage charter contract to load 46,000 metric tons of bulk sugar from Santos, Brazil for discharge in Lagos, Nigeria.
- On 18 September 2021, drugs were found inside one of the cargo holds of the Vessel while she was at the loading port in Santos, Brazil. The Brazilian authorities conducted a thorough investigation at the time after which they were satisfied that none of our crew members were involved in or assisted in the smuggling of drugs. The Brazilian authorities permitted the Vessel to sail out of Brazil on 19 September 2021 without pressing any charges on any crew members, and/or the ship, or the owning company.
- Upon arriving at the discharge berth in Lagos on 9 October 2021, the Nigerian authorities conducted an extensive search of the Vessel; however, no suspicious objects were uncovered. The Vessel then commenced discharge of her cargo on the same day (9 October 2021).
- On 13 October 2021, drugs were found in a hold of the Vessel.
- On 29 October 2021, discharge was completed, and the National Drug Law Enforcement Agency (NDLEA) obtained an ex-parte order from a Nigerian court for an interim attachment of the Vessel and a remand of the 22 crew members for 14 days. On the same day, we received a claim of about USD 3.9 million from the cargo receivers. We are working with our lawyers to defend this claim.
- On 8 December 2021, the NDLEA filed a charge in the Federal High Court of Nigeria against the Vessel and 3 crew members (and 9 unrelated persons who are not working for the Company) for alleged unlawful transport of drugs. There are no charges against the other 19 crew members on board the Vessel.
- The insurers of the Company have issued two Letters of Undertaking ("LOU") to the NDLEA, as security for the release of the Vessel and the 19 crew members that have not been charged. Subsequently, on 13 January 2022, the Federal High Court of Nigeria ordered the release of the Vessel and the 19 crew members on board the Vessel.
- The three crew members who have been charged, are required to remain in Nigeria until legal proceedings are completed. They have been granted administrative bail against security provided by the Company and have been allowed to move from an NDLEA detention facility to a hotel.
- On 31 January 2022, we were informed that NDLEA filed an amended Charge to include another 7 crew members of the Vessel, making a total of 10 crew members who are being charged, and are required to remain in Nigeria until legal proceedings are completed. The

- Company is required to provide additional security for moving these 7 crew members from the Vessel to a hotel.
- The Company is in the process of obtaining departure clearances from the Nigerian Navy and other government agencies. The Company is also arranging to send certain crew replacements on board the Vessel. The Company expects that the Vessel should be able to sail out of Nigeria soon thereafter.
- The Company is working closely with its insurance company and legal counsel to ensure that the case is fully resolved as early as possible.

Market Segmentation

During Q4, The Baltic Handy Size Index (BHSI) averaged 1,743 points, as derived from an average Time Charter (TC) rate of USD 31,370 per day. In comparison, our Handy size fleet earned USD 25,062 and underperformed the BHSI TC rate by 20.11%. The Baltic Supramax Index (BSI) averaged 2,771 points, as derived from an average TC rate of USD 30,472 per day. In comparison, our Supra/Ultra fleet average earnings were USD 27,958 per day and underperformed the BSI TC rate by 8.25%. Our target has been to outperform both the indices.

Type of vessel	Q4 average Index time charter rate in \$ (A)	PSL average time charter Rate in Q4 in \$ (B)	PSL ship difference from Index ships in % (C)	Difference if vessel fixed on 1st day vs Q4 Avg (D)	PSL long term time charter ships adjustment in % (E)	{A*(C+D+E)} = (F) in \$	PSL true time charter rate in \$ (B+F)	PSL true performance versus Index ship in %
Handy	31,370	25,062	25%	-14.0%	12.86%	+7,478	32,540	+3.7%
Supra	30,472	29,287*	10%	-22.1%	3.29%	-2,690	26,597	-12.7%

^{*} PSL average time charter rater in Q4 for Supramax ships is basis 16 ships because one ship was detained in Nigeria during Q4

The three reasons for our performance are: Firstly, our ships are 'different' from the index ships. On an apples-to-apples comparison, our Handy ships are ranked 25% below and the Supras are 10% below the index ship TC rates. Secondly, the 7 handy ships, out of our fleet of 19, on long term charter are fixed at \$19,083 per day and the one Supra, out of our fleet of 17, is at \$13,421 per day, both are well below the average TC rate for the index ships in Q4 (BHSI \$31,370 and BSI \$30,472). And finally, if we see the way the market has gone down, during Q4, if you had fixed all your ships on day 1 of Q4 at the index level (BHSI \$35,769 and BSI \$37,212), despite our ships not being as well ranked as the index ships, you would outperform the average index ship TC by 14% in Handy and 22.1% in Supras. If we had applied these three adjustment factors to our result, we would have outperformed the handy index by 3.7%, and underperformed the supra index by 12.7%, as shown in the above table.

The next SET Opportunity Day will be virtually held at 15:15 hours on the 17th of February 2022 via the SET <u>live web casts</u>. We hope that many of you will attend this event electronically where the Company will get a chance to thoroughly discuss Q4 results. Number of online participants attending PSL's live presentation of Q3 results on 17th of November 2021 were 280 on the SET website/YouTube views and 22 on Facebook for a grand total of 302.

Long Term versus short term Charters

The long-term charters, over 1 year, are shown in the chart below. As can be seen, our forward four-year rolling book is currently at the 16% level with a visible revenue stream of USD 139 million.

Year	2022	2023	2024	2025
Total Available Days	13,140	13,140	13,176	13,140
Fixed T/C Days*	2,936	1,866	1,830	1,825
% age Fixed T/C Days	22%	14%	14%	14%
Av. T/C Rate/Day in USD**	18,385	15,560	15,316	15,316
Contract value in million USD	53.98	29.03	28.03	27.95

^{*}This comprises charters on 5 ships on fixed rate charter and 4 ships on variable rate charters

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

Ship recycling had 5.47 MDWT of ships being recycled during 2021 across the dry bulk fleet as compared to 15.1 MDWT (down by -64%) in 2020. The existing age profile at the start of 2022 of 68.17 MDWT or 7.26% (11.05% in the geared segment and 5.21% in the gearless segment) of the world fleet being 20 years or older, together with low levels of the order book to fleet ratio of 6.88% (order book up to end 2024 compared to net supply at the start of 2022), should result in the world dry bulk fleet growing at a much slower pace.

Annual Benchmarking

Marine Money's 2020 annual benchmarking issue showed that among 22 globally listed peers in the dry-bulk sector, we had the second-highest total return to shareholders of 0.0% compared to a sector average of -25.4%. Our overall performance ranking came in at the middle of the pack among dry-bulk companies.

BDI Developments and our read of the market

- Please watch this beautiful <u>video</u> by BIMCO & ITN on the role of ships and the 1.7 million seafarers who serve on them.
- The dry bulk market will have the same macro issues of supply/demand balance dominating its narrative. Please see the section 'Differences in 2003-2009, 2010-2020, 2021 and the Future' for a comprehensive explanation.
- Average quarterly time charter rates for Capes (180K DWT) were \$ 17,126 per day in Q1, \$ 31,120 in Q2, \$ 42,379 in Q3, and \$ 42,645 in Q4. Capes started the year at \$ 16,656 on 04 January, reached a peak of \$ 86,953 on 07 October, a trough of \$ 10,304 on 12 February, and then closed out the year at \$ 19,176 on 24 December with the average for 2021 being

^{**}Average T/C Rate/Day for the variable rate charters is estimated based on rates prevailing in January 2022 for future earnings and actual earnings for past earnings.

\$ 33,333. Average quarterly time charter rates for Panamaxes (82K DWT) were \$ 18,493 in Q1, \$ 26,052 in Q2, \$ 33,629 in Q3, and \$ 29,253 in Q4. Panamaxes started the year at \$ 12,272, reached a peak of \$ 38,952 on 25 October, a trough of \$ 12,272 on 04 January, and then closed out the year at \$ 23,158, with the average for 2021 being \$ 26,898. Keep in mind that Capes spend 74% of their time on iron ore and 21% of their time on coal. When you have that much of concentration risk of the type of cargoes carried and with a single dominant customer, China, accounting for over 60% of all iron ore imports, you are setting yourself up for volatility.

- Average quarterly time charter rates for Supras (58K DWT) were \$ 16,633 in Q1, \$ 25,538 in Q2, \$ 34,269 in Q3, and \$ 30,472 in Q4. Supras started the year at \$ 11,305, reached a peak of \$ 39,860 on 21 October, a trough of \$ 11,242 on 05 January, and then closed out the year at \$ 25,188, with the average for 2021 being \$ 26,768. Average quarterly time charter rates for Handies (38K DWT) were \$ 16,610 in Q1, \$ 22,507 in Q2, \$ 32,194 in Q3, and \$ 31,370 in Q4. Handies started the year at \$ 12,040, reached a peak of \$ 37,109 on 25 October, a trough of \$ 11,695 on 12 January, and then closed out the year at \$ 26,384, with the average for 2021 being \$ 25,702. Against the larger Capes/Panamaxes, the smaller sizes with real diversification in terms of cargoes carried and ports visited have had a less spectacular though, more stable ride, on the roller coaster of the current dry bulk freight market!
- In our Annual Report for 2020, we wrote that the 'pundits proclaimed that the dry bulk market was condemned to perdition. But just as the pundits were murmuring our last rites, China and its USD 667 billion stimulus plan announced in May (2020), brought the dry bulk market and demand roaring back into life!' The roar let out by the dry bulk freight market in 2021, with average rates earned by our fleet for the year at \$ 20,338, was heard by all. The index ships had annual averages of \$ 33,333 (Capes), \$ 26,898 (Panamaxes), \$ 26,768 (Supras), and \$ 25,702 (Handy sizes).
- In 2020 we wrote that when '4 times as much DWT is delivered (2012 and 2016) as is ordered in any year then the BDI has increased in the subsequent year by 31% and 70% (2013 and 2017)'. In 2020 48.66 MDWT was delivered, while 13.86 MDWT was ordered (or 4 times), and the average BDI for 2021 at 2,943 points was 176% higher than the average BDI in 2020 at 1,066 points. In 2021 37.62 MDWT was delivered, while 37.65 MDWT was ordered, so the 4X rule should not apply. Let us see what happens to this rule as the pundits believe that we will have an equally strong year in 2022 as we had for 2021.
- In 2020 we wrote 'Covid-19 induced congestion delays, deviations for crew changes adding to ton-miles, and delays due to 14-day quarantine of ships have all tightened supply of ships' and that proved accurate in 2021. We expect more fleet inefficiencies for 2022 as we do not see Covid-19 fading away anytime soon. This factor will tighten net effective supply of ships, aided by the very low ordering activity in 2021, to easily counteract the increased supply generated from the faster speeds that ships are expected to sail at in stronger markets.
- Due to geopolitical tensions between China and Australia, coal normally shipped in larger gearless ships, increasingly moved on Supras/Ultras from other alternate suppliers, resulting in increased ton-mile demand for alternate coal supplies to China and from alternate customers for Aussie coal.
- Increased ton-mile growth in demand for grain, helped the smaller size ships, as did the moving out of cargoes from containers to Handies, to reach heights not seen even in the 2003/2009 boom.
- 2021 was, therefore, a story of a demand side recovery aided by supply tightness due to Covid-19 related inefficiencies despite increased speeds (2 knots) which failed to spoil the

- dry bulk party. This leads us to believe that demand supply is in perfect balance and freight markets will be characterized by extreme volatility and sharp rate movements in both directions as we have seen in all of 2021. We expect more of the same in 2022.
- In 2022, according to Clarksons, ton-mile demand is expected to grow by 2.2% while net increase in supply is expected to grow by 2.0%. With the inbuilt inefficiencies in the net supply of ships due to Covid-19 related disruptions, this gap between demand and supply in 2022 should widen in favor of the ship owners and we should see a similar year as we had in 2021.
- Shipments of specialized ores required for renewable energy and battery production will provide additional ton-mile demand for the smaller size ships.
- Coal fired power plants in Southeast Asia currently stand at 90 Giga Watts (GW) with capacity expected to grow by 80% to 162 GW by 2030. Coal imports in this region are therefore expected to almost double over the next 8 years, once again giving credence to the famous quip by Mark Twain, duly paraphrased, that the rumors of the demise of King Coal have, therefore, been greatly exaggerated.
- 21.1% of Chinese iron ore imports came from Brazil (238 MMT) up +1.0% and 61.6% from Australia (694 MMT) down -2.7% in 2021.
- Australia exported a total of 882.5 MMT of iron ore, for a -0.4% drop y-o-y. Brazil's iron ore
 exports rose by +4.1% y-o-y to 347.9 MMT. As longer ton-mile replaced shorter ton-mile, it
 positively affected the Cape sector in 2021.
- Ton-mile demand growth, estimated by Clarksons at +4.2%, during 2021 was higher than net supply growth of +3.55%.
- India's rice exports rose by 45% from a year ago to 21.4 MMT in 2021.
- World steel production reached 1.9 BMT in 2021, up 4.5% from 2020.
- China's hog population is surging after eradication of African Swine Fever requiring larger imports of Soybeans and corn.
- American consumers have paid down debt dramatically during Covid-19 as compared to the GFC so could be on a spending spree once infection rates start to slow down. Consumer spending accounts for 70% of USA GDP!
- China imported 96.6 MMT of Soybean down 3.77% in 2021 compared to 2020.
- China imported 28.35 MMT of corn up 152% in 2021 compared to 2020.
- China imported 9.77 MMT of wheat up 16.6% in 2021 compared to 2020.
- China imported 1,126 MMT of iron ore down -3.82% in 2021 compared to 2020.
- China imported 324 MMT of coal up +6.4% in 2021 compared to 2020.
- China produced 1,031 MMT of Steel down -2.2% in 2021 compared to 2020.
- China exported 66.9 MMT of Steel up +24.6% in 2021 compared to 2020.
- China imported 14.3 MMT of Steel down -29.5% in 2021 compared to 2020.
- China's PMI index was 50.5 during 2021 due to various stimulus measures by the Chinese government.
- China's 2021 GDP growth was 8.1%. The Chinese government have certainly stimulated economic activity and increased demand for dry bulk commodities.
- In Jan 2022, IMF calculated world GDP grew by 5.9% in 2021. IMF revised 2022 world GDP growth to +4.4% and +3.8% for 2023. The latest January IMF forecast for 2022 GDP growth rates was Australia +4.1%, Canada +4.1%, China +4.8%, France +3.5%, Germany +3.8%, India +9.0%, Indonesia +5.6%, Italy +3.8%, Japan +3.3%, Netherlands +3.3%, Saudi Arabia +4.8%, South Korea +3.0%, Spain +5.8%, Thailand +4.1%, United Kingdom +4.7% and United States +4.0%. There were no changes to forecast for 2022 GDP growth rates for Denmark +3.0%, Greece +4.6%, New Zealand +3.3%, Norway +4.1%, Sweden +3.4%, Switzerland +3.0%, Taiwan +3.3% and United Arab Emirates +3.0% from the last reported outlook in October 2021.

- Containerships ordered in 2021, were the most since 1996, at 4.2m-teu, taking the total orderbook to 5.7m TEU. The orderbook to fleet ratio at the start of 2022 is 23% compared to start of 2021 figure at just 11%.
- The current orderbook to fleet (at start of 2022) ratio for the dry-bulk sector is 6.88% (for the geared sector 5.76% and for the gearless sector 7.5%) or the lowest annual reading for over 20 years!
- Recycling of dry-bulk vessels has gone down from 15.1 MDWT in 2020 to 5.47 MDWT (-64%) in 2021.
- PSL's exposure to the smaller geared segments means that it will be exposed to growth in net supply of 2.54% in 2022, according to Clarksons.
- Ships 20 years or older, comprising about 68.17 MDWT or 7.26% of the existing fleet (36.47 MDWT of the geared fleet or 11.05% and 31.7 MDWT of the gearless fleet or 5.21%) at the start of 2022 would be ideal candidates for recycling.
- Net supply growth in 2021 of 3.55% was less than ton-mile demand growth of +4.2% according to Clarksons. The expectations for 2022 and 2023 is that ton-mile demand will exceed net supply growth in each of these two years.
- Another way to look at market prospects would be to compare the current forward orderbook of 66.66 MDWT (till end of 2024) as a percentage (6.88%) of the existing fleet at the end of 2021 and see that it was never as low in the last two or more decades!
- Growth in supply by end of 2022 and 2023 of 2.11% and 1.77% (939.15 MDWT to 958.94 MDWT by end 2022 and then to 975.89 MDWT by end 2023), conservatively assumes recycling of just 8 MDWT/year and slippage of just 5% per year in 2022 and 2023.
- If our reading of net supply growth pans out, then 2022 and 2023 should be good years considering the world GDP growth rate of 4.4% and 3.8% projected by the IMF.
- Healthier recycling is expected during 2023 due to the large number of 20+ year old ships in the world fleet, pressures from BWTS/IMO2020, Special Survey costs on these older ships, and additional regulatory pressure from adoption of EEXI & CII regulations on 1st January 2023, that will force some of them to early recycling.

Key Demand Development

China

China has been hit economically by the following: Delta and the Omicron variant clashing with its Covid-zero policy; lockdowns; greening industrial policy; strict enforcement of emission targets; power cuts from shortages/high coal prices; blue skies policy till the end of the winter Olympics; and getting to grips with the real estate sectors out-of-control debt. Going after the Tech companies, laudable though the goals might have been, the implementation has left a lot to be desired creating short term unemployment and a large wipe out of the gains within the stock market, further pressuring the Chinese economy. China has a history of letting weaker companies collapse to ringfence and make the system safer. During the 1997 Asian Crisis the turmoil in the Guangdong housing market resulted in even big state-owned enterprises, that were active in real estate, defaulting. Therefore, when Chinese authorities decided to let the chips fall where they may, in the Evergrande unwinding, it should not have come as a surprise. China's boom in real estate and infrastructure development, as can be seen by the handling of Evergrande, is coming to an end, with investment moving into higher-end manufacturing and green projects. A downturn in the real estate sector may result in a slowing of demand for steel, cement, home appliances, furnishings, and other allied industries. In the first week of January the authorities ordered Evergrande to demolish 39 buildings in Hainan province that were built illegally. During January 2022, the Chinese real estate sector required \$197 billion to cover maturing indebtedness with potentially defaulting investmentgrade Shimao missing a loan payment deadline on 6 January and Yuzhou Group in the week that followed. If the real estate balloon is to deflate in an orderly manner, and not to explode, then this must be managed adroitly by the authorities. On the other hand, China needs affordable housing on a massive scale. Pushing the real estate sector via policy directives towards affordable housing, like the recently lowered bank reserve requirement ratios, the first interest rate cut in two years, and lowered mortgage lending benchmark interest rates, could reverse the current inherent ills and satisfy real demand for affordable housing. Chinese households are the biggest savers in the world and invest 70% of their savings in real estate. With the current ills of the real estate sector, such savings are now being diverted into the stock markets where daily traded volumes, since July 2021, have doubled to \$155 billion compared to 2019/2020 and have held steady at that doubled level since then. The middle class continues to expand, making consumption a bigger story for China's future. However, the yield on Chinese junk-bonds remain sky high, indicating stress despite the PBOC reducing reserve requirement ratios for banks. The 20th National Party Congress takes place in November 2022, the Chinese government will want the economy to perform smoothly in the runup to this event as President Xi Jinping stands for an unprecedented 3rd term in office. Therefore, the prospects for the Chinese government to go into economic growth mode in 2022 is expected, soon after the winter Olympics, and would be a boon for the dry bulk markets.

America

USA Inflation: During 2021 USA saw more jobs created at higher rates, and lower unemployment. However, the whiplash from pandemic and lockdowns resulted in massive delays at ports with the number of ships waiting outside LA/LB, to discharge containers full of cargoes, reached unheard of records. The ultimate outcome, of booming demand with inventories disappearing into thin air, can only result in prices going up. Result: inflation in USA, according to the Economist, by the 3rd week of December at 6.8% was at a 39 year high; supply chains were under duress; higher interest rates could destabilize over-leveraged borrowers, and sharply correct sky-high asset prices. But please keep in mind that you are comparing inflation in 2021 versus 2020 when USA was going through a particularly challenging period with Covid-19 destroying all modes of travel resulting in very low gas prices. If you compare 2021 gas prices with 2020, they have certainly gone up, but that is because of a low base effect. But keep in mind that underinvestment in fossil fuels will lead to higher energy prices in the medium term till such time as renewables are able to take up a larger portion of energy production. Big pharma in USA is out to 'kill' you with their exorbitant pricing. Take the Covid-19 cure from Merck, costs \$ 17 to make, but sold to the government at \$ 742!! If you do not have inflation with this type of price gouging, then what were you expecting, and consider this: Merck was given a rather large subsidy to discover this cure by Uncle Sam! And finally, the tariff barriers put in place for all the imports that come from China is aiding and abetting the inflation story. If this was removed, it would certainly help lower inflation. And, yet stock markets in the USA are at all-time highs, making a mockery of conventional economic wisdom which has been stood on its proverbial head. To fight this persistent inflation the Fed and several other Central Banks, are terminating their QE programs, and are signaling higher interest rates as early as March 2022. If we look at oil, it has a big element of geopolitical risk embedded in it, raising its price. If USA and NATO would only start listening to Russia and understand their own reaction if Russia were to arm the Mexican border with nuclear missiles aimed at America, then this silly standoff at the Ukrainian border would be history. The second element of high CPI in the developed world is linked to secondhand car prices skyrocketing. This is a result of not enough new cars coming off the assembly line due to lack of chips due to supply chain disruptions. When combined with Covid-19 pushing those who can afford a car to buy one and shun public transport, secondhand car prices behaving in this irrational manner is easily understood. This can be resolved when there are more new cars rolling off the assembly line or when Covid-19 becomes endemic. And food prices going up are a direct result of climate change hurting crop yields with either too much or too little rainfall. Combined with fear from Covid-19 impacting countries ability to feed their populations, restocking of food grains has increased significantly and that has fed into higher prices. Once again, all these three factors will NOT be corrected by higher interest rates and, in fact, may make their prices, and inflation, escalate further. If higher interest rates do not do the trick to combat inflation, then financial markets will get hurt, and Central Banks will walk back QE tapering and rate hikes.

USA Infrastructure: In terms of infrastructure repairs and refurbishment, the Water Works Association (WWA) needed \$ 60b to replace all lead pipes so that drinking water becomes safe for all children anywhere in the USA. But thanks to the divisions within the Democratic party and partisan politics, this was watered down to just \$ 15b. Now the WWA must decide which children will get safe water to drink and those that will continue to drink lead tainted poisonous water in the richest country in the world! If USA is serious about its infrastructure refurbishment, it will be a real shot in the arm for the dry bulk markets with demand for cement, steel, and log cargoes!

Indonesia

Indonesia's announcement on 1st January of the ban of coal exports for the month of January is a double-edged sword. On one edge we will have a shortage of cargoes in the immediate future from Indonesia to their major customers China, India, South Korea, and Japan, all relatively short sailing distances. On the other edge, that same coal demand will have to be replaced via longer ton-mile sailings from South Africa or Colombia or North American continent, increasing ton-mile demand for ships. Meetings that were scheduled for the 5 January to resolve this issue between the coal miners and the Indonesian authorities, failed to take place. In the meantime, about 100 fully/partially loaded ships were awaiting news anxiously if they could complete their planned voyages and another 40+ ships headed to load coal in Indonesia were in a similar quandary. However, latest news on 28th January indicates that 759 Indonesian miners have been allowed to continue coal exports. We expected that this ban would be overturned quickly as the Indonesian government could ill afford to lose a lot of tax dollars from this stoppage of coal exports! As we have repeatedly emphasized, any disruption to normal trade flows is positive for ton-mile demand.

Differences in 2003-2009, 2010-2020, 2021 and the Future

Differences in 2003-2009, 2010-2020, 2021, and the future

Daily average Time Charter rate	2003 - 2009	2010 - 2020	2021
Capesize	67,101*	14,924***	33,333**
Panamax	32,793*	10,965***	27,898**
Supramax	28,013^^	10,765***	26,768**
Handysize	18,753^^	8,789***	25,702**
Demand Billion Ton-miles per year	+5.4%	+4.2%	+4.2%
Chinese Stimulus	China enters WTO 2001	USD 578 bn (2009)	\$667 bn (mid year 2020) (ROW \$20 tn+)
Orderbook/Fleet ratio per year	+36.02%	+26.23%	+7.03%
Annual average % of 20-year-old (start of each year)	+18.38%	+11.27%	+6.25%
Annual average net supply growth	+6.8%	+6.4%	+3.55%

The Future

- Order book to fleet ratio at start of 2022 = 6.88% of existing fleet compared to 78.14% at start of 2009.
- 5.47 MDWT recycled in 2021 versus 5.56 MDWT recycled in 2008.
- 1.57 MDWT recycled in 2021 in the geared sector versus 2.28 MDWT recycled in the geared sector in 2008.

Note: *BCI 172K (4TC), BPI 74K (4TC), BSI 52K (6TC), BHSI 28K (6TC).

- **BCI 180K (5TC), BPI 82K (5TC), BSI 58K (10TC), BHSI 38K (7TC)
- . ***Combine of above two classification
- ^^1 Yr. TC 32K, 1 Yr. TC 52K used for years where there was no BHSI (2003-2006) or no BSI (2003-2005)

Source: Clarksons



Precious Shipping PCL

24

If you look at the time charter rates for the period 2003-2009 it was the highest for the Capes compared to the other two periods. For the Panamax and Supras, during 2003-2009, rates were almost 3X higher than in the 2010-2020 period but almost equal to rates in 2021. For the Handy size, 2021 was 3X higher than in 2010-2020 and almost 1.5X higher than in 2003-2009. However, demand growth rate in ton-miles in the three periods was not significantly different. What was different was, of course, the average orderbook to fleet ratio being highest in 2003-2009 dropping by 27% in 2010-2020 and by 80% in 2021! The other significant difference was that orderbook to fleet ratio was 2X the 20-year-old fleet in 2003-2009, 2.3X in 2010-2020 and just 1.1X in 2021 with the figure dropping at the start of 2022 to just 0.95X. This indicates weak supply growth in the future and indicates strong markets could continue for quite a few years.

Rates started out in 2021 at a low level and then accelerated to a peak on 7th October with the BDI hitting a 13 year high at 5,650 points, and since then, has fallen consistently. Why did rates accelerate in this fashion and then fall so quickly? Demand/supply for dry bulk at the start of 2021 was in perfect balance, and as ton-mile estimated demand by Clarksons grew at 4.2% compared to net fleet growth at 3.55%, rates skyrocketed! But when China decided to reign in their out-of-control real estate sector by letting Evergrande and its brethren collapse, imposed strict anti-pollution controls on coal fired power plants post COP26, curtailed steel production, and insisted on blue skies during the winter Olympics, ton-mile demand, of necessity, took a hit and rates fell for the opposite reasons that they skyrocketed to a peak on 5th October. This was not helped by the central bankers of the ROW tapering QE and indicating 3 to 4 interest rate hikes starting in March of 2022

to combat inflation. With demand/supply being in balance, volatility will be the name of the game for the dry bulk freight markets!

The geared sector, Supras and Handy sizes, had much less volatile rates due to the reasons expressed here but also because they had the slowest net growth rate in DWT in supply of ships in 2021 at 2.84% (Supras), 2.03% (Handy) versus 4.22% (Capes), and 3.82% (Panamax).

China still needs affordable housing in a big way but not the type of luxury houses being built by Evergrande and their compatriots in which everyone invests, makes paper profits, but no one lives in. By letting the big real estate developers suffer, China may have finally controlled this sector and got them to focus on affordable housing that the common man needs, would love to own, and live in, via policy means like the recently lowered reserve requirement ratio for banks, the first interest rate cut in two years, and lowered mortgage lending benchmark interest rates. A win-win solution for all, with the real estate developers likely pushing up steel requirements back to the levels before the Evergrande debacle. That would be a big win for the dry bulk sector.

The winter Olympics starts on 4th February and ends on the 20th of the month, with the Chinese government signaling, that the measures put in place that slowed down the economy starting in November 2021, will be reversed before the end of Q1 2022. When that happens, rates will start to climb, and we may, once again, visit the highs reached in 2021.

The other important event in China is the CCP meeting scheduled in November 2022 when President Xi Jinping would be up for an unprecedented 3rd term in office. For a leader wanting such a tenure, the economy moving forward at a high growth rate is a must, hence no stone will be left unturned to ensure a growth-oriented economy before the congress meets.

As can be seen, all the reasons for the slowdown in Q4 2021 and into Q1 2022 are due to decisions made by governments, be it in China (dry bulk is very dependent on China) or in the free world (Fed Reserve raising interest rates between 3 and 7 times in 2022). These decisions have curtailed demand, but when reversed, they will allow demand to flourish once again, and we could be back at the same pint we were at the start of 2021!

Key Supply Side Developments

We started 2021 with 906.99 MDWT and have increased to 939.15 MDWT (+3.55%) at the start of 2022. If we were to apply slippage of 5% (it was actually 2.11% for 2021) to the scheduled deliveries in 2022 and 2023 and assume scrapping reaches 8 MDWT (it was actually 5.47 MDWT during 2021) we would be left with a net fleet growth of 2.11% (939.15 MDWT to 958.94 MDWT of which 330.10 MDWT to 336.94 MDWT for the geared sector, 609.05 MDWT to 622 MDWT for the gearless sector) by end of 2022 and 1.77% by end of 2023 (958.94 MDWT to 975.89 MDWT of which 336.94 MDWT to 340.42 MDWT for the geared sector, 622 MDWT to 635.47 MDWT for the gearless sector.) Congestion, ballasting ships, slowing speeds, especially in 2023 due to EEXI/CII regulations, and Covid-19 quarantine delays, will further assist in supply side tightening.

The Ever Given

The Ever Given is the infamous ship that got stuck in the Suez Canal, disrupting the smooth flow of ships between East and West for a week in March 2021. It brought Shipping into the mainstream news headlines for more than a couple of weeks displacing everything, including the dreaded pandemic, into second place in our 24-hour news cycle. It also highlighted that the world is more

inter-connected than what the mainstream media and our politicians can either grasp or would like us to understand. It confirmed, once and for all, that shipping is the glue of Globalization that holds us all together. It also brought into sharp relief that supply chain disruptions can be caused by things that we take for granted, like the smooth sailing of ships through narrow waterways like the Suez Canal, that can go horribly wrong, as happened in this case. And, finally, it showed the world just how important the maritime industry is in our consumer-driven world.

Supply Chain Disruptions

The maritime industry is one of the most efficient links in the supply chain system, so when it gets disrupted, it creates inefficiencies that result in an immediate increase in ton-mile demand. Covid-19 has disrupted supply chain systems, as well as all aspects of life and business. Port congestion is seeing no letup as China's covid-zero policy combined with omicron, the most transmissible variant, is creating more, not less congestion in Chinese ports. Global ports are caught up in the ripple effects flowing from Chinese ports. Demand for goods is the pull creating congestion, while congested ports are the push driving congestion. Lack of investments in existing port facilities and a paucity of modern, automated ports has exacerbated the supply chain disruption flowing back and forth around the globe. Productivity has been the first victim of omicron, reducing the number of covid impacted port workers from their jobs. Pilots, the critical element that starts port productivity, are in short supply due to infections and quarantine. Ships that arrive from omicron hit countries, sit at quarantine anchorages, disrupting ports. Ship staff, the glue that binds globalization, face Covid tests, delays, isolation, and longer stays on board. Truckers hit by the pandemic, add to this lack of productivity, with cargoes stuck at ports. Assessing resilience, dependability, diversity, digitalization, productivity, risk mitigation, and inventory levels at all links in the supply chain has become critical for businesses and governments. Inventory levels at businesses and countries remain woefully inadequate to account for current disruptions, despite inventory restocking being at all-time highs. The new mantra is 'just-in-case' versus 'Just-in-time' from the past.

Climate change and GHG emissions

The Heat waves, fires, drought, out of control hurricanes and tornadoes, floods, and massive 100 feet waves will be the norm in 2022 and beyond. Climate change is here, not in another decade, or two, or four, but right now. Bloomberg states that '21 of the hottest 22 years since 1880' have occurred since the start of 2000, and the ocean subsurface in 2021 broke the annual heat record set in 2020. This will make storms, hurricanes, tornadoes, and ocean waves, ever more powerful. Climate change will lead to weather related disruptions with heightened congestion at ports, slower speeds at sea due to stronger/bigger waves, and loss of containers from ships, a regular occurrence. Oceans absorb almost a 3rd of all CO2 emitted by mankind. This has made oceans extremely acidic, will result in the death of coral reefs, and a corresponding reduction in the fish population. GHG emissions will continue to rise as the climate change impact will result in greater demand for electricity with fossil fuel burning, CO2 belching power plants, increasing the amount of CO2 that we put into the atmosphere. This will start a vicious cycle with greater power demand from factories, warehouses, transport/delivery organizations, to cool homes, workplaces, theatres, stadiums etcetera, demanding more power from fossil fuel burning power plants releasing even more CO2 into the atmosphere creating ever more climate change, heat, fires, droughts, floods, storms....and the cycle goes on-and-on. Food production will be hit hard by climate change, and we may find ourselves facing food insecurity no matter how wealthy the nation we live in. This will focus governments on building up buffer stocks of food grains to avoid sharp price increases in food staples with the resultant inflation that it would bring. Larger grain movements, coupled with weather related inefficiencies in reducing net ship-supply, will be ton-mile demand positive for the dry bulk freight market.

The World Inequality Lab published the World Inequality Report 2022 (in December 2021). Three things stand out in this report. First, from 1995 to 2021, the top 1% wealthiest people took 38% of the growth in global wealth, while the bottom 50% got just 2%. The richest 10% accounted for 52% of global income, while the bottom 50% earned just 8.5%. Second, in 1820, the wealth inequality between nations was just 11% while the maximum inequality was within the people of each country. By 1980, due to colonization and the industrial revolution, the Developed world had the highest ever concentration of global wealth at 57%. Global wealth distribution between countries narrowed by 2020, following the economic ascent of China and India, but wealth inequality within each country climbed to 68% as Developing countries allowed their wealth to be monopolized by their rich, even as the wealth gap, between Developed and Developing world, narrowed. And, finally, in the period 1850 to 2020, 49% of CO2 emissions was between North America (27%) and Europe (22%.) A recent IMF study stated "the richest countries represent 16% of the world population but about 40% of CO2 emissions. The poorest countries, about 60% of the world's population, account for less than 15% of emissions." Ergo, increasing wealth disparity and increased CO2 emissions go hand in hand!

Regulatory Developments

The Economist came out with a beautiful film entitled "How chemical pollution is suffocating the seas" and is a must-watch 18 minutes that will change the way you view the business-as-usual world that we live in. <u>Please click here to see this film.</u>

Decarbonization is the new buzz word and made its first appearance in TradeWinds in December 2015. It appeared in just 27 articles from then until April 2018. And has since appeared in TradeWinds more than 1,300 times! So, before you get lost in the details, let me remind you that Shipping carries around 90% of all cargoes in the world and is responsible for less than 2.5% of greenhouse-gas (GHG) emissions. The Economist stated in their issue dated 29th September 2021 that 'according to the UN's Food and Agriculture Organization, raising animals for meat, eggs and milk accounts for 14.5% of global GHG emissions.' And the Economist of 5th October asks a very valid question, 'if beef emits 31 times more CO₂ per calorie of food than tofu does, and coal emits 24 times more CO₂ per unit of energy output than hydropower, then why are we phasing out coal but not beef?' The EU has included shipping in its Emissions Trading Scheme (ETS) while giving a free pass to the livestock industry and has proposed exempting Private Jets from their planned jet fuel tax even though private jets are the most polluting of all aircraft on a passenger-mile basis. And here we are, grappling with Zero Emission Vessels (ZEVs), while no one is talking about curtailing the emissions from the livestock business or penalizing private jets? Personally, I have become a vegetarian since the start of 2020, and that represents my effort to save the planet from global warming by not supporting the livestock industry. Our office executive lunch, served every weekday, has become fully vegetarian since the start of 2020, representing our collective effort at reducing GHG emissions during our mid-day meal.

The IMO adopted the Energy Efficiency Existing Ship Index (EEXI) as amendments to Marpol Annex VI that will enter into force on 1 January 2023. EEXI describes the CO2 emissions per cargo ton-mile, by determining the standardized CO2 emissions related to installed engine power, transport capacity and ship speed. Statistics suggest a bulker (30k to 60k) built pre-EEDI (Energy Efficiency Design Index) i.e., ships built pre-2013 may require a 30% to 40% power reduction (2.5K – 3.5K speed reduction from today's speeds) but ships built post-EEDI may require just 4% power reduction (0.2K speed reduction) to comply with EEXI. Implementation of engine power limitation and energy-saving device technologies will be used by owners to choose the solution best suited for their ships and will be very positive for increasing rates in the dry bulk markets. We will be getting all our ships rated for EEXI and Carbon Intensity Indicator so that we will be in full compliance prior to the new laws coming into force.

The IMO has agreed to debate and arrive at a solution on market-based mechanisms (MBMs) to reduce the CO2 footprint from shipping. This could be via a carbon levy on each tonne of fuel. The Solomon Islands and Marshall Islands have suggested a \$100-per-tonne levy of CO2 released, which is a \$300-per-tonne levy on fuel oil. The idea of any MBMs is to make current bunker fuel as expensive as, say, ammonia. So, the price of fuel oil must reach \$1,500 per tonne, the current price is about \$600 per tonne, to match the cost of future fuels for zero-emission vessels. It is hoped that pressure from the EU's ETS will help prod and push the IMO into taking a strong stand on MBMs via a carbon-based levy. The funds collected from any IMO MBMs via a fuel-based levy could be used in many ways to make a level playing field for greener fuels, from subsidies to research and development. These include:

- To subsidize the difference between a ton of fuel oil and two tons of ammonia (that is when their energy output equivalence is reached) for the first movers in ZEVs.
- To make the cost of fuel for transporting goods on IC engine ships identical to ZEVs for the end-user.
- To fund research and development to produce ZEVs, their designs, their regulations, and their infrastructure.
- To develop green well-to-wake ZEV fuels and their land-based support infrastructure.
- To allow the IMO to put a deadline for prohibiting the physical delivery of IC engine ships from 2030, or some earlier agreed date.
- To allow the IMO to mandate recycling of IC engine ships that are older than 20 years of age from 2030, or some earlier agreed date.
- To make shipyards produce ZEVs at a scale that newbuild ZEVs would cost roughly the same as an IC engine ship.
- To make it a level playing field for charterers to select ships purely based on GHG emissions and no other economic factor.

And if you thought that such MBM price increases, eventually borne by the end consumer, would cost a small fortune, you could be forgiven. According to Boston Consulting Group's calculations, it would add just \$600 to the price of a car, \$3 to the price of a smartphone or \$1 to a pair of jeans. That is a small price to pay for preventing climate catastrophe.

Our read of the Novel Coronavirus or Covid-19

Covid-19 has become synonymous with delays; supply chain disruptions; lockdowns; higher inflation due to the massive government-led stimuli creating demand that far outstrips supply. Economic recovery from the pandemic has been very uneven for 3 reasons. Countries were hit by Covid-19 and went into lockdowns, hurting their economies, at different times; uneven rates of vaccinations in rich and poor countries; and high levels of stimuli in rich countries and lack of it in poor countries, has made the recovery patchy. In 2022 we will get to grips with the labor market; the impact of workfrom-home; fear of working in office with infected people; prioritizing a better work-life balance; and demand for better wages and working conditions. For the Maritime Industry, the impact of Omicron will be to make crew change even more difficult and that is a challenge that we will have to face head-on in 2022.

Omicron has been designated a virus of concern due to the large number of mutations to its spike protein, which makes it 70 times more transmissible than the Delta variant, according to various news articles. The good news on this variant is that though caseloads are spiking, hospitalizations and death rates have not yet risen, and the bad news is that it is so infectious that the sheer number of cases can overload the health care system of any country. In response, several countries have halved isolation periods and so far, it appears that this decision has been justified. If the UK Prime Minister, Harold Macmillan was alive, and was asked today what the greatest challenge was for a statesman, he would have probably replied: 'Jabs in arms, dear boy, jabs in arms.' The problem is that we have too many craven politicians but not a single statesman who can make such a simple

mantra of 'jabs in arms' a worldwide reality. The good news from South Africa's announcement on 1st January 2022 was that it was past the peak of the Omicron wave. The bad news was American Omicron cases crashing through 1.35 million cases on 10th January; Europe reporting that at current infection rates more than 50% of their population could be infected by Omicron within weeks. All this could portend that we are at the beginning-of-the-end of the pandemic, perhaps?

Omicron, and other yet to be discovered variants, will make 'only work from office' impractical. Only 'working from home' will suffer from the lack of networking, human contact, and sparks created when working together, with creativity being compromised. As a result, the future of work will be some sort of a hybrid between only working from home or only from office. Each business and industry will develop norms that work best for them, while keeping diversity and equality in mind, and business leaders will be guided by such industry wide best practices.

For those who have lost loved ones or those that have lost their livelihoods due to Covid-19, 2021 has been a devastating year, with higher prices and inflation eating into their meagre savings. Climate change has ripped apart communities and created a new wave of climate-refugees. While others have prospered via spiking stock prices, elevated profits, higher home prices, increased asset values, and skyrocketing commodity prices with Elon Musk, the richest man on earth, named as Times 'Man of the Year 2021.' Shame on Time magazine for genuflecting to wealth during a pandemic that has crippled the poor.

Others' reading of the market

The bulker sector, particularly at the smaller end, has seen additional "spillover" demand from the "unboxing" of container cargoes, and there have even been reports of bulkers transporting containers. This has added further impetus to already firmly improving markets; Handysize trip earnings, for example, were up ~200% y-o-y at end October. (Clarksons – 5 Nov 21)

Although COP26 aims at reducing activity in certain areas of the economy to improve energy efficiency, the infrastructure overhaul required for renewable energy power sources and electric vehicles is still supportive of bulker demand. Commodities such as iron ore and coking coal are, for now, irreplaceable in producing the steel required for building this transition. The economic shock of the Covid-19 pandemic has highlighted concerns over global energy security, particularly in renewables, with traditional sources such as oil more reliable as a source of baseload power. It is, therefore, unlikely these commodities will see substantial significant demand destruction in the medium-term. Although demand for coal, the dirtiest of fossil fuels, is likely to peak earlier than most, growing demand for other commodities will increasingly drive bulk carrier employment, while continued switching from coal-burn to cleaner fossil fuels will see demand growth for many other asset classes persist. (Braemar ACM – 18 Nov 21)

The bulk industry's supply staying tight and likely to become tighter through 2022~23; near-term China demand (forming roughly one-third of bulk shipping demand globally) set to stabilize on a slight relaxation in property tightening, while PBoC also signals an easing bias in its latest quarterly monetary policy report (19 Nov); in contrast to major bulk, demand, and prices for grains (wheat, soy, and corn) have held up well in recent months. Following the weak start to the US Gulf 4Q21 grain season due to adverse weather conditions (i.e., Hurricane Ida), US grain exports are now picking up steam and are expected to continue into 1Q22; expectations for the upcoming South American grain harvest season to be strong, with Brazil forecasting a record 2022 grain harvest due to a favorable maize harvest following drought impacts, with grain production reaching a record 270 MMT in 2022 (+7.8% Y/Y, source: IBGE statistics institute); power shortages in key countries including China and India, many countries have been proactively building even higher coal inventory, given expectations of severe winter conditions (possibility of a second successive La Nina weather event) and high gas prices; COP26 reinforced the global maritime industry's de-carbonization goal, with a proposal of achieving zero emissions by 2050; rising food safety concerns and the roll-out of

global infra stimulus, including the recently approved US Stimulus Bill, should support minor bulk demand growth in coming years, together with the ongoing global energy transition that requires certain minor bulk intensive technologies (e.g. nickel, cobalt and lithium), an underappreciated/less-cyclical demand driver; supply discipline remains in place with the record-low order book, while scrapping activity and slow steaming will pick up amid tightening environmental regulations in 2022/23. (JP Morgan – 23 Nov 21)

Chengdu becomes first Chinese city to relax rules for developers; Kaisa offers bond exchange to avoid potential default; Chinese Estates, key Evergrande backer, cuts its stake further; China's economy czar Liu He calls for stable housing market; One investor makes a quick \$582 million in Evergrande fire sale; China property moguls use billions of their own cash on rescues. (Bloomberg – 22/26 Nov 21)

The world's press has converged on a number for the Chinese real estate sector: 29% of GDP. That estimate comes from a paper by Kenneth Rogoff of Harvard and Yuanchen Yang of the IMF. Both economists have impeccable credentials. But their number (28.7%, to be precise) does not count what most people think it counts. In a forthcoming comment a team of economists at the ADB, using the same numbers as Mr. Rogoff and Ms. Yang's paper for real-estate investment and services, reckon that China's property sector accounted for 15.4% of GDP in 2017. Excluding imports, the number fell to 13.8%. (The Economist – 27 Nov 21)

The main risk to an otherwise upbeat global economic outlook is that the current inflation spike proves longer and rises further than currently expected, the OECD said. Global growth is set to hit 5.6% this year before moderating to 4.5% in 2022 and 3.2% in 2023. (Reuters – 1 Dec 21)

As real-estate prices boom across the globe, house hunters in Amsterdam say they are losing out on deals even when bidding 30% or more above asking price, in a city deemed one of the riskiest housing markets in the world. (Bloomberg - 21 Dec 21)

Having long shunned property ownership, rock-bottom borrowing costs, rising rents and for some the impact of having to pay to keep their money in the bank have persuaded almost one in two Germans to buy a house or apartment. The property rush is seeing high-rise buildings spring up across Frankfurt, a building frenzy replicated across Germany, where prices have hit record highs. (Reuters – 21 Dec 21)

The IMF will release an update on January 25 that is almost certain to back off its roaring October prediction of 4.9% global growth. Goldman Sachs has cut its forecast to 3.8% from 4.2%. (Fortune – 11 Jan 22)

A displacement of Indonesian coal export volumes is a positive given the country's average distance for coal exports of 0.7x versus the global average, which compares with potential substitutes Australia at 1.3x and South Africa at 1.2x. (DNB Markets – 13 Jan 22)

Spot charter rates for Bulkers surged throughout 2021. Trade volumes have been positive and improving so far this year. In 2021, global iron ore increased by +0.6% y-o-y to 1,554.1 MMT. Iron ore from Australia declined by -0.4% y-o-y, but from Brazil increased by +4.1% y-o-y. In 2021, coal increased by +4.8% y-o-y to 1,170.8 MMT. Coal from Australia increased by +0.4% y-o-y, from Indonesia by +3.4%, from Russia +9.5%, from USA +22.5%. (Banchero Costa – 14 Jan 22)

The global job market will take longer to recover than previously thought, with unemployment levels set to remain above pre-Covid-19 levels until at least 2023 due to uncertainty about the pandemic's course and duration, the ILO said. (Reuters – 17 Jan 22)

China's economy rebounded in 2021 with its best growth in a decade helped by robust exports but there are signs momentum is slowing on weakening consumption and a property downturn, pointing to the need for more policy support. (Reuters – 17 Jan 22)

China's central bank pledged to use more monetary policy tools to spur the economy and ease credit stress as signs of a property market slump worsen. The dovish comments came a day after the PBOC cut its policy interest rate for the first time in almost two years, signaling the beginning of an easing cycle. (Bloomberg - 18 Jan 22)

Steel production in 2021 was 1.9 BMT, up by 4.5% YoY, despite production curbs in China in SH 2021, and is the highest full-year total on record. (Braemar ACM – 1 Feb 22)

What others' say about Supply Side Developments

Deliveries of bulkers in 2022 are expected to decline to around 28.26 MDWT. In 2021, 35.80 MDWT of ships were delivered, -25% y-o-y compared to 47.54 MDWT in 2020. Demolition in 2022 is expected to increase to about 11.30 MDWT. In 2021, demolition was 6.51 MDWT down -50% y-o-y compared to 13.06 MDWT in 2020. Net fleet growth for over 20,000 DWT is expected to slow to +2% y-o-y in 2022, and then further to about +1% in 2023. The fleet expanded by +4% y-o-y in 2021. Contracting activity accelerated but the orderbook-to-fleet ratio is just 7.1% in DWT terms. (Banchero Costa – 14 Jan 22)

With sentiment bolstered by the markets, containership newbuild contracting set a new annual record in 2021 at 4.2m TEU across 548 units, taking the orderbook to 5.7m TEU, 23% of fleet capacity (end 2020: 11%). (Clarksons – 21 Jan 22)

What others' say about Regulatory Developments

Replacing the current merchant fleet of 100,000 vessels with ZEVs may not be complete until the 2040s, according to Danish Ship Finance. Ships engaged in tramp trade, especially dry bulkers, and tankers, could be a difficult and "late adapter" of green fuel technologies. For tramp trading vessels, the transition to zero-carbon fuels will require a global distribution network of the future fuels in question. Such a network is unlikely to be established in the short term. The renewal of dry bulker vessels, which are relatively easy to construct, "is likely to take place over the course of 10 to 15 years, beginning as late as the 2030s". Dry bulk vessels carry 45% of seaborne trade volumes distributed between more than 12,000 vessels with a combined capacity of 226 MCGT. A total of 140 yards with a combined capacity of 45 MCGT, which represents 85% of global capacity, could renew the entire dry bulk fleet in five years. (Lloyd's List – 15 Nov 21)

On Australia's east coast, roughly 200 miles from the Great Barrier Reef, a single coal mine run by Glencore emitted so much super-warming methane in a year that it had the same impact as the annual pollution from more than 4 million US cars. It is one of a group of mines in Australia that are more responsible than most for fueling catastrophic global warming. And that's just from the coal mining process, before this dirtiest of fossil fuels is burned. (Bloomberg – 29 Nov 21)

The orderbook of ships set to be powered by alternative fuels has continued to increase. Alongside LNG, development of other options such as methanol, hydrogen and ammonia are ongoing. Despite the pickup in adoption, we estimate that just 5% of fleet tonnage will be capable of using alternative fuels by the start of 2023, up from 4% today; in many ways shipping's 'Fueling Transition' is just beginning. (Clarksons – 10 Dec 21)

If the financial-services industry was a country, it would rank as the world's fifth-largest emitter of greenhouse gases. (Bloomberg – 14 Dec 21)

With new solar installations, wind farms and other technologies, the world added 290 gigawatts of renewable power production capacity this year, according to a report published this month by the Paris-based International Energy Agency. By comparison, that is twice as much as Canada's total electricity generating capacity of about 145 gigawatts. (Al Jazeera – 28 Dec 21)

An army of McKinsey researchers have produced a plausible estimate of how much a "net zero" transition will cost companies. It's a big number: \$275 trillion in capital spending on physical assets by 2050, or \$9.2 trillion a year. Of course, a lot of that investment is already happening. But McKinsey says the increase in investment needed would be \$3.5 trillion a year. The McKinsey report is silent on who picks up the tab. (Fortune - 25 Jan 22)

Extreme heat has since 2014 become normal in the world's oceans, scientists now reckon. This has a huge impact on marine ecosystems. Researcher Kyle Van Houtan: "Extreme climate change is here, it's in the ocean, and the ocean underpins all life on Earth." (The Guardian – 1 Feb 22)

Others' read of the Novel Coronavirus or Covid-19

The two mRNA vaccines, from Moderna and Pfizer, performed best against the Delta variant, followed by the AstraZeneca jab. (The Economist – 20 Nov 21)

A new study shows that ivermectin, an anti-parasite drug in high demand, can indeed aid the treatment of covid-19, but only in patients who suffer from worms. (The Economist – 23 Nov 21)

Hungarian researchers found that Moderna and Sputnik V vaccines were more effective than Pfizer, based on data from more than 3.7 million inoculated people. (Bloomberg – 25 Nov 21)

Airlines, passengers, and businesses scrambled to respond to a deluge of travel restrictions announced over the weekend to slow the spread of the Omicron variant. The WHO is urging caution after two South African health experts, including the doctor who first sounded the alarm about Omicron, indicated that symptoms linked to it have been mild so far. The variant appears to be more transmissible, reinforcing the need for vaccinations or booster shots, said the US's top infectious-disease doctor, Anthony Fauci. (Bloomberg - 29 Nov 21)

Children under the age of 2 account for about 10% of total hospital admissions in the omicron variant's current epicenter, South Africa. (Bloomberg - 29 Nov 21)

Shabir Madhi, a vaccinologist at the University of the Witwatersrand, South Africa, said he's "optimistic that in the Omicron resurgence, while the total number of cases will probably be greater, hospitalizations and deaths will be lower." (Bloomberg – 2 Dec 21)

Pfizer's vaccine shot provides less immunity to Omicron than to other major variants of Covid-19, according to lab experiments in South Africa, where the number of hospital admissions more than doubled. But researchers said a booster may still help stop this strain. (Bloomberg – 7 Dec 21)

Data on Omicron show surging cases but milder symptoms. The variant's capacity for reinfection appears unprecedented. In South Africa, Omicron is already dominant. It appears to have rapidly out-competed Delta and set off another wave of infections. (The Economist - 11 Dec 21)

Boris Johnson warned the UK is facing a "tidal wave" of Omicron infections and set an end-of-year deadline for the country's booster vaccination program. Infections in the UK from the new variant

doubled in one day and now make up a third of new cases in London. South African studies show a two-shot course of Pfizer's vaccine may have just 22.5% efficacy against symptomatic infection with Omicron but can thwart severe disease. (Bloomberg – 12 Dec 21)

Two doses of Pfizer-BioNTech's Covid-19 vaccine appear to have given 70% protection against hospitalization in South Africa in recent weeks, a major real-world study on the potential impact of Omicron showed. This represents a drop from 93% efficacy against hospital admission during South Africa's outbreak of the Delta variant. (Reuters - 14 Dec 21)

A study on Tuesday confirmed that Pfizer's new treatment for Covid-19 is effective if taken within three days of symptoms starting, the risk of hospitalization and death is reduced by 89%, the company said. (Fortune - 15 Dec 21)

The Omicron mutation is much better at infecting, 70 times faster than delta and the original strain. But the severity of illness is likely to be much lower, according to a study from the University of Hong Kong. (Bloomberg - 15 Dec 21)

Moderna said that a booster dose of its COVID-19 vaccine appeared to be protective against the fast-spreading Omicron variant in laboratory testing and that the current version of the vaccine would continue to be Moderna's "first line of defense against Omicron." (Reuters - 20 Dec 21)

Aircraft passengers are twice or even three times more likely to catch Covid-19 during a flight since the emergence of omicron, according to the top medical adviser to the world's airlines. And those fashionable cloth masks some prefer could be a bad choice when it comes to the new, furiously transmissible mutation. (Bloomberg - 22 Dec 21)

In South Africa, Omicron is behaving in a less severe way, said Professor Cheryl Cohen, one of the authors of a National Institute for Communicable Diseases study. (Reuters – 22 Dec 21)

Merck's molnupiravir was cleared on Thursday by the US FDA for use in some infected adults at high risk of severe illness. (Bloomberg - 23 Dec 21)

The US authorized Pfizer's antiviral Covid-19 pill for people ages 12 and older at risk of severe illness, the first oral and at-home treatment as well as a new tool against the fast-spreading Omicron variant. (Reuters – 23 Dec 21)

Expect more shipping chaos next year as omicron risk forces transport workers, from seafarers to truck drivers, to quit or change jobs. Logistics companies around the world, from global giants to small businesses, can't find enough staff as governments tighten restrictions and virus infections surge. (Bloomberg - 27 Dec 21)

CDC has identified 89 cruise ships with Covid-19 cases on Tuesday. (Bloomberg - 28 Dec 21)

Within weeks, the Omicron variant has fueled thousands of new Covid-19 hospitalizations among US children. And a booster dose of Johnson & Johnson's single-dose vaccine was 84% effective at preventing hospitalization in South African healthcare workers who became infected as the Omicron variant spread. (Reuters - 30 Dec 21)

Many US schools that would normally welcome students back to classrooms today are delaying their start dates, scrambling to test pupils and teachers, and preparing as a last resort to return to remote learning as Omicron cases sprout up across the country. (Reuters - 3 Jan 22)

South African scientists think they may have figured out what causes Long Covid symptoms: microclots in the blood that are resistant to the processes that the body usually uses to break them down, and that don't show up in current pathology tests. (Fortune – 6 Jan 22)

Protective immune "T cells" triggered by the common cold made people less likely to contract Covid, researchers at Imperial College London showed. (Bloomberg - 10 Jan 22)

The Omicron variant is on track to infect more than half of Europeans, but it should not yet be seen as a flu-like endemic illness, the WHO said. (Reuters – 11 Jan 22)

A published lab study suggests that two cannabis-derived compounds may block the coronavirus from infecting healthy human cells. There could be implications both for preventing and treating Covid infections, though more research is needed. (Fortune – 12 Jan 22)

The coronavirus loses most of its ability to infect shortly after being exhaled and is less likely to be contagious at longer distances, a preliminary University of Bristol study showed, reinforcing the notion that the virus is mainly transmitted over short distances and providing fresh support for social distancing and mask-wearing as means to curb infections. (Bloomberg - 13 Jan 22)

Data from South Africa suggests Omicron the latest Covid variant causes less severe illness in the unvaccinated, even those who never had a Covid infection, as well as the vaccinated. The study is yet to be peer-reviewed. (Fortune - 14 Jan 22)

Data out of South Africa suggests the Omicron variant may be more dangerous for children than earlier coronavirus strains. (Bloomberg - 19 Jan 22)

In America, the number of children in hospital with covid is rising fast. Rapid transmission and vaccination discrepancies are part of the explanation. (The Economist – 22 Jan 22)

Judging by excess mortality figures, close to a million people in the US have now died from Covid. Around 700,000 of them were aged 65 or over. (Wall Street Journal – 1 Feb 22)