

SIMPSON I SPENCE I YOUNG® OUTLOOK 2021



Simpson Spence Young 2021 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 London, Singapore, Houston, Shanghai, Stamford - USA, Dubai, Geneva, Sydney, Bergen, Hong Kong, Miami, New York, Mumbai, Madrid, Oslo, Sao Paulo, Copenhagen, Tokyo, Vancouver, Varna and Zug.

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

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INTRODUCTION

As a full service shipbroker with global coverage, we produce a wide range of research publications that cover our core markets of dry cargo, tankers, sale and purchase, LNG, chemicals, freight and bulk derivatives and port services including agency and towage; this offering has traditionally been aimed at our core customers and specialist subscribers.

In this publication we want to bring a more concise look at what we're expecting to see in 2021 to a wider audience. With views on the traditional, as well as some different drivers of the shipping markets, we also look at how the developing emissions regulations may affect commercial fleets and shipping investments. The contributions come from a number of our senior research and broking experts and together they give a taste of what we'll be looking out for in 2021.

Even with 2020 now behind us, we are still in the midst of the global pandemic and understanding the long-term impact of this, and the recovery that should follow, will be critical. We will be watching closely as this plays out in the markets we work across, and Simpson Spence Young will continue to underpin our views and research with insights provided by our big data projects.

We hope that you enjoy this outlook of 2021 and welcome your comments. Finally, we wish you all the very best for the year ahead.

Mark Richardson

Chairman, Simpson Spence Young

TWISTS AND TURNS OF THE DRY BULK MARKET

Derek Langston

Head of SSY Consultancy & Research

After a year when China's dry bulk demand helped prevent the Covid-driven global contraction in dry bulk trade from being even more severe, demand prospects for 2021 hinge on not just China's continued strength of demand, but also on the scale of recovery in the rest of the world.

China's importance to bulker demand is hardly new with combined imports jumping from 440 Mt in 2005 to 1.83 billion tonnes in 2019, but last year's collapse in 2q industrial demand in the rest of the world has intensified the country's significance to cargo volumes.

The most explosive example has been iron ore, which is crucial for Capesize demand, where annual import growth into China spiralled to more than 100 Mt in the first 11 months of 2020, the fastest growth for six years. Although the World Steel Association's Short Range Outlook from October projected flat growth in steel demand for 2021, rising domestic steel prices and a 11-year high for delivered iron ore prices in December 2020 highlight in part the apparent robustness of Chinese steel demand, while recovering demand from other steelmaking centres can add to trade growth. October was the first month since February to see annual growth in crude steel production in the world outside China and the world's secondlargest steel producer, India, had recorded 3.5% year-on-year expansion by November.

Significantly for seaborne iron ore trade, soaring prices indicate not just firm demand, but also actual and anticipated constraints on supply. For the main arterial Capesize iron ore trades, the ability of mining companies, especially those in Brazil, to raise output will be crucial in shaping this year's trade growth.

Coal has suffered the greatest reverse of the main dry bulk cargoes, on course for an annual decline over more than 100 Mt. Prospects for recovery are complicated by not just the pace of recovering demand, but also by the structural challenges facing producers from worldwide efforts to reduce carbon emissions.

Yet this only tells part of the story. Coal imports into Vietnam and Turkey provided rare examples of import growth in 2020, and Vietnam is likely to see further incremental gains in steam coal imports in 2021. From being one of the worst affected by Covid lockdowns in April 2020, Indian imports have seen a sharp recovery.

China's coal import policies are likely to have far-reaching effects. At present the apparent aversion towards Australian coal and rising domestic steam coal prices has benefitted coal suppliers in Indonesia, and US coking coal exporters have reported more interest from China.

ff At present the apparent aversion towards Australian coal and rising domestic steam coal prices has benefitted coal suppliers in Indonesia, and US coking coal exporters have reported more interest from China.

In contrast to coal, grain trades (including soya) are maintaining their upward trajectory. After another virus, African swine fever, forced many countries, particularly China, to cull pig herds in 2018-19, subsequent restocking has driven animal feed demand, driving soyabean trade higher.

An intriguing development with significant implications for trade flows is emerging in the form of China's coarse grain imports. In December the US Department of Agriculture forecast for Chinese corn imports in the current trade year to September at 16.5 Mt from an estimated 7.6 Mt in 2019/20. Allowing for anticipated changes in supply, US corn is well-positioned to expand its market share in China, while reduced expectations for crops shipped from the Black Sea imply reductions in shorthaul trades into the EU. US corn exports typically ramp up from the 1q, potentially improving demand for Ultramax through to Kamsarmax vessels on longhaul trades to China.

Reduced soyabean crop forecasts for Brazil after last year's all-time high are a reminder of the vagaries of weather and have also contributed to the six-year high for soyabean prices. Steel-related bulk imports into China was a key driver of geared tonnage demand in the Pacific during 2020, but steel flows elsewhere have suffered. Those hoping for a swift end to US import tariffs by the incoming administration may be disappointed as such a move may neither be immediate nor complete.

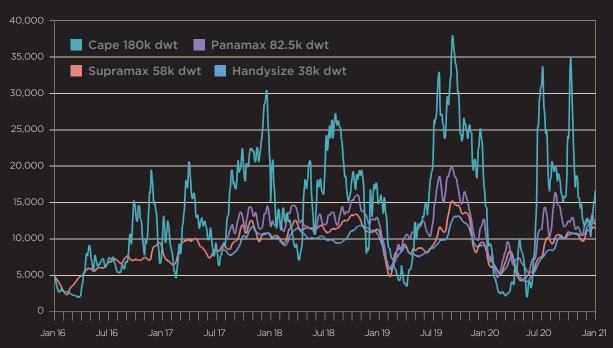
It can be expected that 2021 will bring less Covid-related disruption to ore mining operations.

Very significantly for tonne-mile demand, many of the anticipated developments above feature fronthaul trades from the Atlantic to Pacific, be it bauxite from West Africa, corn and soyabeans from the US and South America, iron ore from Brazil and East Coast Canada and even some recovery in coal volumes from Colombia and the US. Balanced against the gains in volume on Brazil's longhaul iron ore trades will be the greater involvement of 325k dwt Guaibamax tonnage alongside 400k dwt Valemaxes.

A key question for this year is the extent to which fleet inefficiencies will continue to distort vessel supply/demand balances. Since the beginning of 2020, the capacity of the dry bulk fleet expanded by a net 3.9% to mid-December (with demolition activity low by historical standards), but fleet carrying capacity during this time has faced numerous constraints from Covidrelated delays resulting from crew change complications and quarantining in addition to chronic berthing delays in China's terminals since June.

Will there be a repeat in 2021? The causes of last year's vessel queues in China were multiple: the sudden jump in the number of Capesizes arriving laden with iron ore, exacerbated by bad weather at <u>some</u>

If A key question for this year is the extent to which fleet inefficiencies will continue to distort vessel supply/demand balances.



Baltic Exchange Average Timecharter Rates \$/day

locations. However, berthing delays to Panamax and Capes laden with coal from Australia added another dimension, seemingly part of a wider deterioration in relations between the two countries.

The dry bulk carrier newbuilding orderbook has declined to historically low levels relative to the existing fleet: at 54.5 Mdwt in mid-December 2020, it equates to just 6.1% of the existing capacity, the lowest percentage in almost 30 years (more than 80% of which is due for delivery by the end of 2021). While the low orderbook owes in part to a lack of certainty over future market direction, it also reflects doubts over the speed at which financially viable designs for new low carbon ships can be developed. Draft approvals on decarbonisation at the IMO's Marine Environment Committee in October (MEPC 75) throw up little prospect of an immediate regulatory-driven acceleration in demolition.

The dry bulk market of 2020 witnessed many twists and turns for both vessel demand and supply, and this year will no doubt bring more.



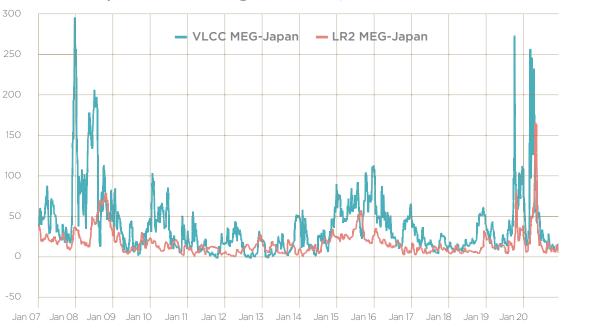
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CHALLENGES AHEAD FOR THE TANKER MARKET IN 2021

Claire Grierson

Senior Director SSY Consultancy & Research

After tumultuous trading conditions in 2020, where tanker rates accelerated to multi-year (and on some routes record) highs before rapidly plunging, 2021 is set to be a challenging year for the tanker market. It will grapple with crude production changes, still high oil inventories, refinery closures, a new US government and potential foreign policy shift, an overhang of tonnage after low scrapping in 2020, and of course how oil consumption continues to recover following the Covid demand destruction and rollout of vaccinations.



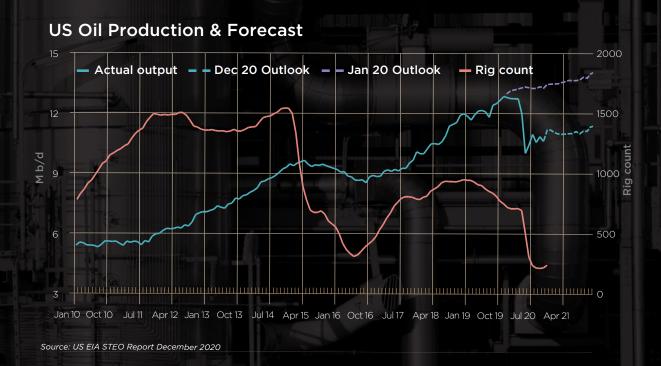
Historical Spot TCE Earnings \$'000/day

Source: SSY





G With Atlantic basin refinery closures and run cuts, a surplus of Atlantic crude could be prime for shipment to Asia, which has recovered faster from the Covid outbreak and is adding new refining capacity, especially in China.



Crude production changes

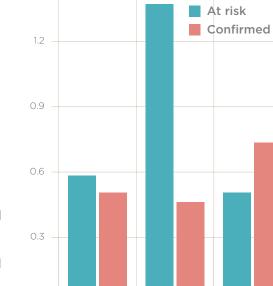
Changes in oil production policy in response to accelerating Covid cases will create volatility and uncertainty for the tanker sector. OPEC+ increased its production quota by 500K b/d for January 2021 and subsequently agreed a further 75K b/d increase in February and March. But this was down from a previous plan of a 2M b/d rise that would have lowered production cuts to 5.8M b/d, meaning still substantial reductions in cargo volumes. A surprise announcement by Saudi Arabia of a unilateral output cut of 1M b/d in February and March will only add further downward pressure to tanker earnings near-term.

Low oil-price related cuts to non-OPEC production this year have also altered the growth path of cargo volumes. For instance, the US was expected to be a major driver of crude tanker tonne-mile demand growth in the coming years, but after peaking in February at 3.7M b/d, US crude exports had fallen to average around 2.9M b/d in 4Q, US Energy Intelligence Administration (EIA) showed. Still Atlantic basin non-OPEC oil supply will be underpinned by sustained flows of Brazilian crude and Norway ending government-imposed oil cuts. With Atlantic basin refinery closures and run cuts, a surplus of Atlantic crude could be prime for shipment to Asia, which has recovered faster from the Covid outbreak and is adding new refining capacity, especially in China. This may offer much needed pockets of underlying support for some of the crude tanker sectors.

US foreign policy shifts ahead

Under President Trump, the US had placed more stringent sanctions on oil producers Venezuela and Iran, which sharply reduced their trading opportunities, export volumes and domestic production. A Biden administration would seek a return to the multilateral nuclear deal with Iran, resulting in a loosening of sanctions. Refiners have replaced lost Iranian crude with predominantly other Middle East Gulf crudes and Russian Urals. OPEC+ would have to adapt its supply quotas to accommodate more Iranian oil. One of the main downsides for the crude tanker market would be the return of Iran's tanker fleet. These ships have largely been utilised for storing oil since sanctions were imposed and if these vessels start delivering Iranian oil to refiners again, it will take trade away from the rest of the fleet.

The US stopped importing Venezuelan crude in June 2019 which cut regional trading opportunities for Aframaxes and



Europe

N. America

Refinery Closure Plans Mb/d

1.5

Source: Company websites, newswires

Asia

ff A downside for the crude tanker market would be the return of Iran's tanker fleet. smaller tanker sizes while China and India had reduced their imports from Venezuela on larger tankers in 2020 under pressure from the US. Any relaxation of sanctions here may allow more tankers that had previously been restricted to resume shipments from Venezuela, mainly to Asia, due to oil-for-aid deals.

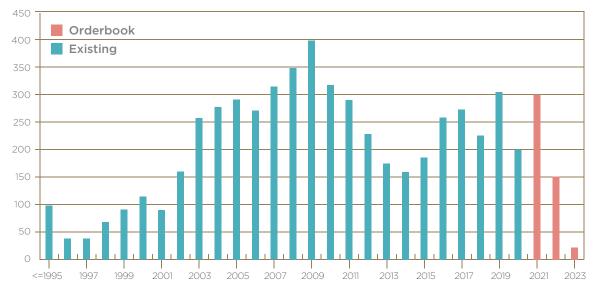
Refinery closures an opportunity for product tankers

With the reacceleration in lockdowns at the end of 2020 and into 2021, major oil forecasters, such as OPEC and the International Energy Agency (IEA) have lowered the pace of recovery in oil consumption for 2021 despite the rollout of vaccinations, which will take some time to reach critical mass. Dampened oil use will weigh on product tanker activity but there could be some positive opportunities from a wave of refinery closures, as weak margins put refineries under greater pressure. The closures are mainly concentrated in the Atlantic basin, with these facilities facing increasing competition from the larger, more sophisticated refineries that have petrochemical facilities coming on-line in the Middle East Gulf and Asia.

In 2020, refinery capacity of 1M b/d was confirmed as closing or due to close in the future in N.America, 600K b/d in Asia and nearly 600K b/d in Europe, according to SSY estimates. Further facilities earmarked for closure amount to up to 3M b/d in Europe, 600K b/d in Asia and 600K b/d in N.America. Given the regional product supply imbalances these closures will create, especially as refiners have been reconfiguring their output slate due to the plunge in airline jet fuel demand, there is scope for more longer haul demand for product tankers.

Tonnage overhang into 2021

Tanker removals in 2020 (through scrapping or conversion to other vessel types such as FPSOs) were at their lowest level in 30 years, which means the tanker market will enter 2021 with a growing surplus of tonnage. Ships will continue to return from floating storage and newbuild tankers will arrive, with Aframax and MR deliveries set to be the largest across the clean and crude sectors in terms of numbers. Demolition should accelerate given sustained weak earnings and a rise in scrap values and based on the age profile of the fleet, there is scope for many older ships to be removed in 2021.



Tanker Fleet Age Profile & Orderbook No. of ships (10K dwt & above)

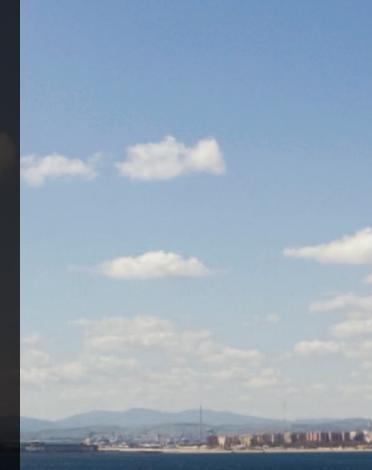
Source: IHS Fairplay. SSY

LNG MARKET REVIEW

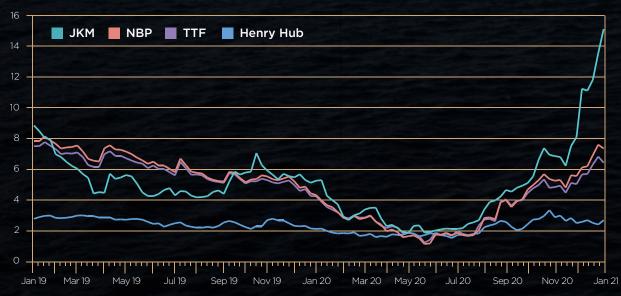
Toby Dunipace

Head of SSY Gas

The LNG shipping market felt the negative ramifications of Covid for the majority of 2020. This resulted in the global destruction of demand for LNG, which is effectively driven by air conditioning and heating demand. Much of this stemmed from the major buying nations of LNG; China, Japan, Korea, Taiwan, and buying countries in Europe. Unlike the conventional tanker shipping markets, where floating storage is a more prevalent tool for charterers, LNG's cargo boils off each day, resulting in a lack of long-term storage solutions. Without the ability to store cargo for a long time, the need for shipping to act as a back stop for high storage meant that LNG shipping rates fell

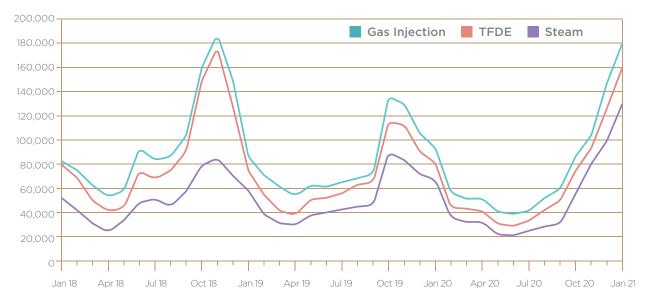


C As ship owners embrace the tougher regulations, we should see a move towards dual fuel ships – whereby a combination of low sulphur marine bunkers and LNG are used.



Natural Gas Spot Prices US\$/MMBtu





LNGC Spot Charter Rates US\$/day

to extremely low levels. This negative market continued until Q4 2020, when the shipping market saw a huge uplift on the back of rising demand and commodity prices that went above \$10/Mmbtu in the Far East. The demand stemmed from cold weather and also production shortages in the Far East, that resulted in cargoes being pulled from the Atlantic Basin causing longer tonne miles and a tighter market. \$150,000 / day for modern LNG carriers was beaten and overall it was a very strong finish to the year.

It is important to look at the year before when projecting 2021. On the face of it, 2021 is likely to start off well in January and hopefully February. The commodity pricing continues to rise as the demand for LNG continues. Cold weather, especially in China, is the key driver and this is being heightened by ongoing Panama Canal delays. The Panama Canal is experiencing significant congestion during the busiest part of the year, and this is leading to waiting periods for LNG carriers of 7-10 days or more. This bottleneck for shipping has an immediate impact on the demand for Gas, storage supplies are low and therefore, demand is high. If we see a cold February and March, then the shipping market could see an overall positive Q1. The market will more than likely slide

during March at the latest, when there is a significant amount of LNG new buildings that are delivering at the back end of Q1. Added to that we will see the commencement of the 'shoulder months,' where there is lower trading in the interim period between winter and summer. These two points coupled together will see a poor shipping market. New buildings will continue to deliver throughout Q2 and Q3, and ships also come off time charter during this period. Overall the market projections are very bearish for Q2 and Q3 2021.

End Q3 and Q4 are historically periods to get excited about, and there is every chance that we could experience similar numbers to those in 2020. There is no fundamental reason to explain this view, but the volatility of shipping and LNG shipping especially (where market availability can vanish quickly) always leaves charterers looking to secure term tonnage at lower levels to avoid exposure to the spot market and any possible spike. Another reason to look at 2020 is that even during the worst global pandemic since the Spanish Flu, with demand for energy at record lows, we still saw a very buoyant market with strong volatility. Even with a depressed outlook for 2021, there is always the chance for a volatility spike. The hot topic away from the short-term

LNG market will be LNG Bunkering. IMO 2020 has resulted in the need for shipping to adapt and meet emissions regulations. LNG is probably the most viable solution for the next 10-15 years in terms of the shipping market moving towards a greener way to transport commodities. There is a ready supply of the fuel/cargo and it is much less harmful to the environment than standard marine bunkers. As ship owners embrace the tougher regulations, we should see a move towards dual fuel ships – whereby a combination of low sulphur marine bunkers and LNG are used. This will result in the need for LNG bunker supply ships – transporting and containing LNG is not as simple as oil products, and in itself is a growing market. The flip side to this is that there will be tougher regulations imposed on the maritime sector, and investment in cleaner methods of transportation may take some investment away from LNG. This is a small risk in the near term. However as previously mentioned, the supply of gas is so large, it will be challenging to walk away from its abundance.



Fleet & Orderbook - Conventional LNGC (>100k cbm)



SHIPPING INVESTMENTS ARE LUCRATIVE IF RIGHTLY TIMED AND STRUCTURED

Jan Keller Head of SSY Finance

Shipping is a capital-intensive business offering investors a wide choice of opportunities with attractive risk-adjusted returns.

For equity investors there are broadly two different types of shipping investments – one focusing on long-term contracted underlying revenues, and the other more of an asset play where investors need to take a view on value appreciation and income developments.

Pure dividend plays with long-term chartering contracts have become rare. In most shipping segments, the initial income coverage will not be long enough to fully write down an asset. An element of re-employment and residual value risk is almost always part of an investment decision. Taking such an asset view can however be very lucrative if the investment is structured and timed appropriately.

In many shipping segments, valuations are close to historic lows, offering attractive investment opportunities. On the supply side, orderbooks for new vessels remain low which will further underpin asset valuations. **ff** In many segments of the shipping market, valuations are at or close to historic lows, offering attractive investment opportunities.

In the short term, fleet inefficiencies and Covid backlogs will help charter rates and underpin asset valuations. If global trade continues to grow as forecasted, this presents investors with an ideal investment environment. Bearing in mind stock markets have recouped almost all Covid inflicted losses and are trading at historic highs, shipping offers an opportunity to pick up undervalued assets. In addition, shipping offers diversification as correlation between shipping stocks and the wider equity market is relatively low.

How quickly a segment can lift off has been evidenced in the container market in the second half of last year. Valuations jumped significantly as freight rates increased rapidly, triggered by a backlog in global supply chains due to reduced sailing during the first global lockdown last spring. It highlights the need for shipping investors having to invest often countercyclically and be first movers. Direct holding in assets can be advantageous in comparison to holding shares in shipping companies. While many shipping stocks have limited trading liquidity, the secondary market for shipping assets has remained active, even in times of distress. Most shipping investments occur on a bilateral basis.

In light of regulatory and environmental changes, there will be an increasing need to identify vessels compliant with evolving environmental standards. With our inhouse tool to analyse vessel data, we can identify suitable assets and provide matching financing. The growing awareness and push to sustainability will allow dedicated green capital to support the shipping sector, thereby unlocking an additional source of capital. New ship designs and propulsion systems will emerge to meet climate goals set by regulators and expected by these dedicated capital providers.

On the debt side the void left by commercial banks - when they withdrew from shipping following the financial crisis - has largely been filled. Alternative providers have emerged while some banks have returned. The debt market has fragmented with top quality owners being offered very cheap cost of capital whereas others will have to carry potentially a higher cost than before. For a credible project, lending is available and can come in the form of a traditional mortgage or a sale and lease back arrangement. With our global reach we can support owners to find an optimal financing package.

In summary, there are signs that 2021 could be an ideal year to look at a shipping investment. With our inhouse knowledge and expertise in S&P, chartering and finance we can provide investors with interesting, thoughtfully structured and tailor-made investment opportunities.



CO₂ EMISSIONS IN SHIPPING

Alastair Stevenson

Head of Digital Analytics

The decarbonisation of shipping has come under increased scrutiny in recent years, not least following its inclusion in the UN's 2015 Paris Agreement on climate change. In response, the IMO set dual goals for the shipping industry in 2018 – firstly a 40% reduction in vessel carbon intensity by 2030 and secondly to halve overall CO₂ emissions by 2050, both relative to 2008.

To measure the carbon intensity of each vessel, the IMO has implemented vessel design and operational metrics. The design parameters are reflected in the Energy Efficiency Design Index (EEDI), which measures the grams of CO₂ emitted per capacity-mile. For a bulker or tanker, it is simply the theoretical CO₂ emitted per nautical mile divided by the ship's deadweight capacity – the lower, the better.

The EEDI has been mandatory for new ships delivered since 1 January 2015, with shipyards delivering phased EEDI improvements for new vessels. These improvements are relative to a trailing 10year baseline and, with new eco designs and slower speeds in some fleets, shipyards have delivered 20% EEDI improvements in the latest Phase 2, which applies to vessels delivered from 1 January 2020. Phase 3, from April 2022 for containers and 2025 for most other vessels, will be more difficult as many of the easy gains have been achieved. This leaves lower service speeds as the likely outcome for oil-fuelled vessels.

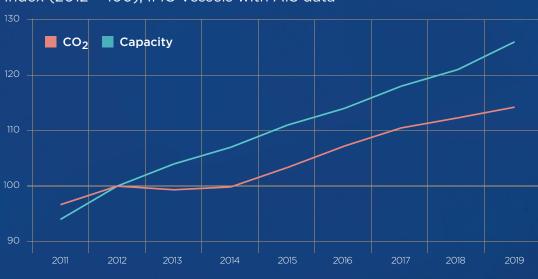
The existing fleet, with or without an EEDI, is also required to lower its carbon intensity. This will be reflected through a lower Energy Efficiency Existing Ship Index (EEXI) and operational gains associated with the implementation of their Ship Energy Efficiency Management Plan (SEEMP). The forthcoming EEXI metric, due to be in place by 2023, is expected to be similar to the EEDI and IMO has advised that the required EEXI improvements will be similar to the Phase 2/3 EEDI improvements. This suggests, with few exceptions, compliance will be associated with limitations on engine power and, therefore, slower service speeds.

Improvements would also need to be shown operationally, possibly through better route planning, hull cleaning or a more efficient propeller.

The IMO can point to some early success, with most studies indicating a reduction in average carbon intensity over the past decade associated with more efficient designs and slower steaming speeds. The net effect, which is widely agreed, is that CO_2 emissions have lagged growth in fleet capacity over the past decade (as shown in the chart below based on Marine Benchmark data).

Yet this has not been enough to create a downward trend in absolute CO₂ emissions and the second IMO goal to halve maritime emissions by 2050, relative to 2008 levels; is an unprecedented challenge. It not only requires offsetting over 40 years of **C** The IMO can point to some early success, with most studies indicating a reduction in average carbon intensity over the past decade associated with more efficient designs and slower steaming speeds.

Maritime CO2 emissions vs. fleet capacity (dwt)



Index (2012 = 100), IMO vessels with AIS data

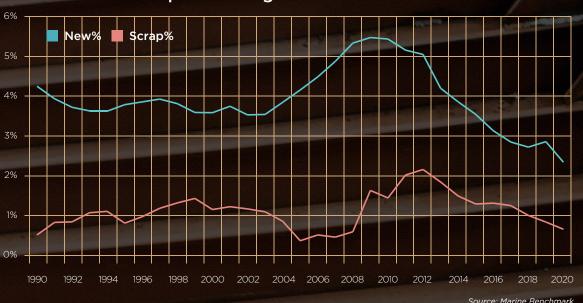
C Depending on the vessel type, the operating lifetime of a ship can exceed 25 years. This means we will begin laying the keels for vessels that will be operating in 2050 within the next few years.

underlying fleet growth, but also the widespread adoption of new vessel designs and alternative fuels, such as ammonia, plus all the associated bunkering infrastructure and supply chains.

Depending on the vessel type, the operating lifetime of a ship can exceed 25 years. This means we will begin laying the keels for vessels that will be operating in 2050 within the next few years. During their lifetime, these ships will be subject to more environmental scrutiny than ever before. It follows that the success of the IMO's 2050 target largely depends on today's boardroom decisions. Yet with no clear consensus on designs, alternative fuels and the availability of future infrastructure, shipowners face extraordinarily difficult decisions on when to build and which technology to back.

Combined with generally lacklustre shipping markets over the past decade, it is hardly surprising that economic and environmental uncertainty has slowed new building activity. With fewer new ships entering the fleet, scrapping activity has also slowed – even allowing for the current pandemic. Ironically, just when the IMO is seeking greater fuel efficiency, we're witnessing an aging fleet that, if unchecked, will eventually threaten the reductions in carbon intensity shown above. If post Covid economic activity recovers, as SSY Research expect, the risk is that fleet available cargo carrying capacity won't match prospective growth in demand as this decade progresses.

Meanwhile, dissenting voices within the IMO are pushing to accelerate change. This raises the spectre of regional carbon controls and taxes – much like the sulphur emission control areas (ECA) of North America and Europe. In Europe especially, this is moving from risk to reality, with speculation that a Biden administration will follow suit.



Newbuild and Scrap Percentage of the International Fleet

Back in 2015, the EU MRV Regulation on the "monitoring, reporting and verification of carbon dioxide emissions from maritime transport" entered force. Vessels visiting EU ports have been required to report their vessel EEDIs (or an estimate), annual fuel consumption and CO₂ emissions data for their EU voyages. Data for 2018 and 2019 is publicly available for over 12,000 vessels, and the database will be used as a basis for EU action on maritime CO₂ emissions.

In addition, last September the EU Parliament narrowly voted to adopt both a very ambitious maritime emissions reduction target - 40% below current levels by 2030 - as well as to include shipping emissions in the EU Emissions Trading System from January 2022. The EU Parliament is now negotiating this legalisation with member states and we are waiting for their inception impact assessment.

While amendments will probably occur, the inclusion of the maritime sector in EU ETS seems likely and will require vessel owners to purchase carbon credits to offset emissions associated with their EU voyages. Using the example of a small Capesize vessel, which emitted 6,600 tonnes of CO2 in two voyages to EU ports in 2019 and, based on the current futures price for an EU emissions allowance in 2022 of €31/t, similar vessel activity in 2022 would require the purchase of nearly \$250,000 worth of carbon emission allowances (EUAs). We calculate that this would add just over \$1.10/t on a voyage rate basis for this vessel. For other ships, this rate depends on dwt, efficiency of the engine and length of the voyage.

As our clients face additional environmental scrutiny, it is more imperative than ever that SSY stay at the forefront of these developments and assist our clients where we can. There is no question that the re-sale value of vessels and their charter rates will increasingly depend on their environmental footprint.





METALS OUTLOOK

Richard Fowler

Analyst SSY Futures

Metals have been largely correlated in 2020, characterised by virus impacts resulting in one of the most significant and immediate impacts to global fundamentals in recent history. Distortions to demand and supply did vary between metals. However, this was largely dependent on location and logistics.

As virus uncertainty rose and demand collapsed more swiftly than supply, metals prices declined sharply with global sentiment which eroded years of gains from equity markets.

The collective monetary and fiscal support saw metals prices rally fairly consistently from lows in March/April. The Fed, ECB and BoJ have increased their balance sheets by nearly 50% or \$7.7 Tn alone.

With the US more far more aggressive on overall easing than peers, the sharp appreciation in the US Dollar in Q1 2020 has been swiftly reversed, and the DXY is now around its weakest levels since Q2 2018. Not only that, prospects for further fiscal easing and the potential for energy imports to plug the shale gap may well see further deterioration in the trade deficit.

Movements in the US Dollar, together with the change in inflation expectations have been particularly key for metals' price direction and will likely continue to be the most important macro series to monitor.



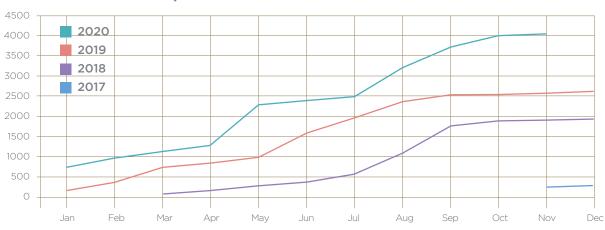
Metal Price Comparison \$/t

Source: SSY, Custeel, LME, Wind









China Cumulative Special Bond Insurance RMB BIn

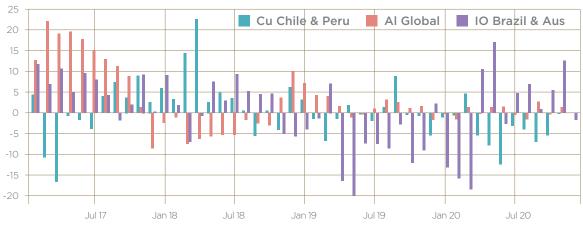
Source: SSY, Wind

Credit easing in China has been particularly impactful, given the relatively direct influence had on metals-intensive sectors such as infrastructure and construction. Aggressive targets were set and exceeded for special bond issuance for example, which represent part of local government bond issuance earmarked for infrastructure projects. To November, more than RMB 4 Tn of special bonds have been issued. Expectations on the extent to which these areas of support continue (or are expected to continue) will therefore be of particular influence for ongoing demand forecasts. With risks still present, it's unlikely to see support removed immediately.

C Movements in the US Dollar, together with the change in inflation expectations have been particularly key for metals' price direction and will likely continue to be the most important macro series to monitor.

Image: London Metal Exchange, City of London. Alamy Stock





Metal Supply Indicators YoY%

Source: SSY, IAI, Ministries, Wind

The supply situation varies considerably by metal, though output should increase for most. Currently copper supply from major producers Chile and Peru is almost back to flat year-on-year as of October and is likely to rise further in 2021 given rising output at Grasberg, Spence and Cobre Panama to name a few.

Aluminium has been relatively unaffected in supply terms overall, with consistent low single-digit growth in smelting this year. China has taken excess capacity and the rare situation of the aluminium arb opening continues to see effective netting of primary and semi-fabricated aluminium trade. Domestic margins are very strong, supporting production levels.

Though, like supply, demand is returning, it's doing so at a slower pace for specific industries and locations. Global commercial flights, which include passenger and cargo flights, still fall considerably short of numbers last year for example and ex-China demand will be key for sustaining trends.

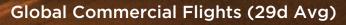
With vaccines around the corner and governmental support in place, the normalisation in demand ex-China is expected to continue, both from remaining

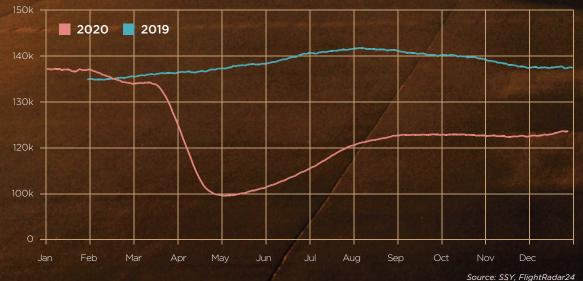
GC Currently copper supply from major producers Chile and Peru is almost back to flat year-on-year as of October and is likely to rise further in 2021 given rising output at Grasberg, Spence and Cobre Panama to name a few.

Image: Chuquicamata, world's biggest open pit copper mine, Calama, Chile



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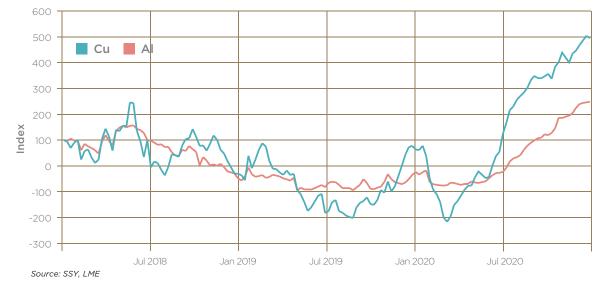


Source: SSY, CPB, Markit

pent-up demand as well as a stabilisation from lockdowns easing. Though governmental support can, and likely will lead to misallocation of capital, this isn't expected to be an issue for this year.

With Chinese credit expected to remain loose and further details of the recent fiveyear-plan likely to surface, we expect relative demand stability there. There are potential short-term risks, such as commercial real estate domestically or threats from geopolitical events of course and these will have to be monitored closely. In terms of metals prices, there's little in the data to argue for a break from trend at this stage in the coming months. There are certainly areas where variance around trends have become overextended and will mean revert, but a break would likely only occur with marked US Dollar strength or a downward correction in demand that would cause an unwind in positioning, neither of which we expect.

To that end, indicators for positioning are extended relative to recent years and whilst that naturally underlines a potential for liquidation, it neither necessitates nor predicts one.



LME Fund Positioning

DRY FFA OUTLOOK IN 2021

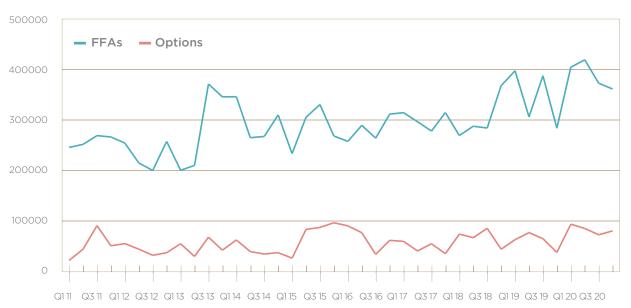
Duncan Dunn

Senior Director SSY Futures

The Dry Cargo FFA market has grown steadily back from the low transaction levels following the credit crunch in 2008/9 and the rapid decline of the formerly dominant over-the-counter style of trading. When the dramatic fall in the dry cargo markets occurred in the second half of 2008, around half of FFA volume had already moved to clearing, so the market structures proved robust. However, the levels of capital needed to support cleared FFA trading proved difficult for many participants in post credit crunch markets,



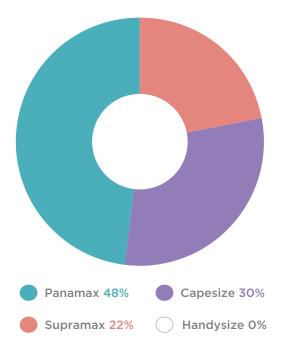
DRY FFA vs Options Quarterly Volumes



I In 2020 for the first time over 1.5 million lots have traded, representing growth of around 70% from a low point in 2012 and options volume for 2020 has been the highest since records began.

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ff It is a well-established fact in derivatives circles that volume begets more volume and as new freight-based users join the market, we also anticipate a resurgence of financial traders.

as bank finance was tight. Transaction levels of cleared FFAS remained stable but by 2012 they had dipped to below one million days traded annually.

In 2020 for the first time over 1.5 million lots have traded, representing growth of around 70% from that low point and options volume for 2020 has been the highest since records began. This growth looks set to continue through 2021 as a steady flow of newcomers are joining the FFA market, which looks set to boom. It is a well-established fact in derivatives circles that volume begets more volume and as new freight-based users join the market, we also anticipate a resurgence of financial traders. This core growth is driven by the continuing success of the Baltic's time charter average contracts for the Capesize, Panamax and increasingly Supramax vessel sizes.

Using these contracts freight market participants can transfer market risk, from exposure to rising or falling time charter rates, to "basis risk" which is the risk that their actual vessel or particular route will perform differently to the time charter average contracts. This basis risk is far lower than market risk and in recent years FFA users have become adept at managing it by indexing their vessels and understanding the likely premium or discount attached to different voyages.

This practice gives the FFA user the ability to price their freight contracts with far more confidence and out-compete those not using freight derivatives. Of course like all derivatives FFAs bring a degree of added complexity to a business using them, Warren Buffet famously called them "financial weapons of mass destruction" but this was in the context of a company with an overly complex strategy and poor controls and today more and more freight traders and vessel owner-operators are understanding and embracing them.

In simple terms FFAs allow users to fix or float their freight exposures. By adding freight options, the FFAs fast growing younger sister, traders can also insert floors and ceilings to the pricing they are exposed to in an underlying physical deal. SSY Futures have been at the heart of this business since its inception and we are happy to make our expertise available to newcomers to this fast-growing market, so that they can be confident in their ability to integrate a cautious, baby steps approach until they become experienced participants in their own right.

We're looking forward to continued growth of around 20% in the FFA markets in 2021 and look forward to assisting new converts to this now firmly established market.

LOOKING FORWARD FROM THE ENERGY DESK

James Whistler

Head of Energy Derivatives

2020 was a busy year for commodities and energy markets. In such a challenging and extreme year due to Covid, derivatives markets have been an important part of the price discovery process and managing volatility.

At the end of 2019, LNG prices were relatively soft due to some supply overhang and a resoundingly mild northern hemisphere winter. This was reflected in related power markets. As we neared the end of 2020's first quarter, the effects of the pandemic were evident and already soft energy prices crashed and forward curves tumbled.

Despite the challenging market backdrop, we've been working hard to build SSY Future's presence in Singapore and Japanese electricity futures, and LNG Forward Freight Agreements. This includes the production of our new daily reports that cover LNG and related energy products, and a dedicated Japanese electricity

C As I look ahead to 2021, I see a sustainable recovery path by mid-2021, and this should be reflected in improving electricity forward curves around the world towards the end of Q1'21.





report. We've also spent a lot of time on education and introducing new participants to these markets. These efforts were rewarded with a dominant market share. Notably, SSY brokered over 50% of all trades in EEX's Japanese electricity futures in Q3'20.

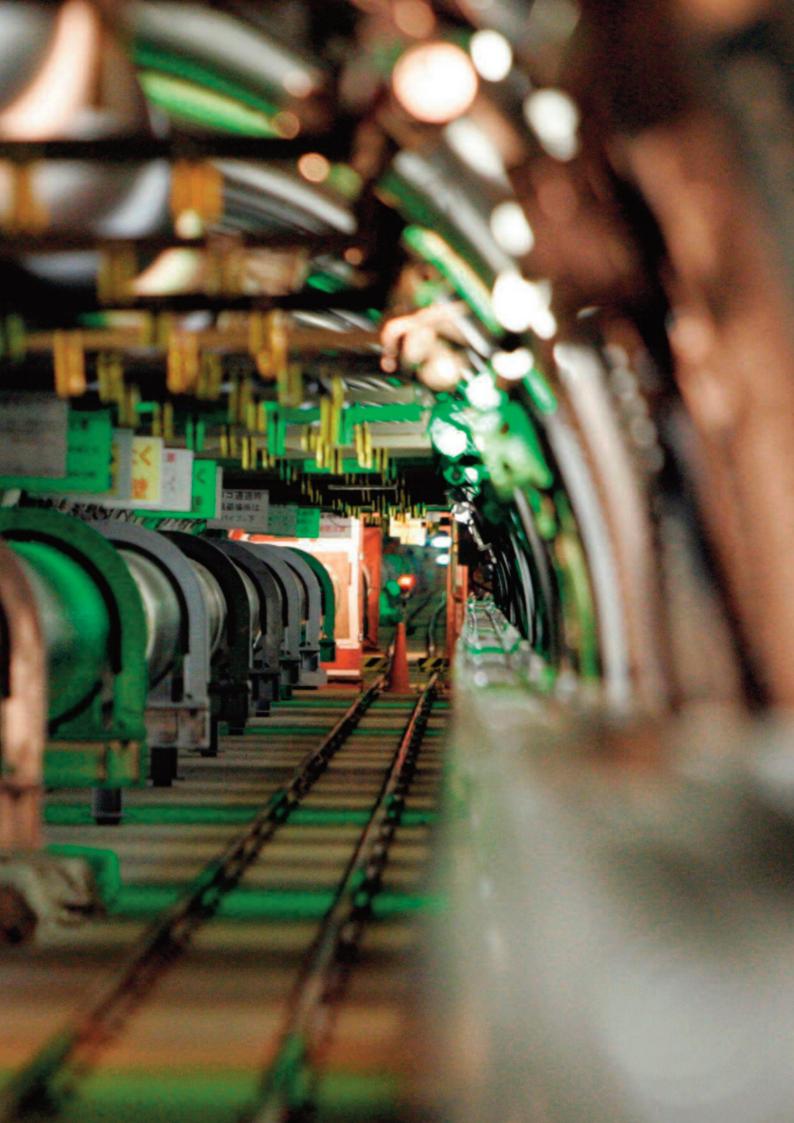
As I look ahead to 2021, I see a sustainable recovery path by mid-2021, and this should be reflected in improving electricity forward curves around the world towards the end of Q1'21.

I expect liquidity to keep developing in Japanese power, with relatively healthy fuel margins coming back into the forward curve to entice the all-important generators to lay off some risk. Monthly volumes have been steadily building, and I believe 2021 will be the breakout year. The market is complex; with weather risk, diverse generation mix and locational grid challenges. Increased reliance on futures contracts to hedge these risks is natural and follows the logical path already observed in Europe, the US and Australia, amongst others. EEX has done well in bringing in diverse speculative participation to help this process along.

In LNG FFAs, the hefty volatility experienced over the past months will no doubt bring new participants. December was a timely reminder of just how vital the freight sector is to global LNG prices. SSY Futures is offering a high-quality LNG FFA brokerage service to its clients globally from its London and Singapore offices. Trading activity has been growing on CME, and we will soon gain some clarity on possible new listings on competing exchanges, including ICE and EEX.

We will be growing the SSY Futures energy derivatives business further in the coming year with a number of new developments across Asia-Pacific and beyond. I look forward to sharing these with you in due course.







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