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OUTLOOK 2023

Simpson Spence Young
2023 OUTLOOK

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About Simpson Spence Young

Established in 1880, Simpson Spence Young (SSY) is the world's largest independent shipbroker. Our 400 employees cover each major market including dry cargo chartering, tanker chartering, LNG chartering and projects, ship sale and purchase, chemical chartering, consultancy and research, futures and towage.

SSY has a global reach with offices in Athens, Copenhagen, Dubai, Geneva, Genoa, Hong Kong, Houston, London, Madrid, Mumbai, New York, Oslo, Sao Paulo, Seoul, Shanghai, Singapore, Stamford-USA, Sydney, Tokyo, Vancouver, Varna, Zug.

Trusted and long-established, SSY has the privilege of working with clients across the globe, connecting people in the world of shipping.

www.ssyonline.com

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INTRODUCTION

Welcome to our 2023 Outlook report.

I think we can all agree that 2022 has been one of the most tumultuous on record with global factors having a major impact on shipping and commodity markets.

The fallout from the ongoing conflict in Ukraine has resulted in serious repercussions throughout 2022 and will undoubtedly continue to have a major effect well into 2023. While COVID-19 looks to be behind us "on paper", its lingering effects are still being felt and continue to affect global supply chains. As a consequence, we've experienced a general slowdown in economic growth and an increased tightening on monetary policy with interest rates increasing in response to rising inflation.

Added to this, the decarbonisation of shipping markets continues to be an important challenge and one that we must collectively tackle head on. The IMO is attempting to improve the carbon performance of existing fleets, while working to encourage moves towards low or zero-carbon fuel alternatives. How effective these measures are remains to be seen.

In this report, SSY experts examine how these factors have influenced shipping markets in 2022 and provide insights as to what we can expect in 2023. Suffice to say, the forces as outlined above will continue to shape our business in the year ahead.

Wishing you all the very best,

Stanko Jekov

Managing Partner, Simpson Spence Young

DRY BULK MARKET

Alastair Stevenson
Head, SSY Digital Analytics

After all kinds of upheavals to the dry bulk freight market since the beginning of 2020, charter rates had retreated to levels more resembling the pre-pandemic world by the end of 2022.

Of course, this is not to claim that the freight market environment has largely reverted to its pre-pandemic state. On the contrary, the powerhouse of dry bulk import demand, China, spent 2022 still beset by Covid restrictions which, alongside real estate weakness, have hampered its recovery. SSY estimates that this year's annual drop in China's dry bulk imports may be confirmed at the best part of 100 Mt.

Compounding this clear trade negative is the removal of some of the fleet inefficiencies which had supported market balances in 2021. These include the reduction of quarantine requirements, plus lower levels of port congestion in China, which may derive from fewer weather-related disruptions as well as from less pressure from inbound arrivals after queues build.

Then there is the particular set of consequences from the conflict in Ukraine.

On the other hand, as high energy prices have flowed through the global economy and stalled the Covid recovery. The onset of recessionary conditions and weaker economic growth subdued dry cargo demand in the second half of 2022. With the notable exception of the world's second-largest producer, India, which managed to generate annual growth, weak steel production figures add to the sense of an intensifying cyclical downturn.

At the same time Colombian and South African coal exports were increasingly directed towards Europe.

Indeed, the structure of dry bulk demand has been altered as pressure on gas supply in Europe will keep coal in the energy mix for longer than previously anticipated.

On the other hand, the onset of recessionary conditions, European gas shortages contributed to surging energy prices, subdued cargo demand in the second half of the year. With the notable exception of the world's second-largest producer, India, which managed to generate annual growth, steel production figures add to the sense of an intensifying cyclical downturn.

At the same time, cargo supply for geared vessels was being squeezed by ongoing export restrictions in India (with punitive export taxes on iron ore and steel, which were partly revoked in November) and China (controls on some fertiliser exports).

After Covid recovery powered a trade rebound in 2021, seaborne dry bulk trade retreated again in 2022. Unlike 2020, when an abrupt drop in coal led the decline, 2022 featured drops in steel-related bulk cargoes. Iron ore saw the largest fall, with year-on-year falls in imports into China in addition to Japan, South Korea and Taiwan. Of the main exporters, Brazil and India saw the most conspicuous annual declines in 2022.

“ The structure of dry bulk demand has been altered as pressure on gas supply in Europe will keep coal in the energy mix for longer than previously anticipated.

For the Capesize market levels, this was only part of the story. SSY's in-house time charter assessments for Capesizes with and without scrubbers indicates average earnings (basis a straight average of the 4 main TCs) of around $25-26,000/day for the former, but only $16-17,000/day for the latter.

By historical standards, the dry bulk carrier orderbook remains low, at 6.9% of the existing fleet, though much of that reflects a comparative lack of ordering of Capesize tonnage.

Fleet deletions are poised for a 15-year low, while bulker newbuilding deliveries are on course to fall short of 30 Mdwt and last year's total of nearly 37 Mdwt. However, this masks discrepancy between vessel sizes, with fleet additions into the 40,000-64,999 dwt and 65,000-99,999 dwt sectors higher than 2021.

Outlook for 2023

Seaborne dry bulk trade is expected to return to growth in 2023 however, the combination of global steel sector weakness, grain trade constraints and disruption to cargo supply, such as the announced Indonesian bauxite export ban, will weigh on the pace of expansion.

The main swing factor for steel-related and other trades will be China, which is currently facing stiff economic and Covid-related headwinds. SSY's base case projects persistent near-term softness in industrial activity and economic growth. However, if the current covid-related disruption is overcome post-winter, the narrative improves substantially with more economic green shoots and China supporting dry bulk demand during the second half of 2023.

Global grain trade will remain strong with Australia poised for a third consecutive bumper year of wheat exports, while Canadian grain exports will only be limited by supply chain capacity. SSY expects more Brazil-to-China corn cargoes with tentatively positive prospects for Brazil's soyabean harvest, plus a strong US dollar, supporting market balances in the first half of 2023. However, we are mindful of drought-hit constraints on grain exports from Argentina, plus the obvious difficulties in harvesting in war-torn Ukraine. Overall, seaborne grain trade is expected to regain some of 2022's lost volumes and be close to 2021 levels.

As containership rates have retreated to pre-pandemic levels, the extraordinary process of loading either containers or de-containerised cargoes on to less expensive bulkers will fade. This demand had supported the geared vessel markets from 2021 into 2022. Geared vessels may face further headwinds if the Indonesian government follows through on plans to limit bauxite exports from mid-year.

Meanwhile, the dry bulk carrier orderbook remains low by historical standards – equivalent to just 6.9% of the trading fleet in deadweight tonnage terms at the end of 2022 – and restricting the pace of newbuilding deliveries in 2023. In conjunction with a modest uptick in scrapping activity, partly due to new IMO greenhouse gas regulations but mainly as weaker end 2022 markets weed out older vessels, 2023 supply growth is likely to be subdued.

SSY's Base Case anticipates 2023 dry bulk carrier fleet utilisation close to 2022 levels, though moving higher as the year progresses. With so many macro-economic, geopolitical, fleet efficiency, and regulatory risks overshadowing this outlook, 2023 is set to be another volatile year.

“Global grain trade will remain strong with Australia poised for a third consecutive bumper year of wheat exports, while Canadian grain exports will only be limited by supply chain capacity.

TANKER MARKET

Claire Grierson
Head, SSY Tanker Research

The tanker market continued to adapt to the fallout of the Russian-Ukraine conflict in 2H22 as global oil trade flows further shifted, causing extreme rate volatility. Europe's steady move away from Russian oil bolstered Suezmax and Aframax markets given the shorter to medium haul demand for North Sea, West African and US crude as immediate replacements.

The tanker market was also lifted by recovering oil consumption post-pandemic and therefore greater import demand, with refineries ramping up output. This meant increased crude needs and more exports of refined products as refinery closures since the pandemic has left a global imbalance of clean product supply. Distillate stocks were low globally, and for Europe, this meant more volume moved from east of Suez (where most new refinery capacity is concentrated) to the west, thereby bolstering already firm clean tanker earnings as it elevated tonne miles.

The biggest transformation in the tanker sector in the 2H22, however, was the swing in earnings for VLCCs. After falling to -$23,000/day (a record low in SSY data back to 2000) for a non-eco vessel at the start of June on the benchmark Middle East Gulf to China route, by November, earnings had climbed to just under $100,000/day representing a near $125,000/day swing in five months.

VLCCs were increasingly utilised on trades that would normally have been performed on Aframaxes or Suezmaxes given the strength in earnings for

“The tanker market was lifted by recovering oil consumption post-pandemic and therefore greater import demand, with refineries ramping up output.

those sectors, such as from the US Gulf to Europe. Increasing demand from Europe for Middle East Gulf crude raised trading opportunities for VLCCs and Suezmaxes. This was underpinned by rising OPEC output from Middle East Gulf producers as OPEC+ steadily relaxed their productions cuts. This culminated in a peak in August of VLCC monthly loads of 168, which was up 37 cargoes from the low for the year recorded in March, and the highest monthly volume since early 2020, SSY broker data showed.

Shifts in crude futures pricing spreads also made Atlantic basin crudes more attractive to Asian buyers again. As the Brent-Dubai spread had narrowed from July, this lifted tanker tonne miles for the VLCC sector and supported rates. Rising US crude exports to record levels after the US triggered massive releases from its Strategic Petroleum Reserve (and as domestic oil production climbed), had not only rallied Aframax and Suezmax rates but increased VLCC demand from the US Gulf. US government trade data showed a significant uptick in exports to Asia in 2H22, so necessitating the use of the larger tankers. The final quarter of the year also witnessed a shift in Brazil’s trade flows from moving supply to Europe to a rebound in demand from China, thereby adding to the need for VLCCs in the southern Atlantic basin.

China’s zero-covid policy had restrained the country’s crude import demand for much of 2022 as waves of lockdowns curtailed oil consumption and refinery runs dropped. But with economic pressures and rising stocks, there was a change in China’s refined product export policy and it raised its export quota for the latter part of 2022. Additional crude import quotas were also given to independent refiners and this boosted China’s crude imports and refinery runs in 4Q22.


SMOKING
FIRST

Outlook for 2023

For 2023, the tanker market will feel the effects of the EU ban on Russian oil, as seaborne crude imports were banned as of 5 December 2022 and refined product imports will be halted from 5 February 2023. EU owned vessels will no longer be able to move Russian oil due to marine insurance restrictions unless the oil has been sold at or below the price cap that the G7/EU has agreed.

This should open EU vessels that had been moving Russian crude back up to wider trading opportunities, which should help alleviate some of the supply squeezes that the market has faced. Non price-capped Russian oil would need to move on state-owned and third country-owned vessels that have state-backed insurance and potentially tankers operating in the so called “shadow fleet” of ships that have previously engaged in the carriage of sanctioned oil. While this already exists for the crude tanker market, this has not been the case for the clean segment so there is uncertainty in how, and to where, Russian refined product will move and in what volume. India and China have already increased their imports of Russian crude and it remains to see how much more they will and can take and if it will be at a price capped level. Russia has said it will not abide by the price cap. For clean products, Russian oil has already been moved to the Middle East and there is scope for volumes to head to Latin America, Africa and the Sub-Continent.

The relaxation in China’s zero-Covid policy is expected to lift its crude import demand in 2023, but the biggest question is whether the additional volume required will be met by Russian oil, which would not be positive for the broader market, or other suppliers. For the clean market, the sustained longer haul movement of refined products and the recent start-up of new refineries in the Middle East Gulf, means more oil should continue to move west. However, there are factors that could take some of the strength out of the tanker market, which include OPEC+ cutting production while inflationary and recessionary pressures are a risk to demand.

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DERIVATIVES

Przemek Koralewski

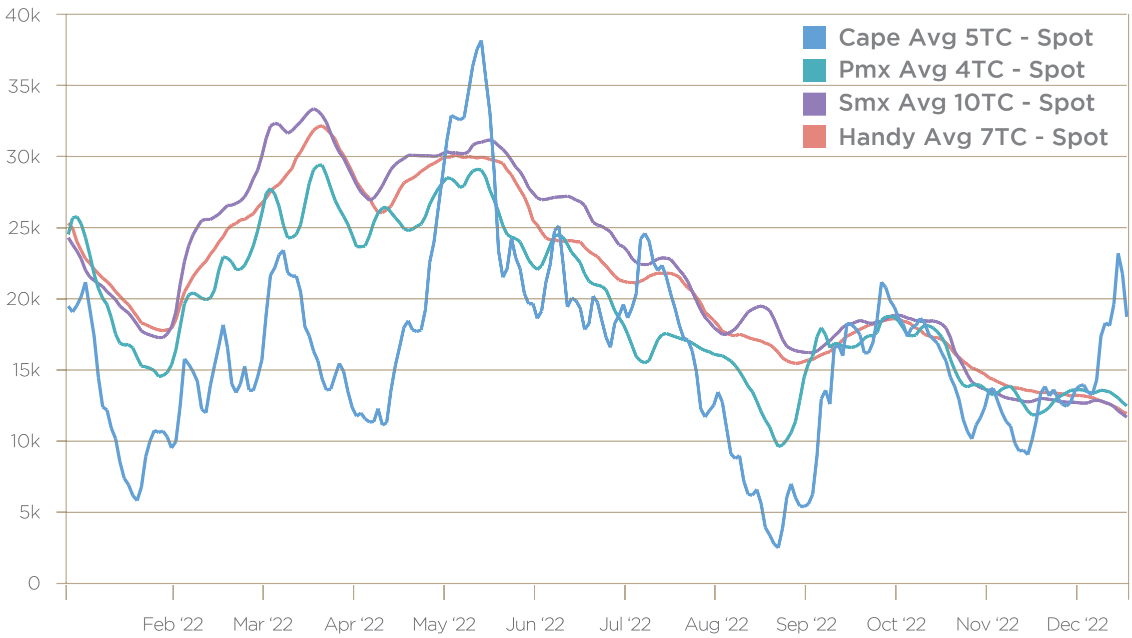
Head, SSY Futures, Business Development

2022 will certainly go down in history as a unique year for the global economy. Economies continued to open up from the post-Covid lockdowns, conflict continued to rage in Europe and inflationary pressures triggered a mass response from central banks which have increased rates to levels not seen in a post 2008/09 world. All of this contributes to a state of ongoing uncertainty. Supply chains are shifting as a result – not only due to sanctions but also due to the signs of deglobalisation and blocks of interest rearranging themselves across the global powers which seems to be forming blocks of interest across the US, EU and China. Interestingly, It remains to be seen how India will position itself in these new spheres of influence.

> **"Following a relatively positive first 5 months of the year, the FFA market reversed course and for the most part of the second half, was in a downward trend across all vessel sizes.**

Baltic Exchange Dry Bulk Assessments

$/day average timecharter rates

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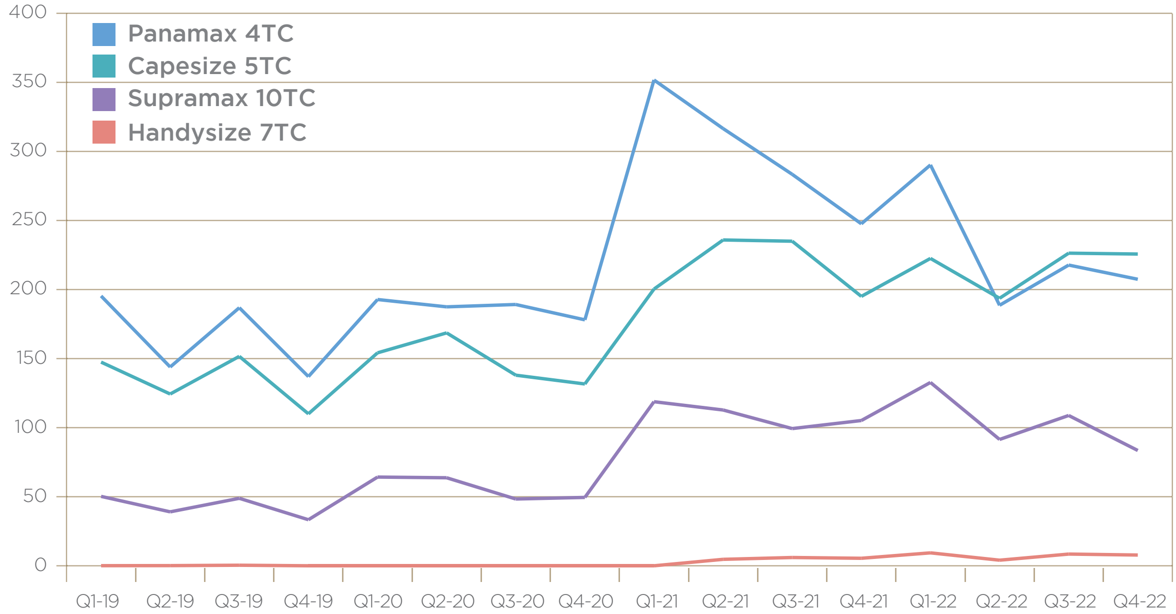
Dry Bulk FFA Timecharter Market Volumes

Quarterly Total, '000 Days



So, taking this into account, how has the FFA market performed? Volatility was definitely the main theme that was visible this year. As we pointed out in our mid-year outlook, this was expected with the number of events that markets were exposed to. Following a relatively positive first 5 months of the year, the FFA market reversed course and for the most part of the second half, was in a downward trend across all vessel sizes. We saw some stability in Q4 with the Capes, the most volatile segment staging a decent recovery in rates in early December.

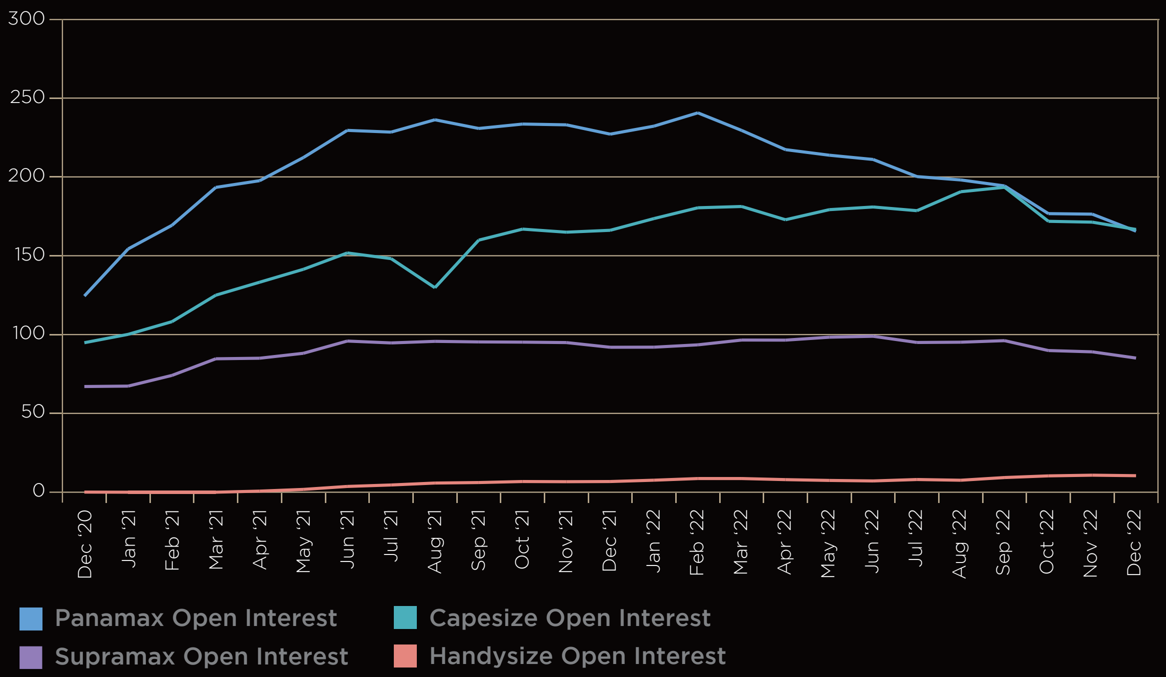
Trading volumes remain above 2020 levels across all vessel sizes and slightly lower than the very strong 2021 levels, except for Panamax which was the strongest performer in volume terms in 2021. After relatively lower volumes in Q1-Q3 2022 when comparing to the same periods in 2021, Panamax volumes noted a 30% increase in Q4 2022 vs Q4 2021.

Turning to open interest, we observed a drop in total FFA open interest in line with the downward price trend. Panamax was the biggest contributor to the lower levels

Quarterly Volume Changes vs same period in 2021 & 2020			
	CAPESIZE	PANAMAX	SUPRAMAX
Q4-22 vs Q4-21	0%	30%	-26%
Q4-22 vs Q4-20	49%	3%	3%
Q3-22 vs Q3-21	-4%	-23%	10%
Q3-22 vs Q3-20	64%	15%	125%
Q2-22 vs Q2-21	-24%	-45%	-25%
Q1-22 vs Q1-21	11%	-17%	12%
Q2-22 vs Q2-20	7%	-7%	33%
Q1-22 vs Q1-20	44%	51%	107%

YTD 22 vs Same Period 21	-5%	-28%	-8%
YTD 22 vs Same Period 20	39%	16%	77%

Dry Bulk FFA Open Interest 20d moving average, '000 days



however the open interest in the Panamax segment reached record high levels in early 2022.

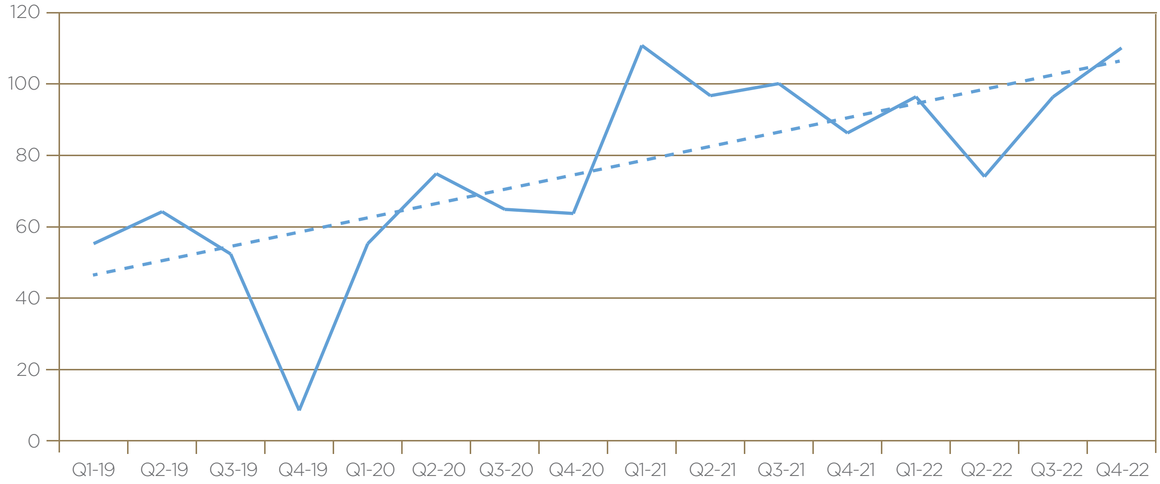
We have been bullish on the smaller vessel sizes and the performance in Handysize has confirmed our stance. The open interest is at its highest level since the underlying index description was modified by the Baltic Exchange. In fact, we are seeing that new market entrants are very much the ones with exposure to the smaller vessel sizes.

Options

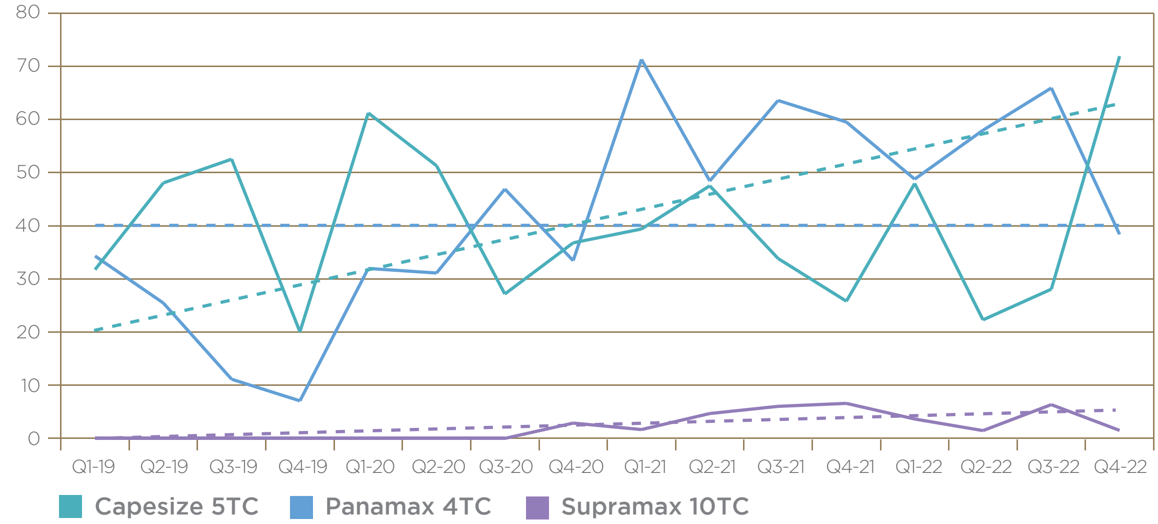
FFA Options volumes have been trending higher since the beginning of 2019. The main driver behind this increase is the progressive growth in Panamax Options volumes. Although it's worth noting that Q4 2022 saw a swap in the level of activity in the options market between Panamax and Capsize options.

Open Interest in the options market is less volatile than in the FFA's with total OI pretty much in line with the levels we saw at end of 2020.

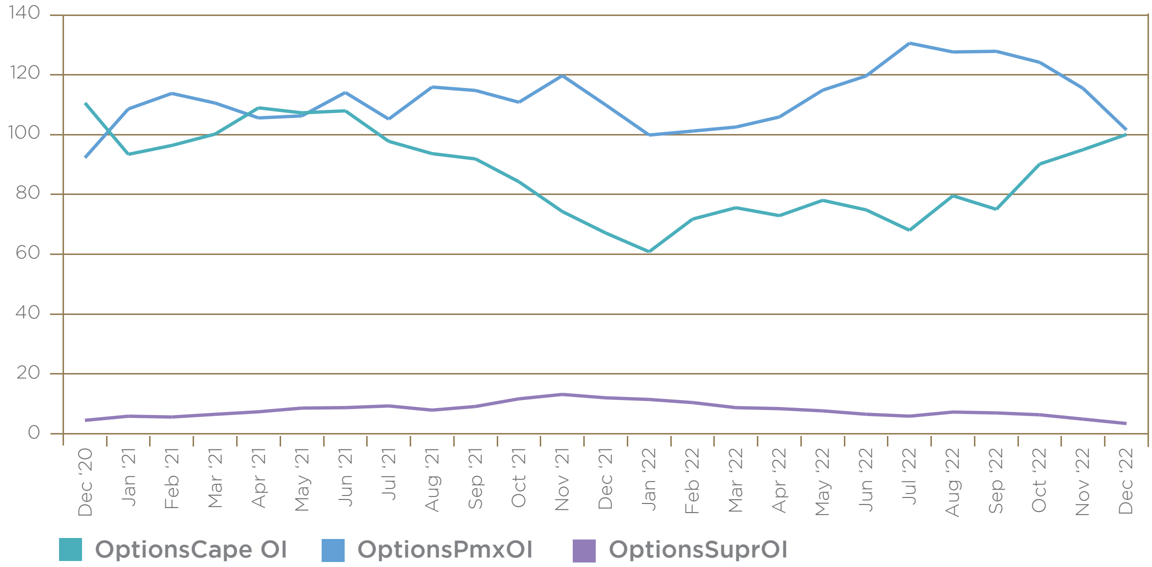
Dry Bulk FFA Options Volumes All products, Quarterly Total, '000 Days



Dry Bulk FFA Options Volumes Quarterly Total, '000 Days



Dry Bulk FFA Options Open Interest 20d moving average, '000 days



Outlook for 2023

There is a lot of speculation about recession in general. Some big financial institutions are expecting a hard landing while the latest round of lower than expected inflation data has triggered some moderate optimism. That being said, the Federal Reserve is still signalling more rate hikes to further cool the economy. We will also be observing China very closely and their emergence from "Zero-Covid" in addition to the real estate sector which is a huge driver of commodities demand and by implication freight demand. We will also be closely monitoring the steel industry performance which could have bearing on the iron ore trade and in turn could impact Capesize performance.

The Russia/Ukraine conflict is of course an area to focus on. The longer it lasts, the more detrimental it can be on the trade routes while the effectiveness of the grain corridor remains to be seen. We are hearing in the market that even if the corridor is enforced, a sizeable amount of grain is now moving to neighbouring countries on rail. This could potentially develop into a more permanent trend, however with uncertainty being at an all-time, high we would be cautious making strong statements in this respect.

Additionally, 2023 will be a year when the widely anticipated carbon regulation comes into effect. What impact, if any will this have on freight supply? This remains to be seen once the regulations are in force. We strongly advise our clients to be ahead of the curve and start putting in place measures to be ready - specifically for the inclusion of shipping in the ETS. This is something our carbon team can help with so please get in touch with us should you require assistance.

LNG

Toby Dunipace
Head, SSY LNG

Has 2022 been the most turbulent LNG shipping market ever?

The last 6 months have defied all predictions and broken all records. The geopolitical landscape has resulted in a very exciting LNG shipping market that has seen uncertainty pave the way for unprecedented, frantic chartering for LNG carriers.

The midpoint of the year saw a shutdown of a major LNG export terminal, Freeport, which knocked rates down during the June/July period. However, this was merely a pause for thought as what followed was chaotic.

Europe was constantly in the spotlight throughout 2022 as the need to remove itself from Russian pipeline gas became more and more evident. Nations without significant LNG import / regasification infrastructure have worked towards chartering Floating Storage and Regasification units (FSRU's). These vessels have proven to be a "quick fix" solution for nations switching from pipeline gas to LNG imports for power generation.

During the second half of 2022, European nations raised LNG imports further as they began "stockpiling" LNG in anticipation of a potentially cold winter and without Russian pipeline gas. Despite having had a mild start to the winter and with LNG deliveries on shorter tonne mile routes compared to Asia, the incremental import demand has resulted in vessels floating, laden, waiting to find a discharge slot. The net result has been shorter LNG position lists and a further charter rate support. As ever for shipping, unseen events and volatility prompt high rates for ship owners.

In fact, the underlying LNG price (for the commodity) has been so high in Europe, that the "ocean freight" element has been arguably insignificant. For a European energy major dealing with domestic supply concerns, the cost of shipping is only a small fraction of the whole picture. The conflict in Ukraine has refocused many on the security of energy supply, and this eclipses the concern of paying high rates. The Far East has been a different story.

China, the largest importer of LNG, has had a very quiet 6 months in terms of LNG import activity. This is due mainly to its "zero covid" policy which has tangibly slowed domestic demand growth. Such is China's importance to regional LNG trade, that this has been the defining factor in Asian markets.

As China's LNG import demand growth has slowed, Chinese LNG off takers have been able to resell their parcels to European customers. Other Far Eastern importing countries remain busy, but even here the mild winter, so far, has dented LNG import intentions. As the energy situation in Europe has been so dramatic, there have been times where Far Eastern buyers have somewhat "struggled to compete." Of course they have been buying normally, but the spotlight has been fixed on Europe over the past 6 months.

Another feature of 2022 has been LNG new buildings, with a huge amount of ordering taking place throughout 2022. Although the pace has slowed slightly during Q4, new build prices are at a record

high at $250 million. It feels as though this might be the ceiling, but these estimates are in theory just a number that Charterers can calculate for fixing.

The other newbuilding issue is the lengthy delivery – with yard estimates now stretching into 2027. This makes any decision making very difficult as the timing is very hard to map out. At current prices, owners are reticent to order speculatively and this places the onus on the Charterer to "know" that they can commit to excessive pricing and for a long period of time. Owners are typically requiring a charter period of 10 years or more to make things work and whilst that can be workable for a prompt vessel, the 2027 delivery makes it very challenging.

Outlook for 2023

As we look to the new year, there is an overriding sense that the conflict in Ukraine will continue to dominate the energy sector headlines. Even if the fighting stops tomorrow, will Europe ever let itself be so dependent on Russian oil/gas? It would seem unlikely. So, we are entering a new energy paradigm where the LNG sector has had to accelerate its activity. Projects are getting FID (final investment decision) quicker, charterers are committing to shipping faster, and Owners are looking for 6-digit rates as a matter of principle. All in all, it makes for a very exciting market and year to come.


SHELTER
FIRE LINE
VALVE

CHEMICAL TANKER MARKET

Adrian Brown

Head, SSY Chemical Research

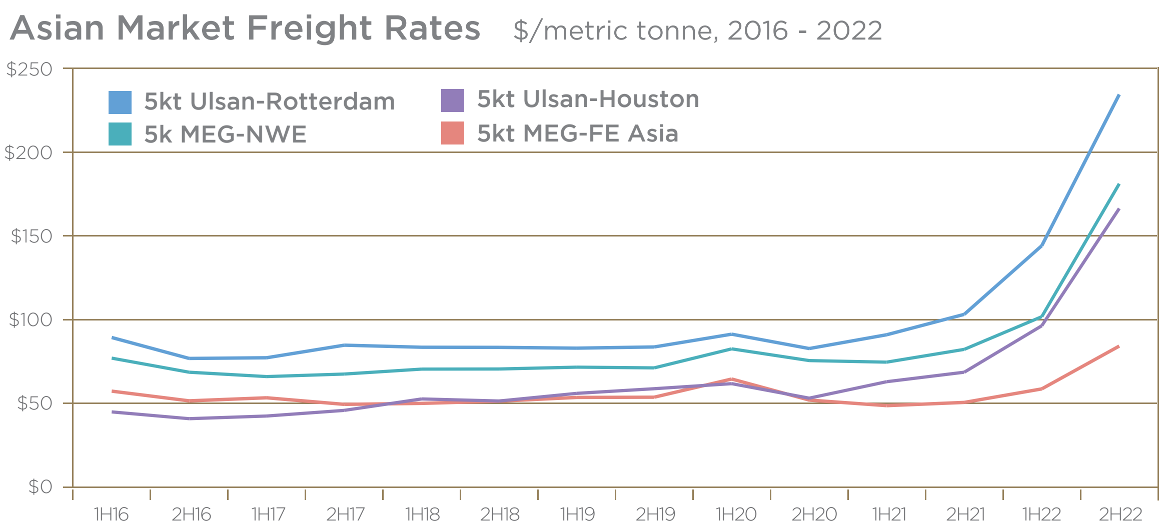
For just about every chemical tanker owner, it was an unforgettable summer. Earnings continued their meteoric rise on most trade lanes globally, building on the gains recorded after the start of the Russia/Ukraine war. For those Owners whose governments had not introduced sanctions against Russia, it was an especially lucrative period.

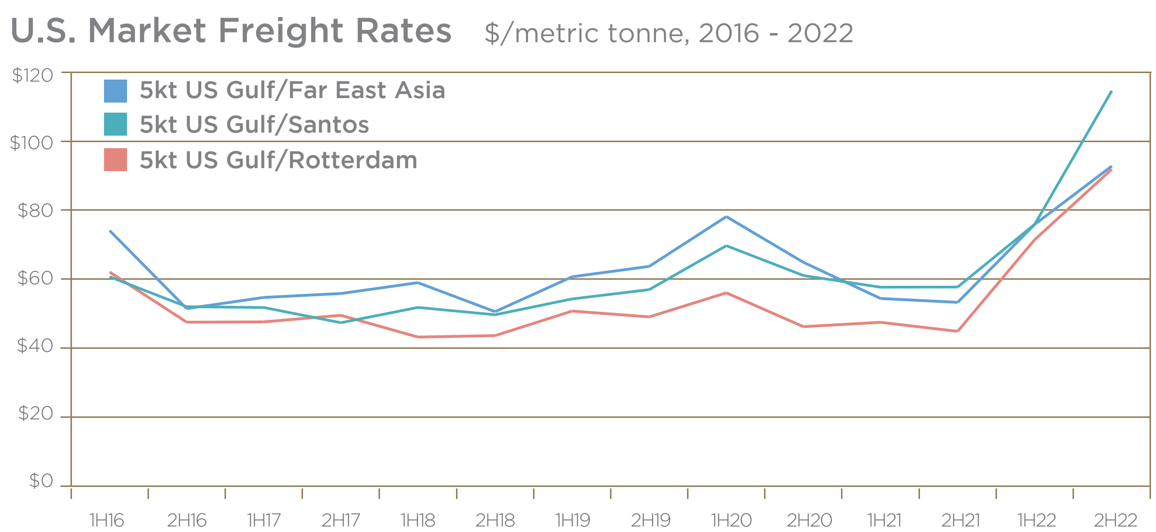
For Europe, effectively faced with a ban on importing Russian chemicals, and with its own chemical industry hobbled by crippling energy costs, an increase in imports from other regions was the only solution. The resulting increase in tonne-miles siphoned off a substantial proportion of the global deep-sea fleet. Meanwhile, other sectors that compete for vessel space were also enjoying a considerable boom in freights. Chemical-capable MR's secured employment in more lucrative CPP trades, or turned to the edible oil markets, where earnings were on a par with CPP. Owners of stainless tankers who were free agents to spot trade their ships learned to exploit the shortage of space suitable for sulphuric acid, with suitably high freight levels.

Except for China and its prolonged lockdowns, Covid was under control and the world opened up for travel, stimulating the use of biofuels among other types of fuel. Feedstocks to produce biofuels had to be imported from Asia, causing even greater competition for vessel space on routes already under pressure from heightened chemical demand, which were already trying to wrestle space away from buoyant CPP and palm oil markets.

In Asia, thanks to reduced domestic demand for some products (as a result of lockdowns in China), chemical producers possessed some of the lowest-priced products globally and consequently Asia became a key supplier to the rest of the world for many chemicals. Strong freight levels were sustained by a shortage of space and the need to pay the ballast leg for Owners to send ships there.

In the US, exempt from any serious hurricane damage, chemical producers were able to target users in Europe and South America, and freights responded to the increased demand for vessel space.





“For Europe, effectively faced with a ban on importing Russian chemicals, and with its own chemical industry hobbled by crippling energy costs, an increase in imports from other regions was the only solution.

Strangely, the European domestic market did not collapse as some had expected. Instead, Owners' psychology altered. No longer were they on the back-foot and buoyed by the knowledge that space was in short supply, thanks to the impact of the war, freights maintained their upwards momentum. Some Charterers, faced with COA renewal levels that ranged from 10% to 75% elected to time-charter tonnage instead, effectively doubling the usual hires in order to match Owners' TCE levels. This in turn supported second-hand values.

Outlook for 2023

It looks set to be a tumultuous year ahead for the Chemical market. Tonnage supply remains tight. The orderbook is very small for dedicated chemical vessels, with fewer than 40 tankers ordered over the last six months. Low scrap values however have discouraged Owners from recycling older vessels. Uncertainty about which technology will prevail regarding bunker fuels have dulled Owners' appetite for new orders, along with the high cost of a new vessel and a shortage of slots at suitable shipyards. Meanwhile the introduction of CII and EEXI regulations are likely to result in slow-steaming for older, less-efficient tankers, which is essentially the majority of chemical tankers, effectively reducing tonnage supply. A delay in the onset of the European carbon tax is also expected. Much will depend on what the outcome of the Ukraine conflict will be, and how cold the European winter will get. European gas reserves are almost at full capacity, and a mild winter will ease pressure on heavy energy users, some of whom have already started to reduce production.

The future of the Chemical market is also intrinsically bound to that of the CPP market. Should CPP rates remain firm, the threat of Swing tonnage entering the Chemical sector will be removed. Rates for products that compete for space with CPP, such as biofuels, edible oils, molasses, UAN and some bulk chemical grades will follow CPP rates to some extent.

The removal of Russian chemical exports could have been expected to result in a collapse of the Chemical market in the North Sea and Baltic and the potential relocation of the fleet, leading to potential oversupply in other European regions, but paradoxically, the opposite has occurred, at least so far. Logic would suggest however that with European inflation running at around 10%, consumers will cut back on expenditure, and with fiscal policies being introduced to combat inflation, coupled with the promise of further electricity price increases in the Spring that Chemical demand ought to weaken. Meanwhile, Covid restrictions appear to be lifting in China, and should stimulate demand there, although there are still questions about the efficacy of vaccines.

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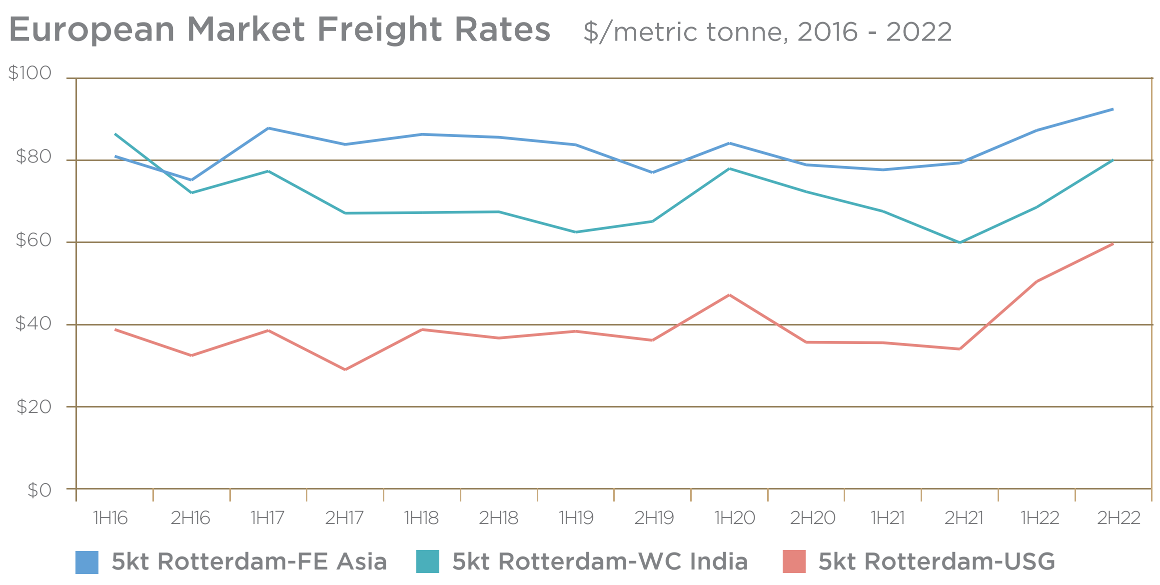

SALE & PURCHASE

Toby English
Head, SSY Sale and Purchase

2022 was a particularly active year in the S&P market, but very much one of two halves. Drycargo dominated 1H 2022, as we outlined in our mid-year report, whilst Tankers firmly took the limelight during 2H 2022 as rates surged and buying demand followed suit. In the Dry Bulk and Container segments we saw a slightly more subdued interest during 2H due to the weakening freight markets, however a healthy number of transactions were – and are – still being concluded in the Dry Bulk sector where the drops in vessel prices, reflecting falls in the underlying time charter market, brought in opportunistic buyers with anticipation of better rates to come.

Drybulk

The weakening in the Dry Bulk market post summer, particularly the June-August time charter declines, slowed 3Q22 S&P activity as both buyers and sellers waited for the dust to settle. Whereas stronger period freight rates had supported higher price levels earlier in the year, this quickly changed as rates eroded and - without either short or longer term charters available - buying interest quickly cooled. However, the weakness wasn't prolonged. As timecharter rate bottomed and prices dropped, activity on the 2nd hand side in turn picked up. Despite period rates still not supporting even the reduced "new"

price levels, a number of buyers – who perhaps felt they might have missed the boat previously – started to acquire tonnage at levels that represented some 15-20% drops against prices earlier in the year. Arguably this activity was on a more speculative basis and with a forward view of the market increasing longer term.

Despite slips in the freight market, there seems to be no sign of the buying activity decreasing as we move into 2023, even as the new IMO EEXI and CII regulations take effect. It is interesting to note representative sales of 17 year old capes facing engine derates to achieve EEXI compliance traded in the low $20m range in 1Q22 and are now achieving mid-teens – a +25% reduction. The answer as to why ships of this age still make sense to buyers over more modern (and more EEXI compliant) tonnage - and certainly over new buildings - comes down to the relative affordability in what is still a tight supply market. There is also the continued lack supply of more modern, "eco" tonnage, and as such when a ship of this type does come to market, there is a steady stream of interest/offers, albeit much more conservatively than earlier in the year.

Of course, the long-term supply side, coupled with the potential de-escalation of China's Zero-Covid policy, may be the critical factor needed for some market recovery in 2023 as we have alluded to in our Dry Bulk Outlook. That being said, the steady stream of S&P activity will continue across all segments and ages, if tonnage is priced accordingly.

Tankers

In the first half of 2022, we noted an increase in both Tanker chartering and S&P markets against the negative backdrop of the conflict in Ukraine, and as a result of the significant increases in the freight market we have subsequently seen a huge amount of activity on the Tanker S&P side, with prices also sharply increasing. This was largely due to the current strength in underlying charter rates on both the spot and term, which resulted from the sanctions imposed on Russian exports, ships, and banks earlier in the year.

In May '22, we saw 3-year charter rates for Scrubber Fitted Modern Eco LR2s at $29,000/day whilst more recently, similar vessels have been fixed at end December for $37,500/day for the same period. In line with these increased charter rates, asset pricing has followed suit. For example, in April this year, a 2007 built Japanese Aframax was sold for $16.5ml. In November, the same unit was then sold again for $32m – a near doubling of the asset value.

Likewise, demand for ice class vessels (particularly in the LR2 and Aframax sectors) increased. In March, a 2006 built South Korean LR2 Tanker with Ice Class 1A was sold for a price in the region of $21m, while towards end of December a same-aged sister vessel had seen offers in the mid-upper US$ 40 mills, and in fact at the time of writing a 2007 Korean built Ice 1A LRII has reportedly been sold for US$ 47 million. Similar examples abound and illustrate both the vastly improved Tanker S&P market over the last few months and the Ice Class premium that is incurred by any prospective Buyers to cover the winter period.

The story remains the same in the Suezmax market. In May a 2004 South Korean built unit with Ice Class 1C was sold for $21.5m; 5 months later and once considering the age difference, we noted an approximate increase of slightly over 45% in asset value, as a 2-year younger sister ship was sold for a price in the region of $35m.

On the crude side, the VLCC market struggled early in the year as the fallout of the Russian-Ukraine invasion initially favoured Suezmaxes and Aframaxes as Europe drew in oil from shorter-haul suppliers. By June, average monthly non-eco earnings on the benchmark MEG-East route had fallen to $19,000/day in June. However, by November, monthly VLCC earnings were averaging $77,500 p/day as recovering oil import demand in Asia drew more longer haul barrels from the Atlantic and VLCCs were increasingly utilised for trade to Europe. The strengthening in the underlying charter market was reflected in stronger asset values. Back in January, a 2005 built South Korean VLCC was sold for $32.8m, whereas at the beginning of

“There seems to be no sign of the buying activity decreasing as we move into 2023, even as the new IMO EEXI and CII regulations take effect.

December, it was reported that an equivalent 2005 South Korean vessel sold for $51.5m.

The longer-term fundamentals in the tanker market remain compelling due to limited shipyard supply and the dearth of ships delivering beyond 2023. As a case in point, the orderbook for VLCCs from 2023 and beyond stands at 19 or approximately 2% of the fleet. With prices of VLCC new buildings near $120m with delivery end 2025 and into 2026, there is also a-significant question mark over next generation fuelling, and whether owners would want to commit these sort of price levels without being able to have some comfort in what engine and fuel technologies the market will settle on. As such we have seen more focus on the 2nd hand side, albeit with very few days due to a lack in candidates.

Where we saw more activity on the Tanker newbuilding side during 2022 was at the smaller end of the market. As a case in point, during 2022 we noted 43 MRs contracted in Korea and China with prices increasing from just under $40m at the start of the year to levels of $45-46m today, a representative increase of around 15%. Likewise, the lack of 2nd hand tonnage meant that owners who might have opted for modern/ECO 2nd hand ships instead contracted ships in Korea and China, with a number of LRIIs, Aframaxes and, latterly, Suezmaxes being ordered, and enquiry increasing.

Containers

As for the Container market, we saw a weakening freight market across all sizes. In June 2022, 6–12-month TC rates for Eco Neo-Panamax Containers averaged at $170,000/day, whereas in December '22 average TC rates for the same period have been reported at $80,000/day. Despite the significant fall in rates, we have seen a continued appetite for new buildings, particularly in the larger end of the market where close to 70 orders have been placed during 2022.

The likes of MSC, CMA CGM and other liner companies have continued to order new tonnage, with particular focus on LNG dual-fuelled units. However, it is worth noting that in 2022, the total number of orders placed was approximately 42% lower than in 2021.
Does the current slide in rates signal the end of the boom container market? It's hard to tell. Certainly, there is still appetite from the Liner companies to replace larger tonnage and we have seen continued ordering as a result. The "feeder" container orderbook (sub 8,100 TEU) has however seen much less ordering.

Likewise, as older ships face more regulatory scrutiny, including the IMO's EEXI and CII regulation, it could mean a growing interest in replacing them with more modern tonnage. Consequently, there is the potential for some volatility in the container 2nd hand market going forward.

LNG

Yard availability for LNGCs has changed drastically over the past six months. The surge in demand for new buildings over the year has put a strain on yard capacity, with yards now effectively locked up until 2027 and beyond. The year-on-year trend shows a significant increase in LNG newbuilding orders, which in turn, is reflected in price levels. Increasing demand, higher steel prices, and competition from other sectors have driven prices up by around 15% since the start of the year, with Korean yards reported to have committed orders for levels of around $250m versus closer to $205-210m earlier this year. Even at these prices, the levels of orders have increased, with some 85 ships now scheduled to deliver in 2026 versus only 30 in 2023. This demand, as well as the improved

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charter market, has also seen an increased activity in the older LNG S&P segment, with several more speculative LNG vessels being sold over the course of the year and then fixed on charters.

Orders aside, demand for tonnage from charterers and end users remains strong

with the fundamentals continuing to look positive for the LNG sector. In October, a 174,000 CMB new building from Hyundai H.I. secured a 3-year charter with a rate of $180,000/day. Further, one-year rates for modern two-stroke vessels at the end of December stood at about $230,000/day, a 100% increase since 2021. These rates reflect how charterers are increasingly trying to fix vessels as we are entering a period where tonnage is expected to be tight, and demand for LNG tonnage potentially increasing further.

In addition, one can argue that with LNG technology having settled somewhat in recent years – albeit with tweaks in terms of containment and engine design being constantly made – as well as an overaged/small steam turbine fleet subject to increased regulatory change, the LNG market is in a more comfortable place than, say, the larger crude newbuilding segment where owners are more at the whim of technological and fuel changes.

Outlook for 2023

In conclusion, as we ended 2021, we predicted a volatile environment for the S&P market, with regulatory changes dictating how the 2nd hand market would develop. The unforeseen events in Ukraine significantly ramped up this volatility, leading to a hugely active Tanker market in particular. The various geopolitical impacts of course continue to have a significant knock-on effect for shipping, and in turn the S&P market. With regulatory changes now upon us as we move into 2023, it will also be interesting to see how this impacts the 2nd hand markets for older tonnage, as well as Newbuilding supply remaining tight across all sectors. In short, we expect a lot more volatility in 2023, and expect a busy S&P market as a result.

DECARBONISATION

Alastair Stevenson
Head, SSY Carbon / Digital Analysis

Decarbonisation initiatives remained a hot topic of conversation in shipping circles throughout 2022, and this will only intensify in the years to come. While there is a growing consensus that meaningful action is required to reduce shipping's greenhouse gas emissions, there is little agreement on the best pathways to achieve this. This in turn has ignited a powerful global debate on a wide range of decarbonising initiatives.

International Maritime Organization

The next phase of IMO's initial greenhouse gas strategy, adopted in 2018, is now underway with the regulations underpinning the EEXI, CII and SEEMP Part III in effect. These energy intensity measures are part of the IMO's efforts to reduce the carbon intensity of international shipping 40% by 2030, relative to 2008 levels.

The IMO's carbon intensity measures have been subject to criticism as not doing enough to reduce actual CO2 emissions whilst creating perverse unintended incentives.

EEXI compliance remains a headache for shipowners and class societies though, as we reported mid-year, it is not likely to greatly affect vessel operations. The main issue for owners is the provision of acceptable vessel input data for verification, while class societies are faced with the onerous responsibility of verifying and certifying EEXI values on over 50,000 vessels. ClassNK, for instance, noted in early November '22 that only 40% of its registry had applied for preliminary EEXI verification and highlighted the risk that it would struggle to provide timely verification services if all owners left EEXI compliance to the last minute.

Meanwhile the CII (carbon intensity indicator) debate has intensified, particularly as owners have begun proposing CII-related clauses into commercial contracts that potentially affect vessel operations. It was always the IMO's intention that by providing few regulatory consequences for not attaining required CII levels, a poor CII performance should be punished commercially. The underlying problem is that a poor CII can result from circumstances unrelated to the vessel's technical efficiency and beyond the decision-making control of both the owner and the charterer. Not surprisingly, neither owner nor charterer want responsibility for events beyond their control. Ultimately this responsibility will need to be shared and reflect different circumstances, but this all needs to be agreed and contracted in advance.

The IMO has also shown its willingness to address non-sensical aspects of the CII calculation. For example, at the IMO MEPC78 meeting in June, the IMO altered the CII calculation to exclude ice class vessels sailing in pack ice – which almost guaranteed an 'E' rating for a vessel running through winter ice. It makes practical sense for the industry to evaluate each vessel technically and look for ways that voyage fuel consumption can be commercially moderated, but not prejudge a poor CII performance if it is based on events beyond the control of owner and charterer alike.

Ultimately common sense requires a better approach to assessing vessel operations or, better, renewing the focus on regulations and industry initiatives that promote meaningful reductions in CO_2. That will be key in achieving longer-term decarbonisation goals.

2023 will be a busy year for the IMO as it begins the review of its initial greenhouse

gas strategy, perhaps with a view to tightening its decarbonisation goals. At the same time, working groups within the IMO evaluate the potential for market-based mechanisms to reduce CO_2 emissions, as well as assessing the industry's adaption to the EEXI and CII regulations.

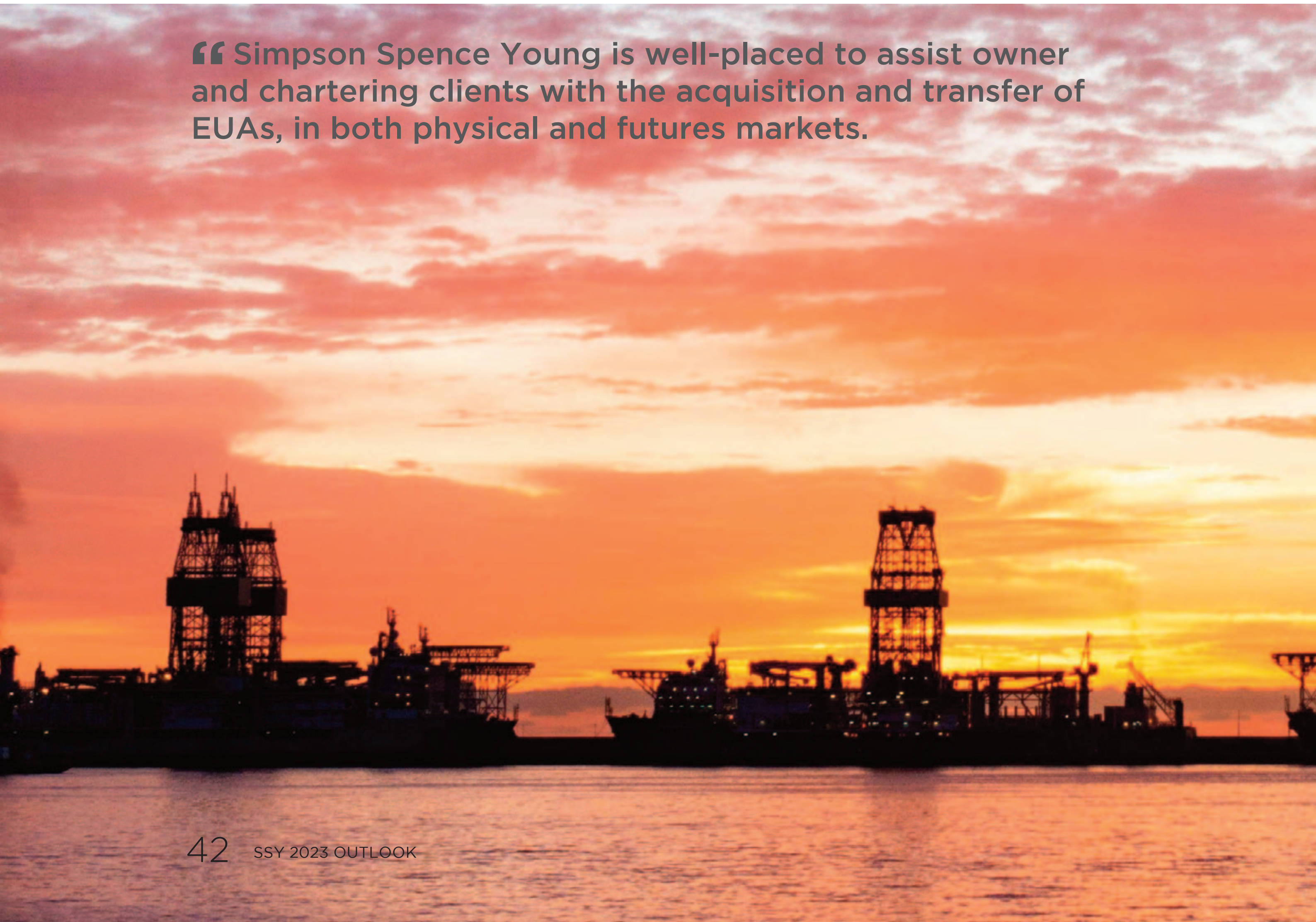
European Emissions Trading System

Shipping will, finally, be included in the EU Emissions Trading System (ETS) from 2024, following the successful Trialogue negotiations between the EU Commission, Parliament, and Council. This will require all vessels over 5,000 gross tons to offset emissions on EU voyages through the surrender of EUAs (allowances).

It will be the owner's responsibility to ensure they have accrued sufficient EUAs to offset their emissions each year, but the EU's 'polluter pays' principle means that it will be the chartering party who is responsible for compensating the owner for emission costs. This may mean the transfer of EUAs from the charterer into the owner's registry account. Alternatively, it could also be financial compensation, leaving the owner to purchase the EUAs themselves. Either way, contractual amendments are required as the taxes on the vessels have traditionally been on the owner's account.

SSY estimates that 85-95mt of EU shipping emissions will eventually need to be offset by the purchase and surrender of EUAs (emission allowances), taking account of the 50% discount and 300nm capture rules applying to international voyages. Approximately 35mt of this will be in the tanker and bulker segments, discounted to 14mt during the 2024 phase in. This compares with around 1,400mt expected to be offset by all industries covered in the EU ETS.

“Simpson Spence Young is well-placed to assist owner and chartering clients with the acquisition and transfer of EUAs, in both physical and futures markets.



EU Spot EUA Prices 2007-2022, Monthly €/t

The actual cost of the emission offsets is unlikely to be onerous for the chartering party, being a tiny fraction of the cargo value. Even as 2024 EUA futures prices have soared to nearly $100/t at some points in 2022, the equivalent of over $300/t on a heavy fuel oil basis, the added cost on a tonne of Brazilian iron ore on a Capesize is still less than $0.50/t, or $0.10/bbl on an Aframax import of Arabian crude in 2024. This analysis considers the discounted emissions on international voyages, added emission costs on the return ballast leg, and the 2024 phase in.

Simpson Spence Young is well-placed to assist owner and chartering clients with the acquisition and transfer of EUAs, in both physical and futures markets, as well as guiding clients through the intricacies of setting up EU registry accounts and ETS-related contract amendments.

Voluntary Emission Markets

Meanwhile, carbon offsetting in voluntary markets continues to accelerate – trebling in value during 2021 and, anecdotally, sustaining these values in 2022. Even with the inclusion of shipping in the EU ETS and the possible adoption of market-based measures by the IMO, the growth in voluntary offsetting is underpinned by the increasing need of companies to offset their scope 1, 2 and 3 emissions.

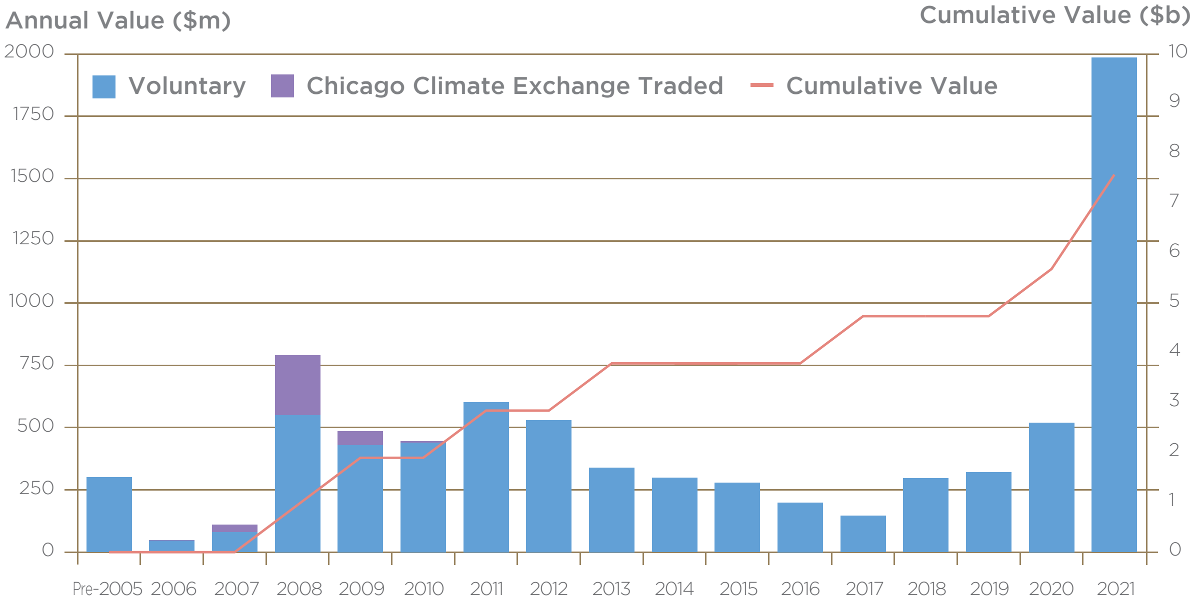
“For many companies, the decision to voluntarily offset emissions isn’t truly voluntary. In nearly all cases it reflects the wider ESG initiatives demanded by shareholders and boards.

For many companies, the decision to voluntarily offset emissions isn’t truly voluntary. In nearly all cases it reflects the wider ESG initiatives demanded by shareholders and boards. For the maritime sector we are seeing growing interest in offsetting from charterers as well as shipyards and bunking companies, which suggests further volume growth in 2023.

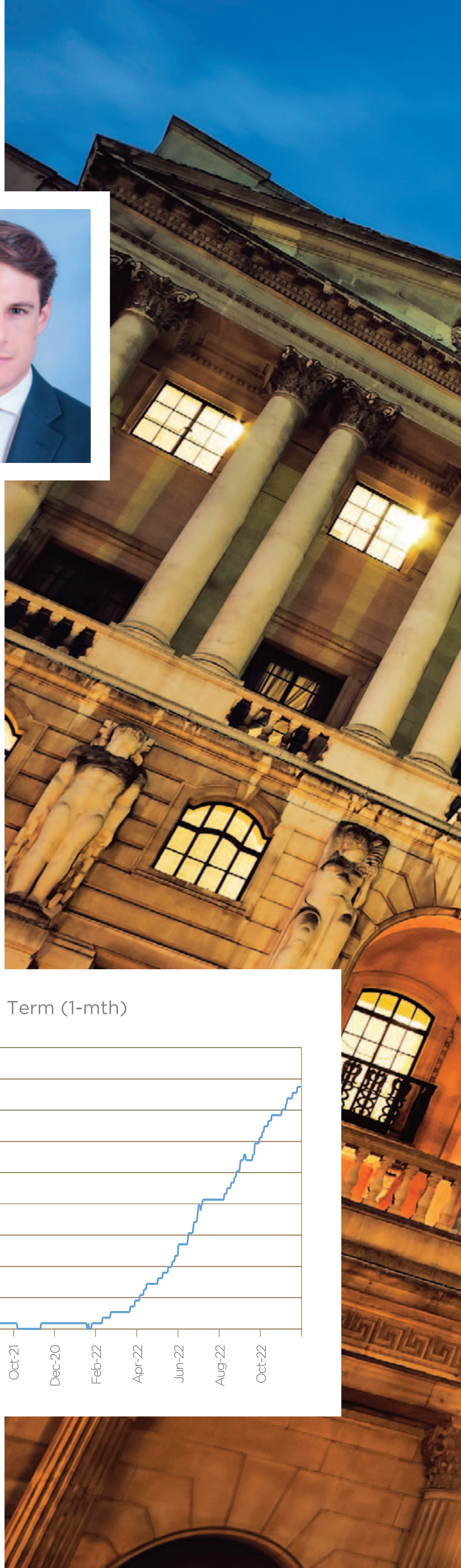
While volumes have increased, and the costs as well, voluntary offset prices remain a fraction of the mandatory markets.

Voluntary Carbon Market Capitalisation

Traded carbon credit value, pre-2005-2021



FINANCE



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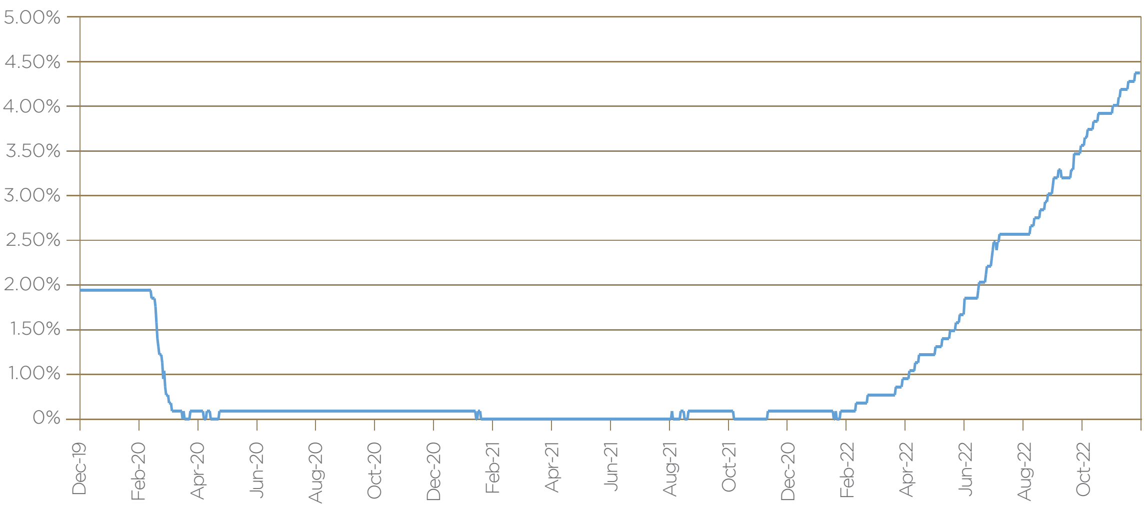
2022 was a year that witnessed a significant increase in interest rates around the world. By way of example, the 10-year US Treasury, often considered a benchmark of security, started the year at ~1.5% and today sits at over 3.8%. The overnight bank borrowing rates are the measure of interest costs at the shorter end of the interest rate curve and have increased even faster. Historically this market was based on LIBOR (London Interbank Offered Rate) but due to various market manipulations that came to light back in 2012, the market has gradually moved to SOFR or Secured Overnight Financing Rate. SOFR started the year at 0.05% (very close to 0%!) and currently sits at ~4.3%.

Secured Overnight Financing Rate SOFR Term (1-mth)



Source: FactSet, Dec 2022

Impact of Central Banks

To address the wider economic concerns, Central banks have been raising rates to slow down the pace of borrowing. In an environment where demand is strong, prices are rising and concerns of inflation abound, contracting monetary policy is one of the few tools central bankers have to manage these trends. In theory, if the cost of money is higher, people and companies will not purchase as many goods and services thereby reducing demand. Largely because of the situation with Russia & Ukraine, trade routes are changing, ton miles are increasing and there is substantial demand for a global fleet of ships that takes time to grow. For the time being, despite the efforts of central bankers to reduce prices around the world, demand for maritime transportation is increasing and rates remain strong.

Interest Rate Components

Companies that borrow in the bank market usually have to weigh up two components to their loans: i) the floating rate, based on SOFR (the bank's cost); and ii) a spread or margin (the bank's markup), which is fixed for the life of the loan. For example, a borrower with a 3.0% spread, would have been paying 3.05% at the start of the year, but today is paying over 7%. In addition to the SOFR rate, for a new loan, in many instances the spreads are widening as banks see that we are in an inflationary environment, with a risk of recession coupled with additional political risk (e.g. war in Ukraine) - the 3.0% of yesterday may now be 4.0%. The market view is that these assets need to carry a higher risk factor and therefore should be priced accordingly. In short, the cost of debt financing is higher for nearly every institution - governments, banks, corporate borrowers, and individuals alike.

Bank Market vs. Alternative Lenders

Most companies borrow from banks or other floating rate-based lenders. There is another category of debt provider, the "alternative lenders", who raise money from institutional investors and seek to return them a fixed yield. These funds often target an annual return in the region of 10%, so while their return requirements are higher, the difference between their cost of capital compared to a bank may be lower. These alternative lenders will also provide a higher advance rate on the assets – up to ~70-80% as opposed to the ~50-60% typically targeted by banks. So, while borrowing is more expensive today, the higher leverage sources of capital may make relatively more sense by lowering the ship owners' overall weighted cost of capital.

Fixed vs Floating Options

Given the trends noted above, owners are increasingly raising the topic of how to fix or cap their interest rates. Larger companies with established commercial banking relationships and in-house treasury functions may well choose to enter derivative contracts to hedge their interest rate exposure (for example using SWAP instruments to effectively convert some of their floating costs into fixed charges). Other owners work with alternative, non-bank lenders who, because of their funding sources, can provide fixed rate options. In the current market, depending on the owner and their objectives, many of these fixed rate solutions can be priced competitively. In higher leverage situations, owners often view the higher cost debt from alternative capital providers as a proxy for a tranche of low-cost equity. On the flip side, if the flattening of the forward curve is to be believed (see below), while locking in rates today may provide better cost visibility, in the longer term this may result in higher break-even rates than would otherwise be incurred.

Outlook on Interest Rates

The forward interest rate curve indicates the market's current expectation of sustained higher rates for some time to come (with a flattening of the curve from 2024 pointing to the possibility that Central Banks may begin easing rates as global inflationary pressure lessens). However, the implication for ship owners is a prolonged period of higher capital costs well in excess of those enjoyed over recent years.

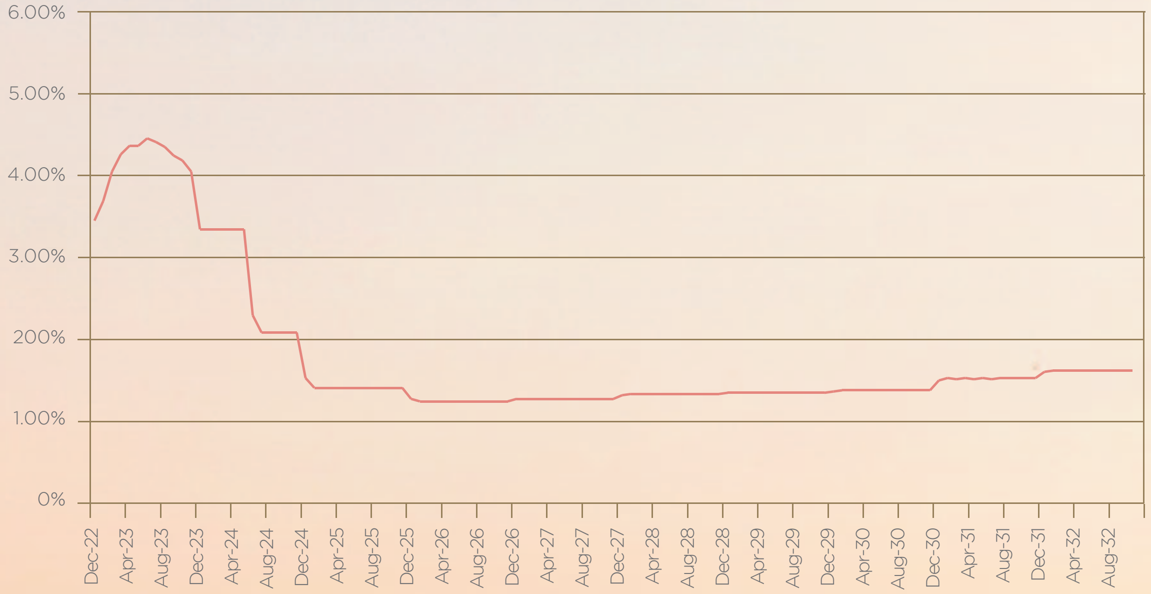
A Deeply Cyclical Business

Today, the major bulk commodity sectors are all performing relatively well and have been averaging TC rates substantially above cash flow break-evens. Most owners today can absorb the higher costs of capital – particularly if the asset has been owned for several years. Not surprisingly, some owners are using today's strong cash flow to paydown the more expensive debt. The current strong market provides an attractive opportunity to grow, but owners must be cognizant about their break evens and balance sheet in a potentially less robust environment.

By way of illustration, if we assume a 60% LTV refinancing of a 10-yr MR tanker today compared with the same transaction 12 months ago (all other variables being constant), we estimate owners are facing a debt service cost that has increased by over 25%. If we use today's prices for a new S&P deal (values up 75% vs. a year ago), the overall financing cost will have more than doubled. During the current strong trading environment for tankers, such rate increases would have a limited impact as most owners will be more than compensated for higher debt service payments. However, should the tanker rates fall to levels last seen in 2021, the impact of the higher borrowing rates could easily turn an otherwise profitable vessel into a loss-making asset.

Secured Overnight Financing Rate

Forward Curve SOFR Term (1-mth)



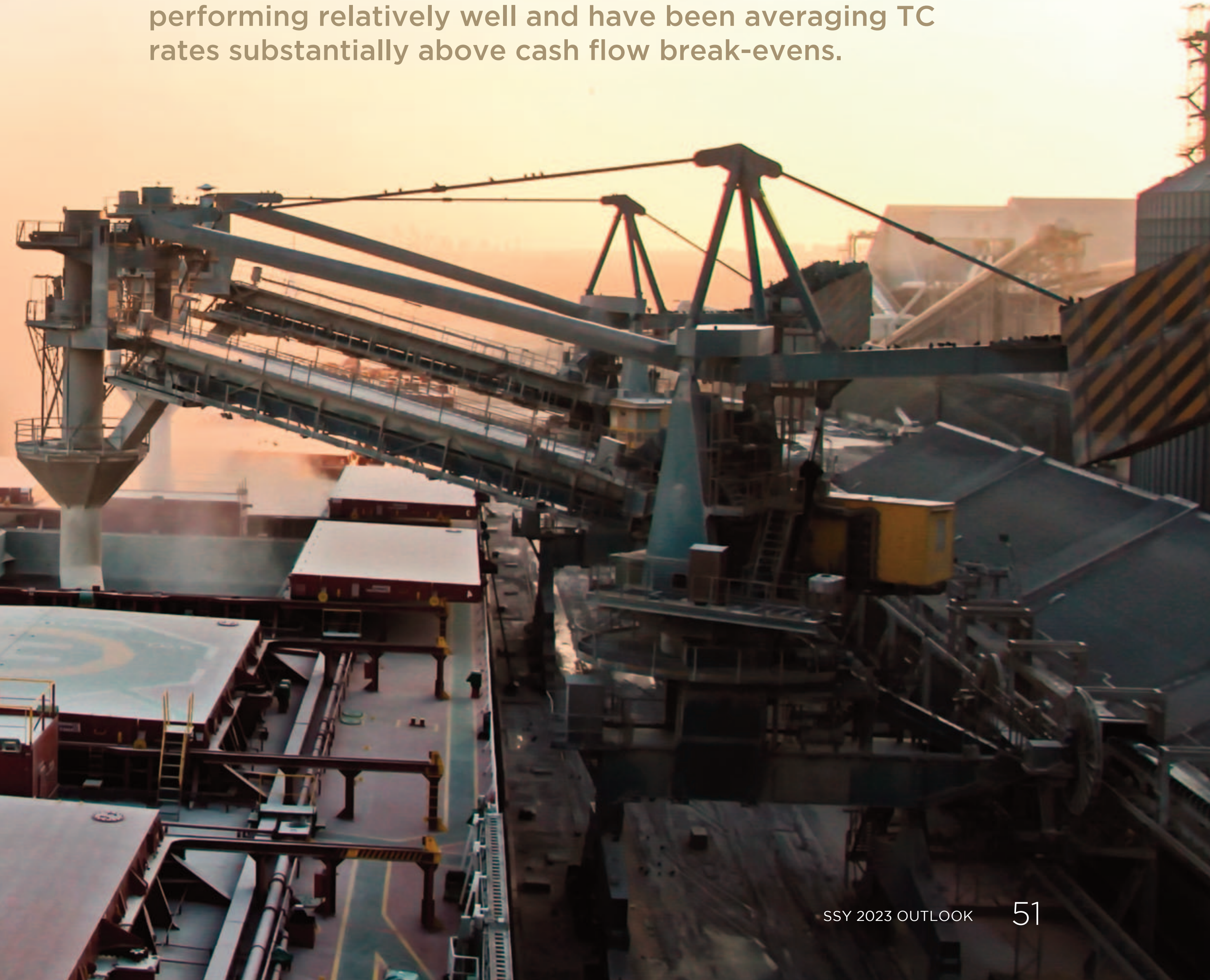
Source: Pensford, LLC (www.pensford.com), Dec 2022

Conclusion and Possible Way Forward

Corporate finance theory teaches us that debt should be less expensive than equity. Debt is a fixed income instrument with no upside but a first priority on liquidation – low risk equals low return. Equity is a variable return investment which has unlimited upside, but also is a first loss position – i.e. higher risk equals higher return. In an environment where debt is becoming more expensive, it is likely we see a number balance sheet and capital allocation adjustments to reflect the closing of the cost gap. We expect owners to continue capitalizing on the strong market and outlook to pursue growth across all sectors. Strong cash flows generated in the market today can serve as equity to facilitate deals. Moreover, as shipping companies and lenders entertain potential downturns in future markets and reduced earnings, we are likely to see a more cautionary approach to leverage and break-even management.

The SSY Finance team is comprised of experienced and dedicated finance professionals focused on advising and sourcing bespoke capital solutions for SSY's shipping clients. The team maintains a global investor network and we would be delighted to discuss any maritime financing options, including the themes discussed in the article above.

“ Today, the major bulk commodity sectors are all performing relatively well and have been averaging TC rates substantially above cash flow break-evens.



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