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GLOBAL LOGISTICS UPDATE

MARCH 2022

Higher Rates and Capacity Constrains to Continue in 2022

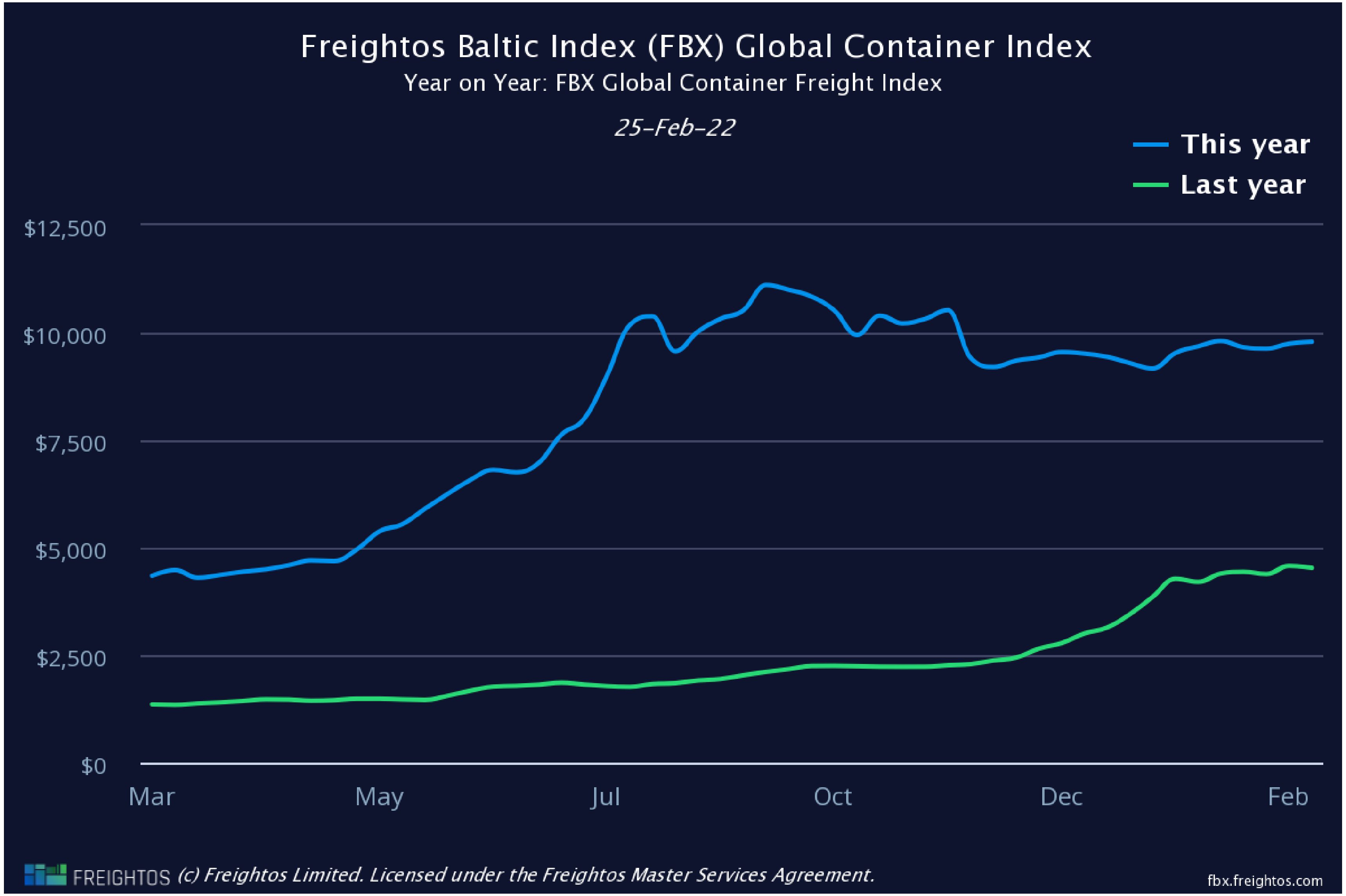
The outlook remains very similar to the previous month. Higher transportation prices, more delays and disruptions are to be expected as the Russia/Ukraine conflict strikes another blow to global supply chains. The sanctions, restricted airspace, and dangerous conditions in the region are forcing shippers and carriers to find alternate routes, leading to delays and backups, especially on freight routes from Asia to Europe. Train (New Silk Road) and Air Cargo between Europe and China are also affected. More dramatic impact on the global economy is expected from surging energy prices and inflationary pressures. Infections and respective governmental restrictions due to the Omicron variant continue affecting labor shortages globally, although a decline is now being seen in many countries. Transit times for sailing from far East to LA/LB ports are taking ~38 days. Our goal is to keep you informed as we monitor this dynamic and crucial part of our supply chain.

OCEAN

OCEAN: High Level Summary

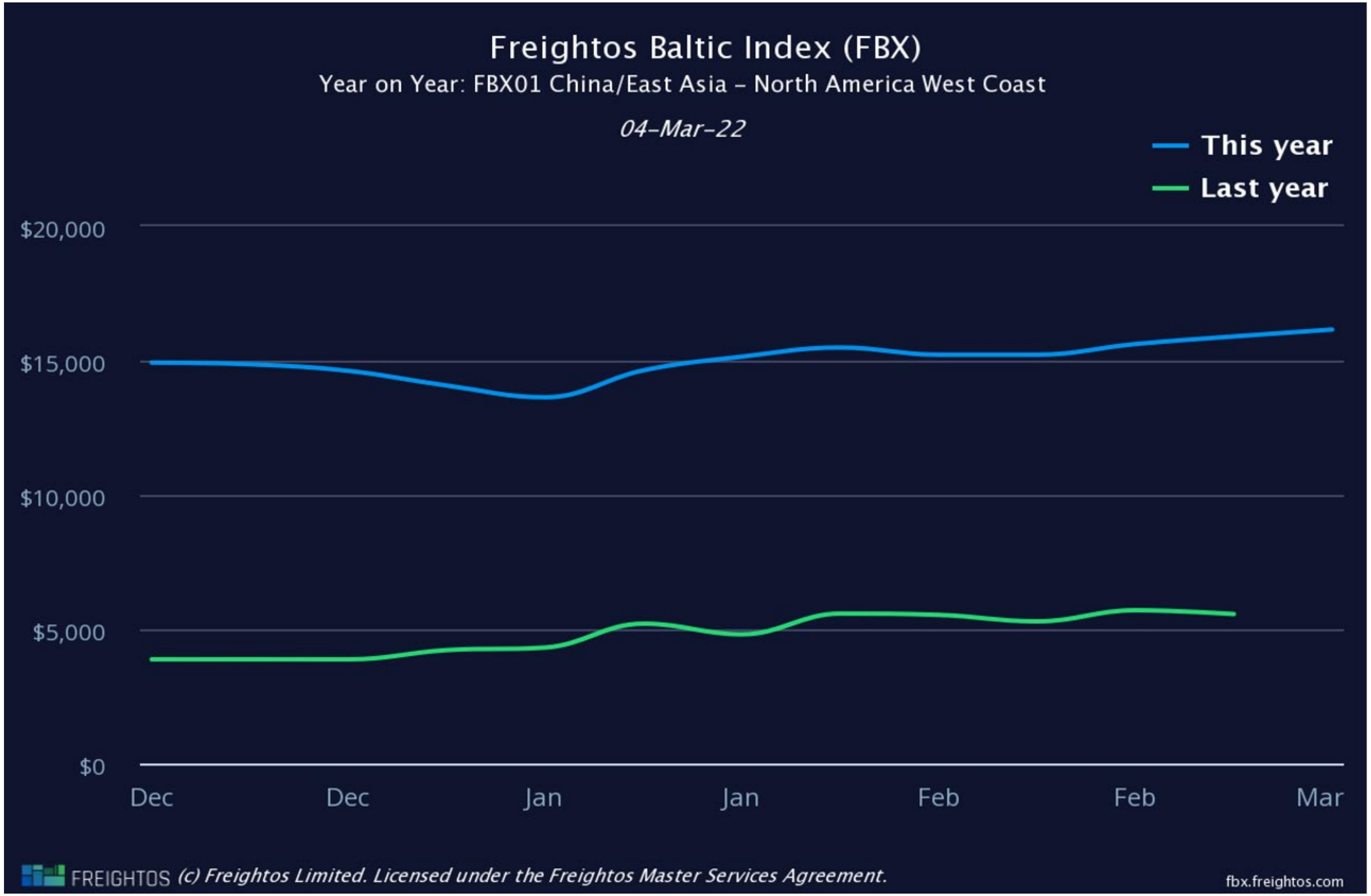
- Global demand remains strong, and capacity is tied up due to congestion delays at ports in North America and Europe.
- Global reliability schedule remains very low, dropping from **78%** in 2019 to **35,8%** in 2021.
- 45 cancelled sailings have been announced between **weeks 9 and 12**, out of a total of 558 scheduled sailings, representing an **8% cancellation rate**.
- All Ukraine ports are closed, and major shipping lines suspended their services to Ukraine.
- Vessel delays remain a significant problem in the **Asia – North Europe** and **Asia – US trades.**
- Cargo destinated for Russia and Ukraine is now pilling up in multiple ports, especially Constanza, Istanbul, Hamburg and Rotterdam. Delays or rising detention & demurrage charges at these ports are expected.

OCEAN: Global Ocean Container Index (YoY)



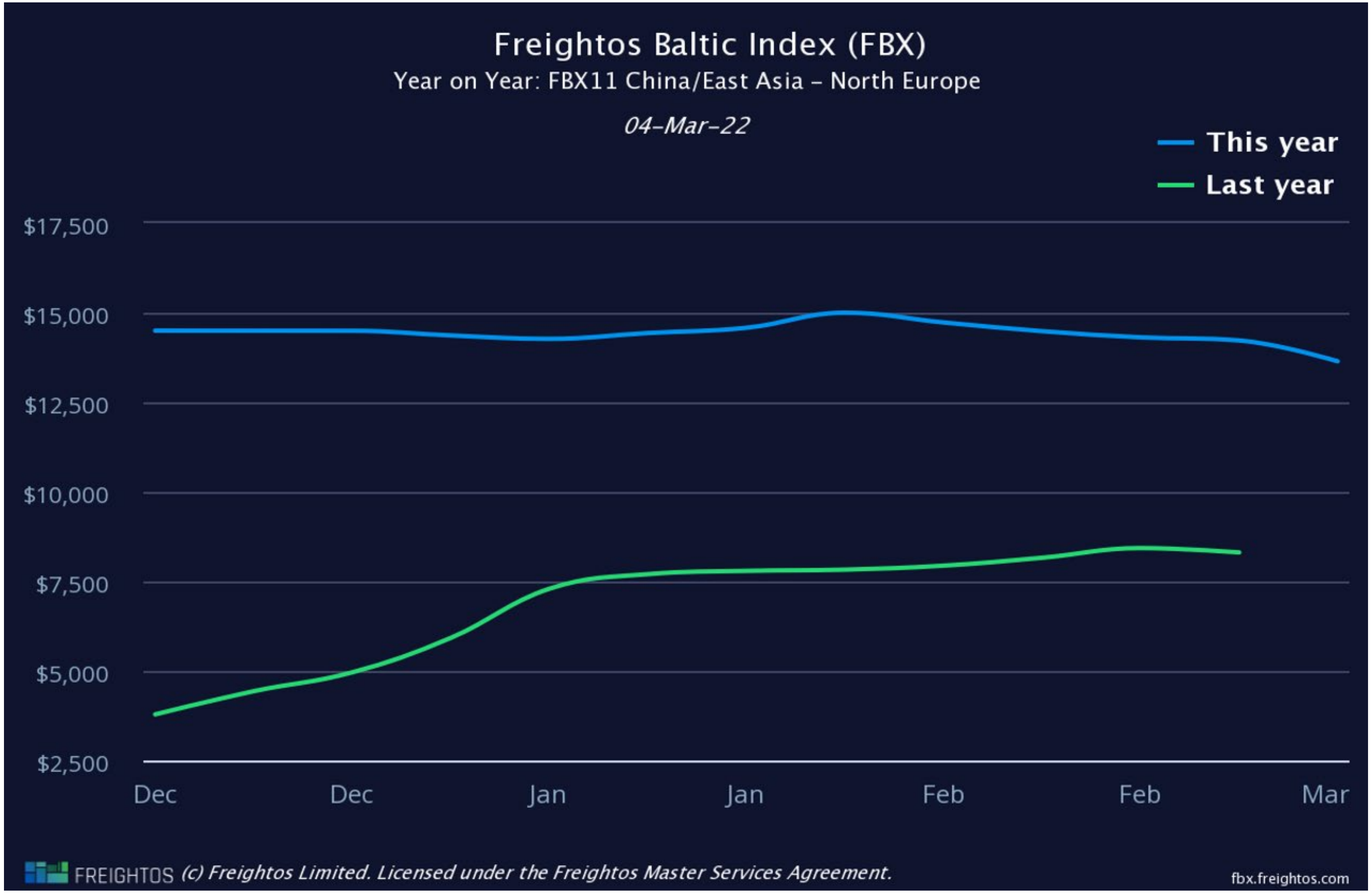
Container index is 2.2x higher vs. 2021

OCEAN: China to NA West Coast



Container index is <u>2.86 x higher</u> vs. 2021

OCEAN: China to North Europe



Container index is <u>1.7x higher</u> vs. 2021

ROAD

ROAD: Regional Dynamics

North America

Tight Capacity

- Current market has 7 available loads per 1 available truck, vs. pre-pandemic levels of 2 to 1
- Driver hiring and retention remains extremely challenging (many carriers remain 10-20% down on hiring target from pre-pandemic level)

Rates

- Van rates with slight variation vs. previous month, however still ~30% higher vs. last year

Europe

Capacity & Drivers shortage

- As a result of Russia/Ukraine war, and on top of the existing shortage of drivers, mainly in Germany, it's expected to have this situation worsening, as ~17% of drivers operating in Germany, are from Ukraine

Rates & Capacity

- Across Europe Index capacity is down by 5% vs. last year
- EU-wide regulation changes ("The Mobility Package") expected to impact rates from Feb 1 onwards

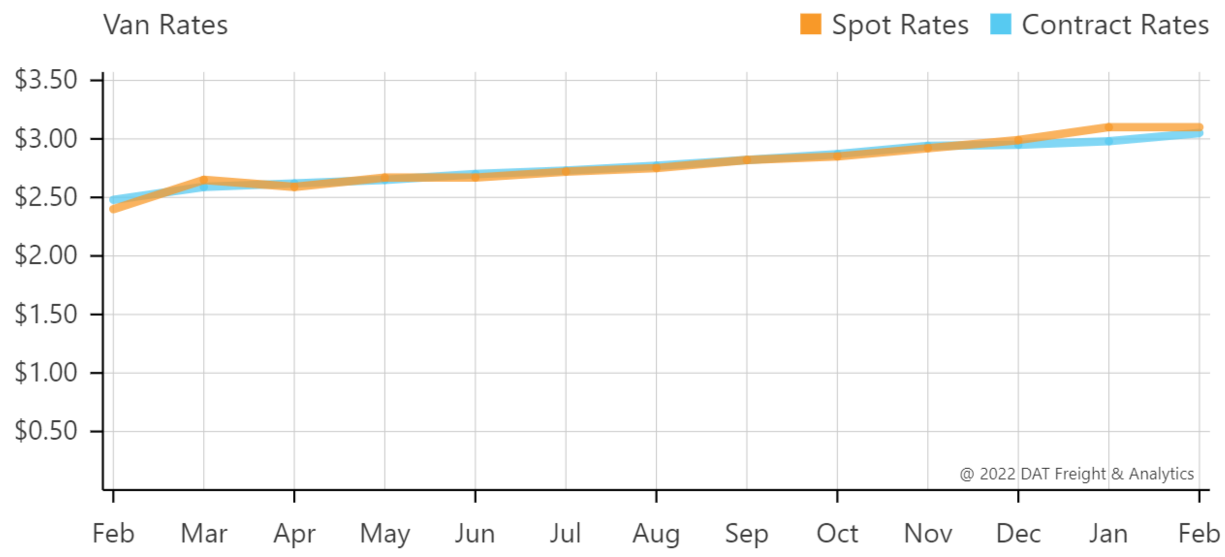
Asia Pacific

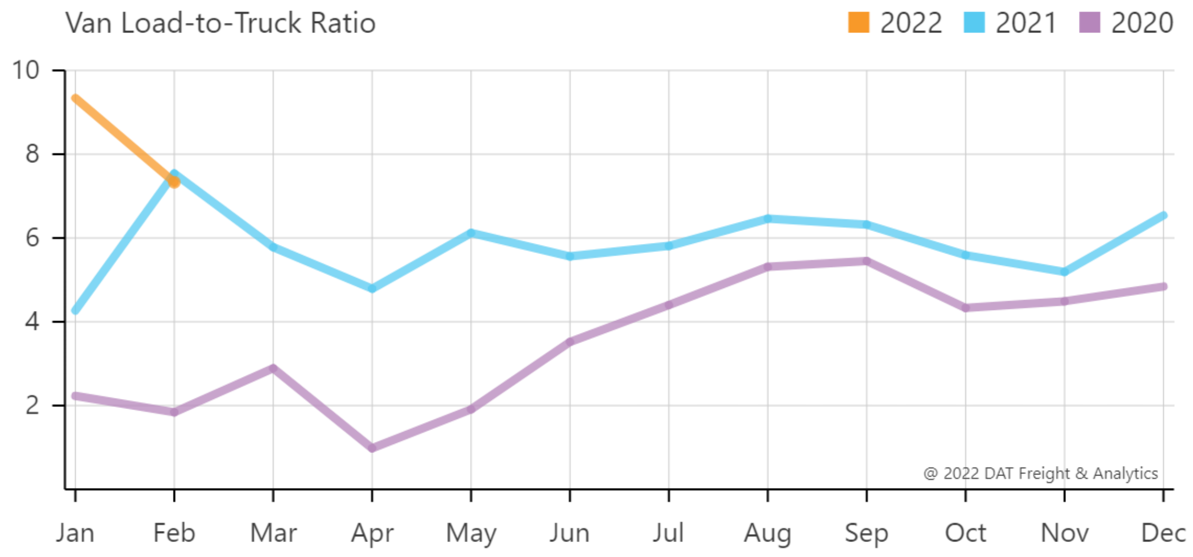
Long Lead Times & Some Capacity Constraints

- Congestion at the Chinese road export borders (PingXiang and DongXing) causing long lead times and shortage of assets for freight out of and into China (PingXiang with 12-14 days queuing)
- Due to the recent COVID-19 outbreak in Hong Kong, many truck drivers are infected in South China. At the moment, situation is very dynamic.
- Remaining intra-Asia FTL / LTL road service is generally running in time

ROAD: NA Price & Capacity Index (VAN)

Rates continue to climb and capacity available is volatile





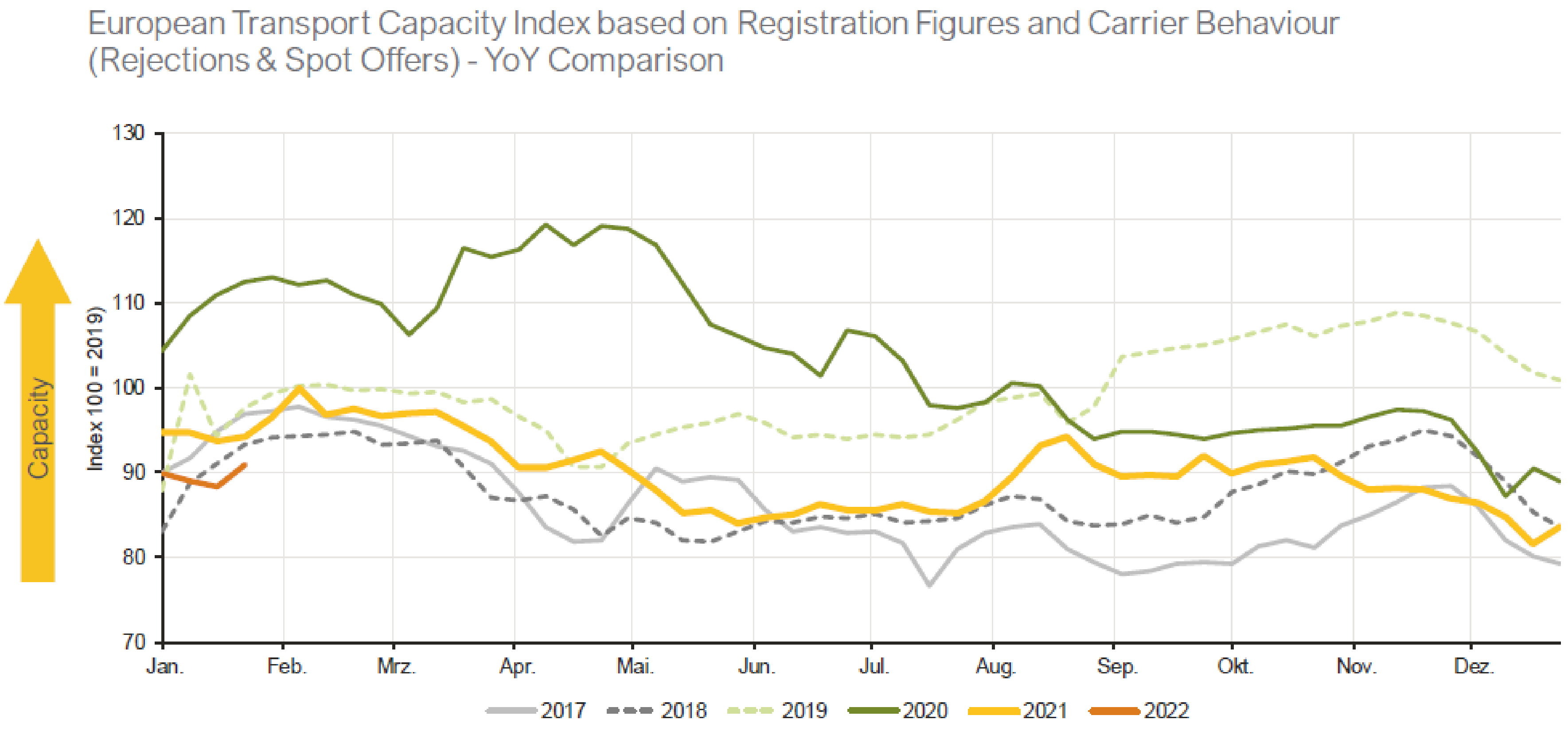
Rates increased 28.8% YOY and reduced 0.1% vs Jan 2022
Load-to-truck ratio decreased 2.9% YOY and 22% vs. Jan 2022

Van Load-to-Truck Ratio: # loads available / truck

e.g., In Feb 2022 it shows there are **~7.3** loads to tender for every available truck.

ROAD: EU Price & Capacity Index (VAN)

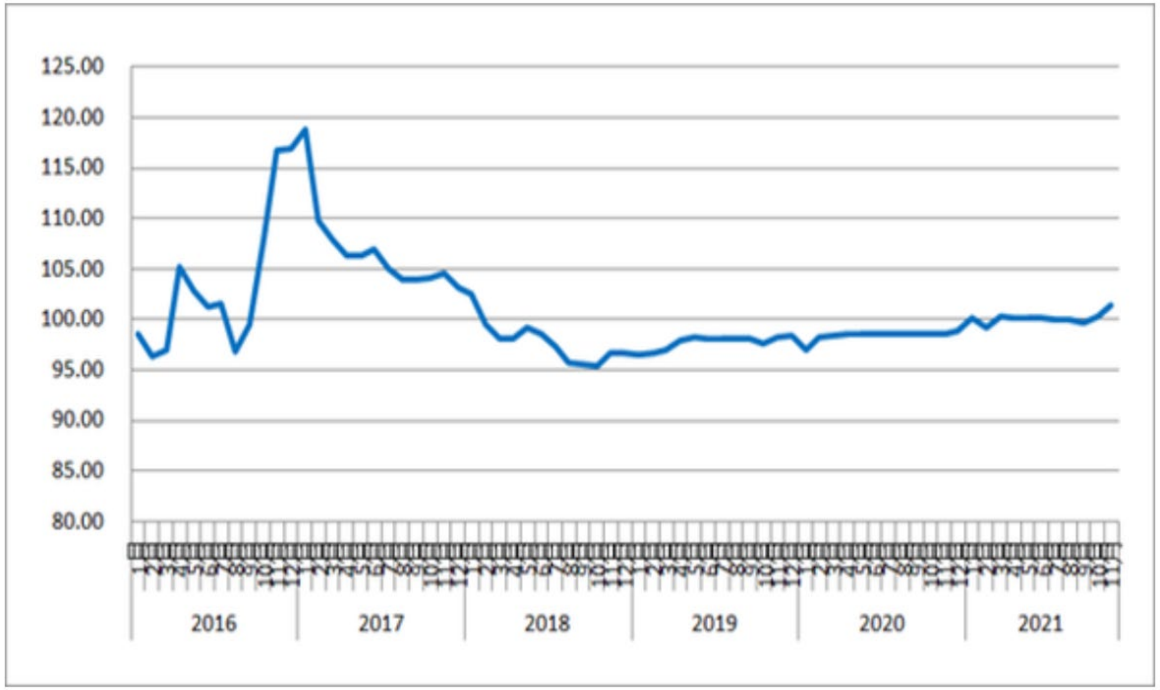
Rates and capacity available are volatile

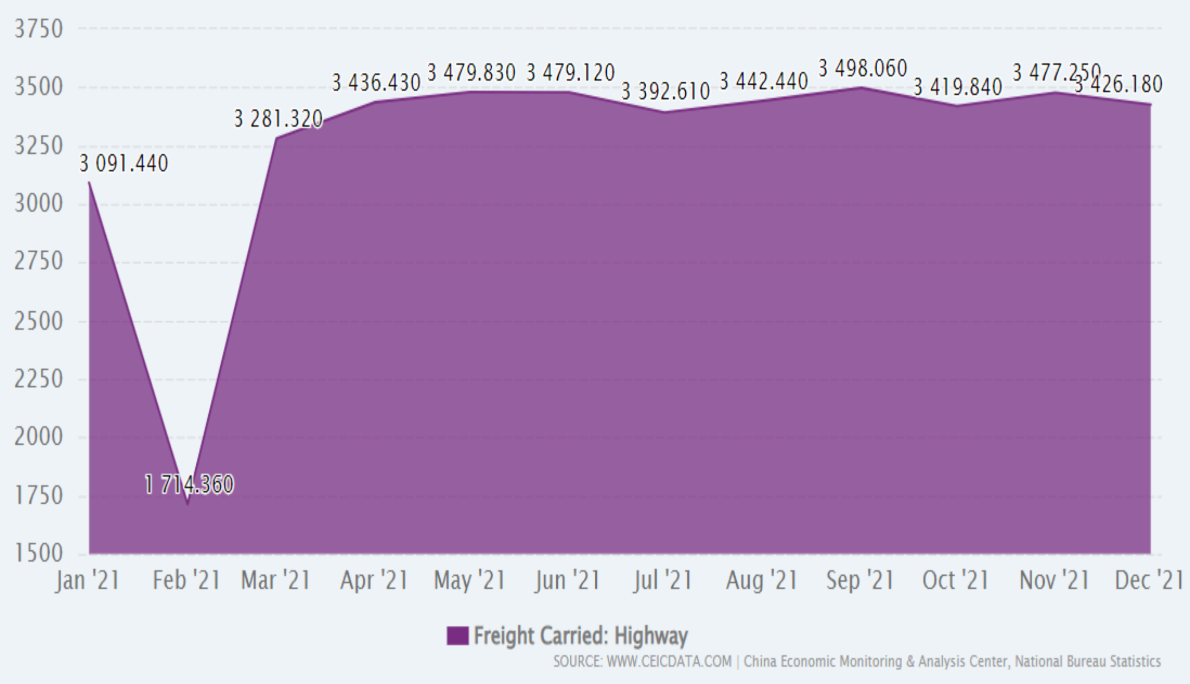


Index Capacity reduced 5% YoY and remained similar vs. Jan 2022

ROAD: China Road Freight Index & Volumes Carried

Freight index shows low fluctuation and mostly stable capacity





Freight rate index of China's highway logistics was 100.5 points in Jan22, representing 1.89% less than previous month and up 0.4% YOY

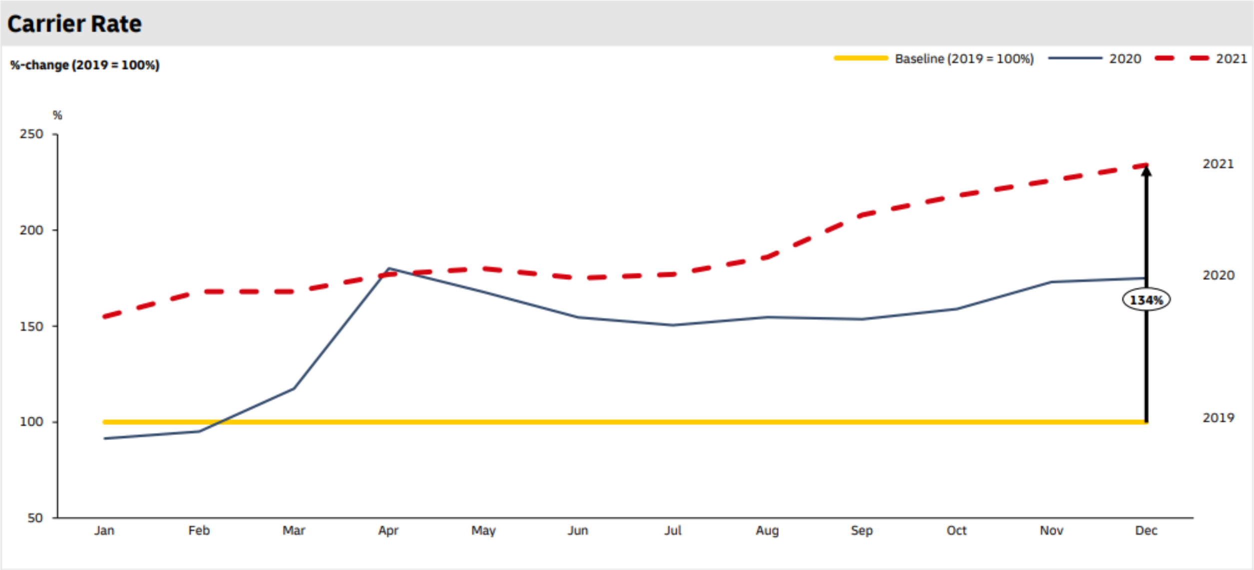
Light volume's fluctuation of -1,4% vs. Nov21 and ~10% YOY

AIR

AIR: High Level Summary

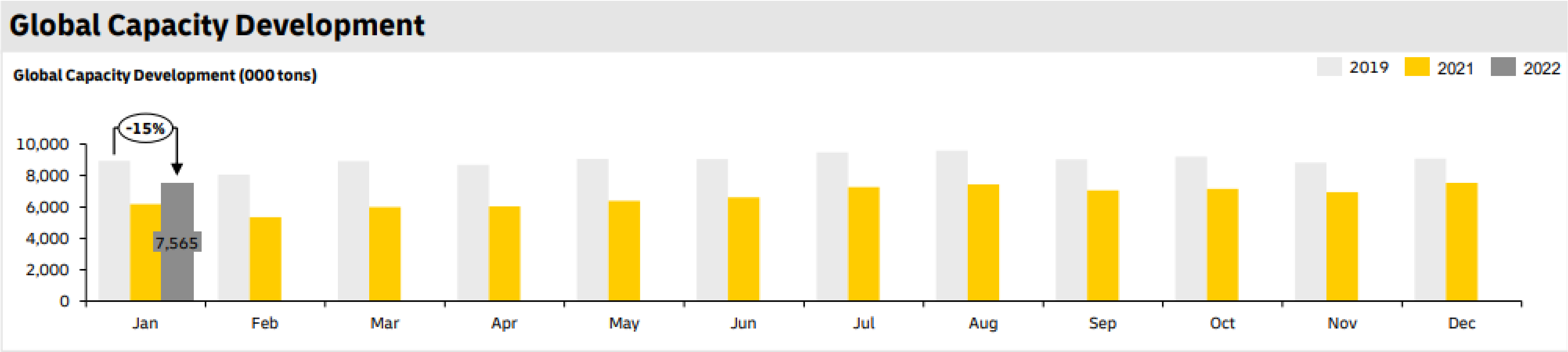
- Global capacity still affected and -15% down compared to Jan 2019.
- Russia / Ukraine conflict impacting airfreight between Europe & Asia. Russian airline companies banned from Western Europe flights, reducing cargo capacity.
- Significant price increase expected due to higher costs (cargo planes not able to stop at Russia for refueling and oil prices rising).
- COVID travel restrictions keeps affecting passenger flights and, therefore, belly capacity. Market still expected to generate major disruptions for the next 1 - 2 months.
- Most notably rates to/from ASPA (especially CN) likely to remain high as space constraints continue due to COVID regulations. Overall rates are **134% higher** than 2019 baseline and **33%** vs 2020 baseline.

AIR: Global Air Freight Index



Current rates are 134% higher vs. 2019 baseline

Global capacity down 15% vs. 2019 baseline



RAIL

RAIL: High Level Summary for North America

- Rail **volumes increased 11%** vs. Feb 2021 (carloads + intermodal).
- Demand seems to be over exceeding existing rail capacity at times.
- Railroads are investing more in technical capabilities in order to streamline operations and boost service levels.
- Rail represents ~28% of freight movement in NA.
- Record container import volume is straining rail capacity.

Looking Forward

- The COVID pandemic persists and has reshaped the world. It has accelerated many things, from population decline to digital revolution.
- Russia/Ukraine conflict led to logistic restrictions between EU and China. The rail lines are on hold and, due to imposed sanctions from Occident countries, airflights are also limited. Alternative for cargo would be ocean freight.
- Moving volumes currently using rail (Asia – Europe) into ocean freight, represents an increase of 5 to 8% in demand, in a still congested trade.
- European driver shortages and higher demand likely to increase as a result of Russia/Ukraine war, influencing higher freight rates.
- Country regulations limit access to additional capacities (e.g. China CAA regulation that freight cannot be loaded in the pax cabin of aircraft anymore).
- Port congestion to persist through 1H 2022 with a possible improvement in 2H 2022.

H.B. Fuller's Response

- Our long-standing relationships with several freight forwarders are helping us to get the best service levels possible in this environment and have mitigated market impact to H.B. Fuller.

- Where inbound freight is coordinated by our suppliers, our H.B. Fuller Logistics team is intervening to help where possible when our suppliers run into problems.

- H.B. Fuller Supply Chain and Logistics teams working closely together to build in the increased lead times for international freight in order to avoid any supply disruptions to our customers.

- Where needed and possible, we are investing in dedicated trucks and our carriers are showing high performance (from the moment we have product ready to ship).

- Hiring additional resources for our Supply Chain departments to manage logistical challenges.

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