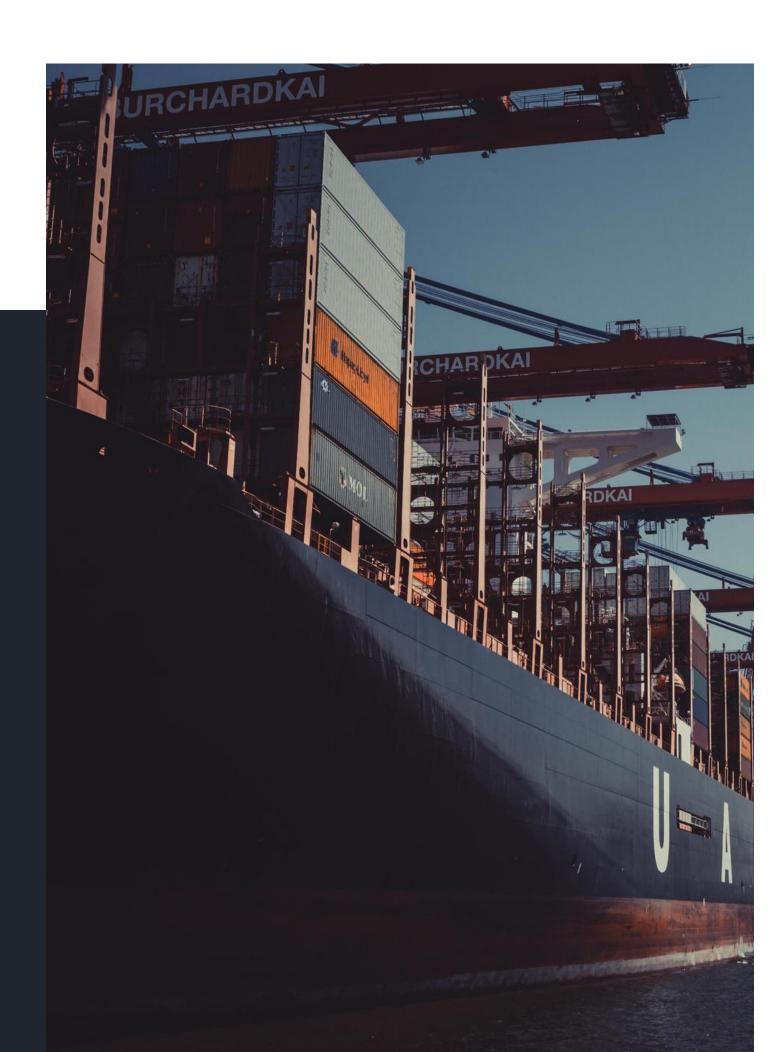
COVID-19 & SHIPPING

GROUP 3: ANKITA KESHAVA, MARIANNA KOUKA, NAVYA SRAVANI JAMMALAMADAKA, SACHIN JAYACHANDRAN, SRICHARAN ARUMUGAM, ZIJIE HUANG



DETAILS

01. Case Study Audience & Objectives

To conduct for our client (**shipowner**) a detailed analysis of the market conditions, as experienced after the advent of covid, and provide him with **recommendations** about his **immediate investment (next vessel acquisition)**

02. Questions

Which regions exported the most?

Which regions experienced higher imports?

What types of vessels were mostly utilized?

Was there specific demand for a certain commodity and therefore vessel type? What were the market reactions (sales, idle, orderbook, spot freight rates)?

Key Question: Where to invest next?

03. Data Used considering the years 2018-2022

- Imports & Exports: coal, grain, oil, iron ore, crude oil, oil products
- Orderbook, Idle, Sales Activity, Spot freight rates
- Trade growth of major bulks and oil

STORYBOARD

01

Introduction

Laying out key insights for imports/exports, global trade, commodity demand, vessel utilization, vessel sizes & routes

02

Data Overview

Providing details about the market reactions & average daily earnings

03

Data Emphasis

Emphasizing on Tankers

04

Key takeaways

Tanker earnings, sales activity, orderbook

05

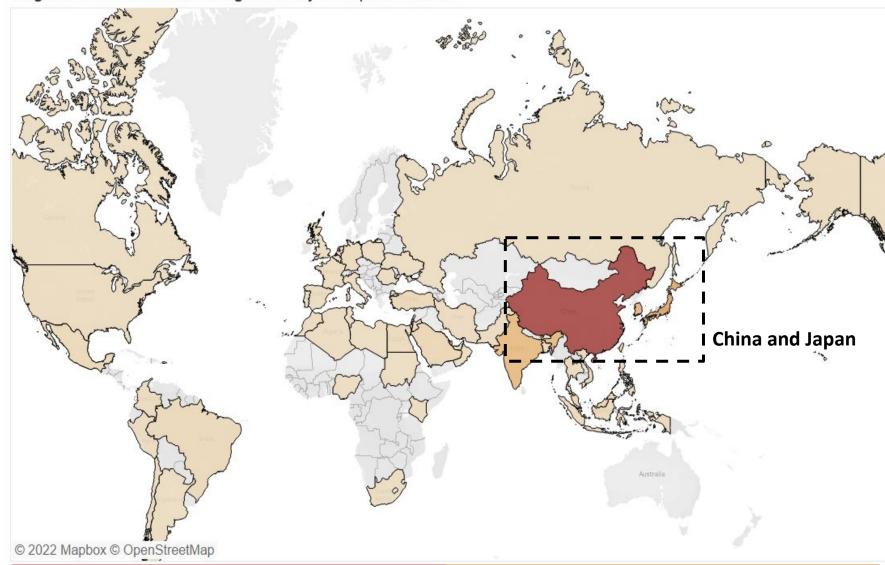
Recommendation

Investment decision based on projected data and current conditions

Regions that had highest imports & exports - Dry commodities

(In million tonnes)

Regions which contributed significantly to Imports Trade



China

2020: 1,984 M Tonnes

2021: 2,078 M Tonnes

2022: 1,571 M Tonnes

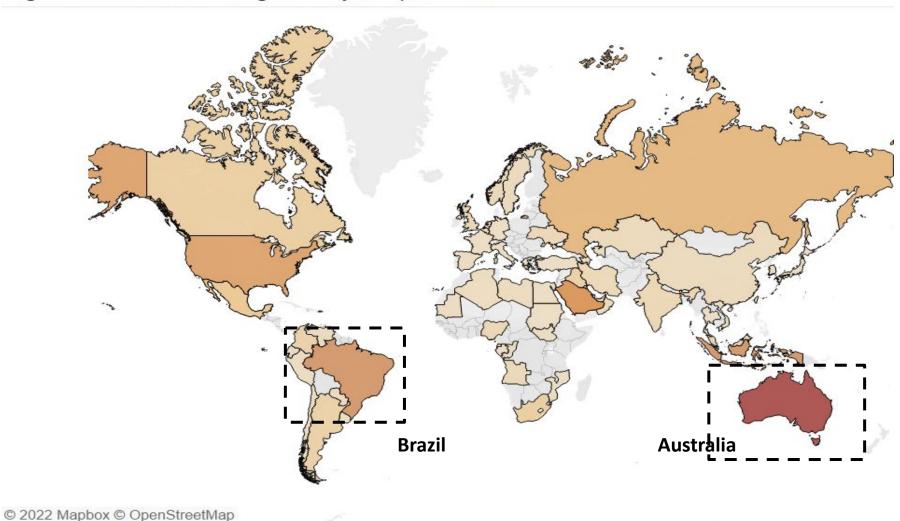
Japan

2020: 656 M Tonnes

2021: 692 M Tonnes

2022: 640 M Tonnes

Regions which contributed significantly to Exports Trade



Australia

2020: 1,977 M Tonnes

2021: 2,044 M Tonnes

2022: 1,786 M Tonnes

Brazil

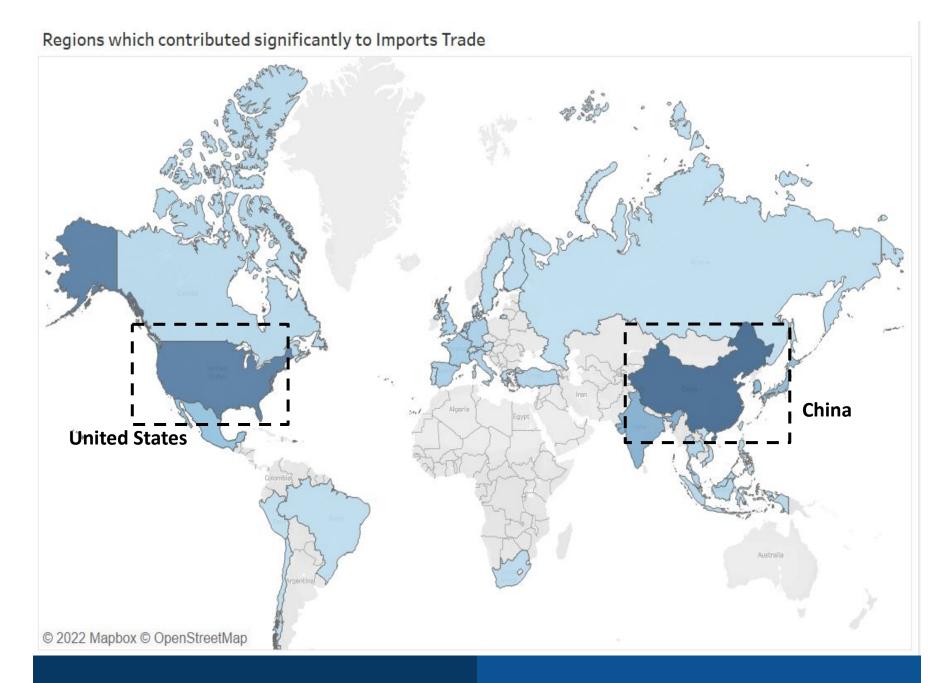
2020: 918 M Tonnes

2021: 929 M Tonnes

2022: 868 M Tonnes

Regions that had highest imports & exports - Wet commodities

(In million tonnes)



China

2020: 518.4M Tonnes

2021: 488.1M Tonnes

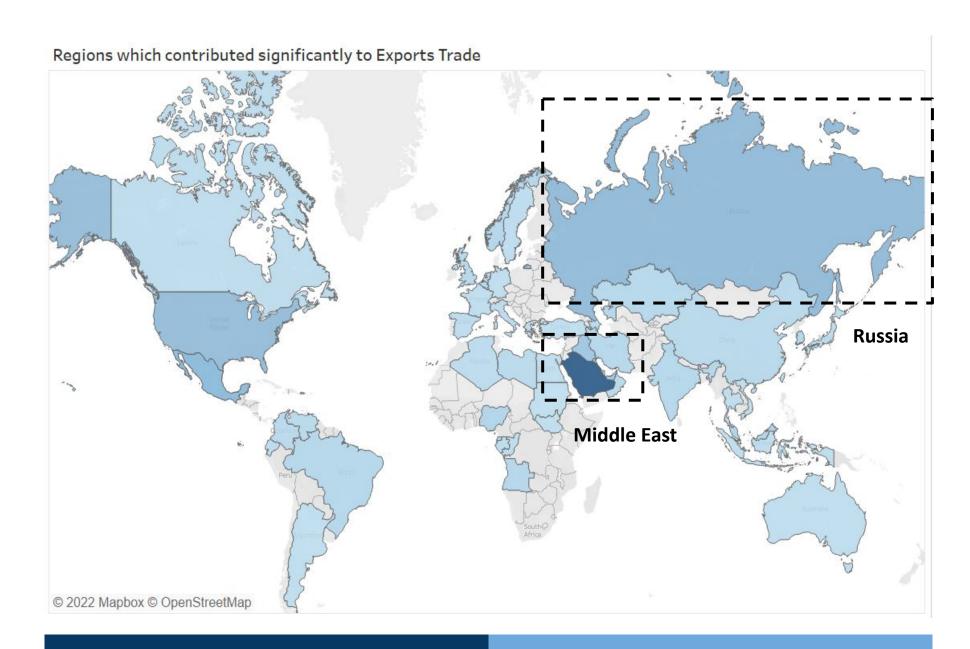
2022: 466.9M Tonnes

United States

2020: 432.1M Tonnes

2021: 447.8M Tonnes

2022: 422.3M Tonnes



Middle East

2020: 848.1 M Tonnes

2021: 841.2 M Tonnes

2022: 948.4 M Tonnes

Russia

2020: 266.0 M Tonnes

2021: 270.5 M Tonnes

2022: 267.1 M Tonnes

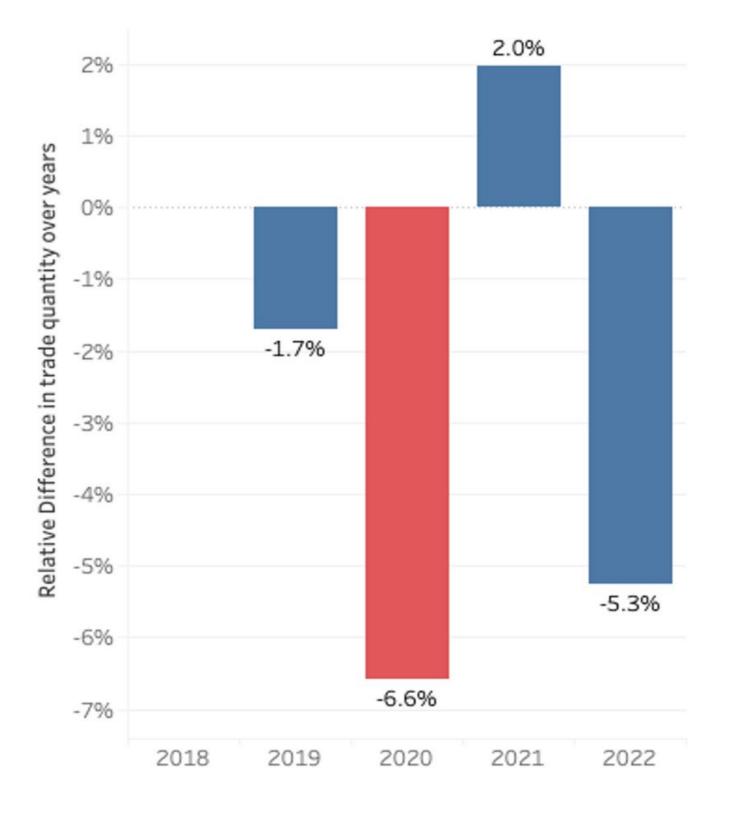
Pandemic causing disruption in Global Trade Volumes

-6.6%

Covid-19 has had a massive impact on global trade with a **6.6% negative growth in 2020** compared to 2019.

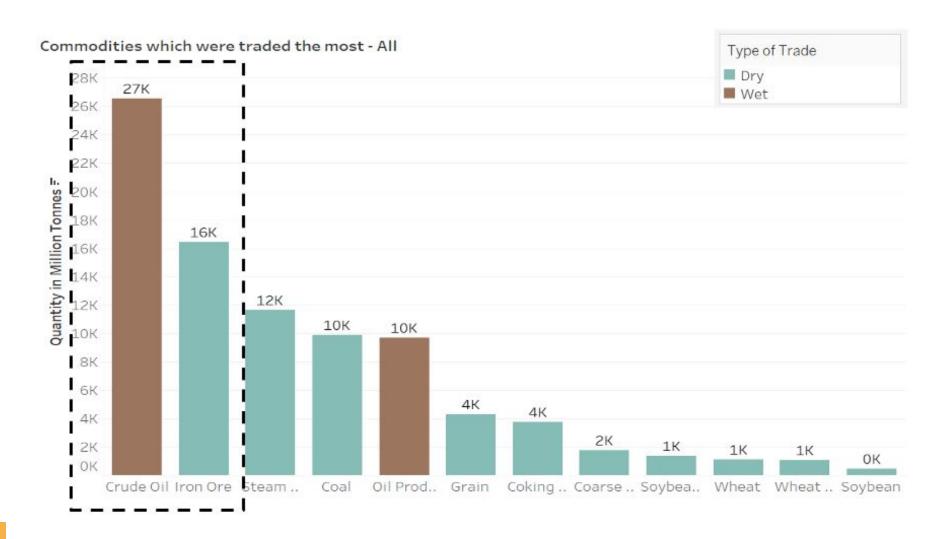
2022 also witnessed a significant impact of -5.3% growth in world trade due to the Russia-Ukraine war and China's strict zero-covid policy.

Percentage of the relative difference between the years in world trade volume



Commodity Demand

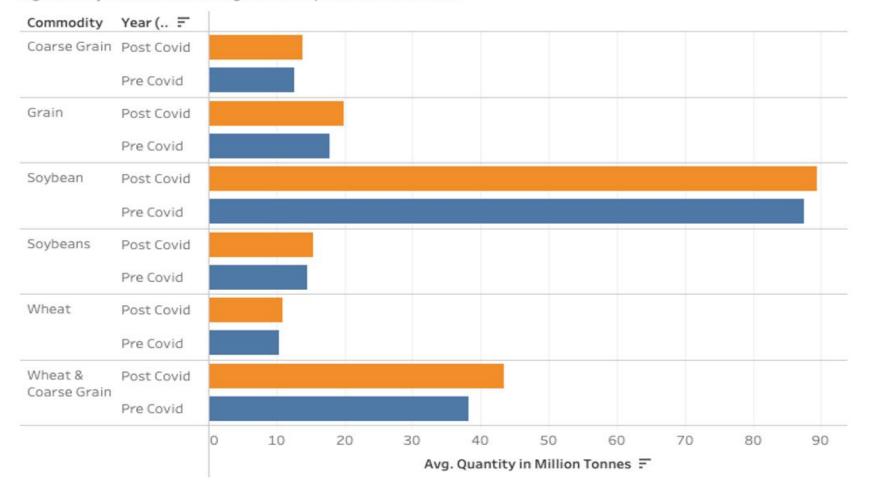
Considering only the major commodities which contribute significantly to world seaborne trade



Crude oil and **Iron ore** are the commodities that experience the **highest trade** volumes over the years 2018-2022.

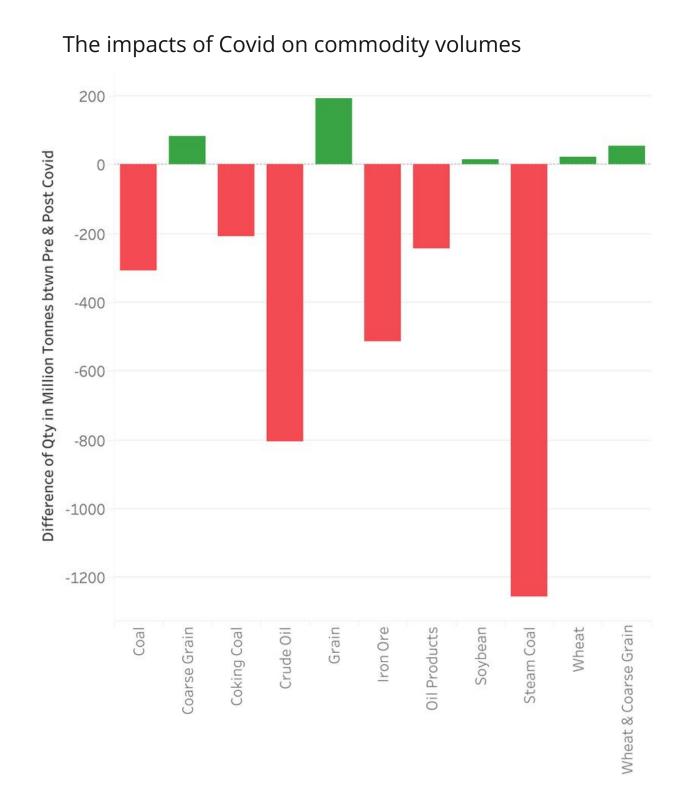
Grains, **Wheat**, and **Soybeans** (food products) were the only commodities that **performed better post covid**.

Grains, soybeans and wheat were the commodities that improved in post covid period. Oil and coal trade reduced significantly after covid. This might be an impact of the war as well.

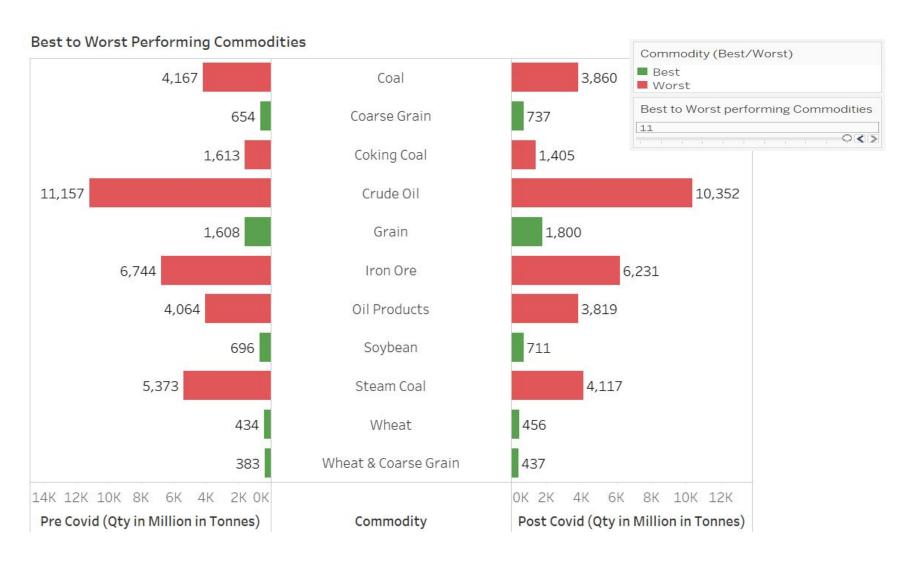


Commodity Performance

Before and After Covid-19



Best to Worst Performing Commodities

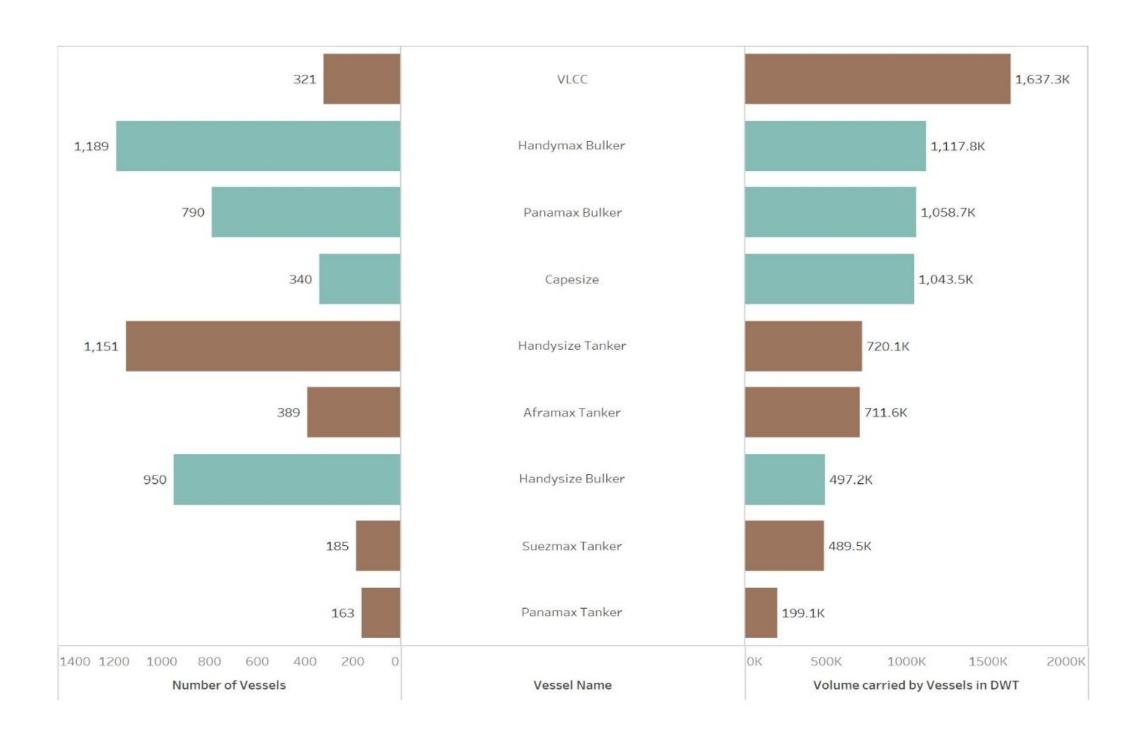


Apart from **agricultural products**, it is clear that the commodities suffered decreases because of the effects of covid-19.

Vessel Utilization

Comparing the number of vessels and volume carried by each vessel type over the years 2018-2022

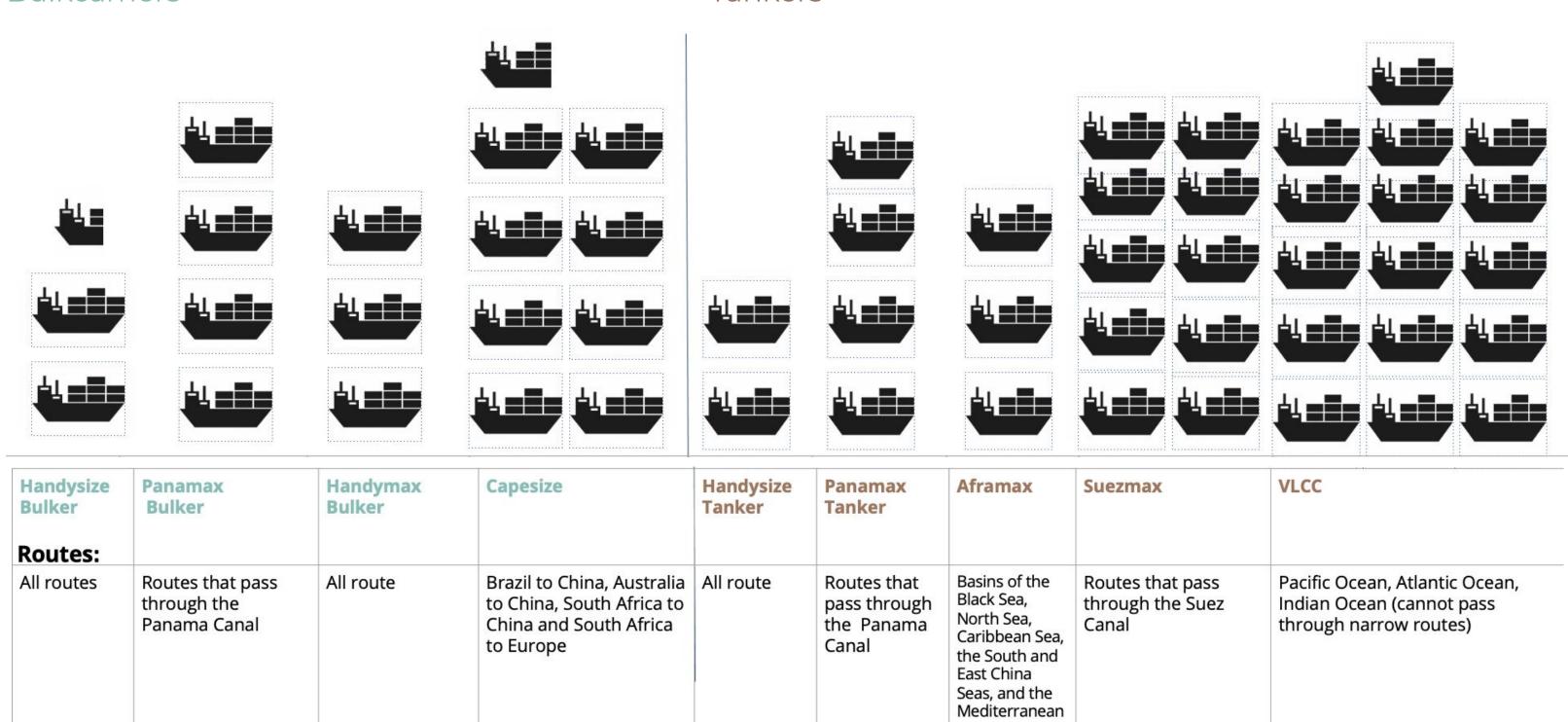
- Handymax Bulker and Handysize Tankers
 were the most active as their carrying
 capacity was appropriate to facilitate the
 decreased output.
- But when comparing the DWT Volume with the vessel type, VLCC, Handymax,
 Panamax, and Capesize were the vessels that were most utilized.
- The high volumes of VLCC and Bulkers
 (Handymax, Panamax, and Capesize)
 were driven by Crude Oil, Iron ore, and Coal trades.



Vessel Sizes & Routes

Comparing the carrying capacity of each vessel type and the routes they cover

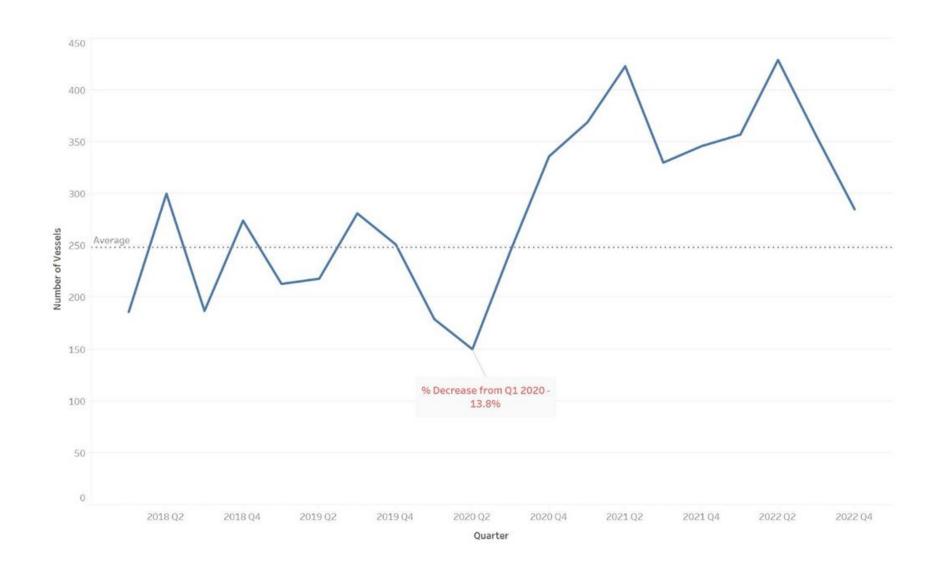
Bulkcarriers Tankers



Market Reactions

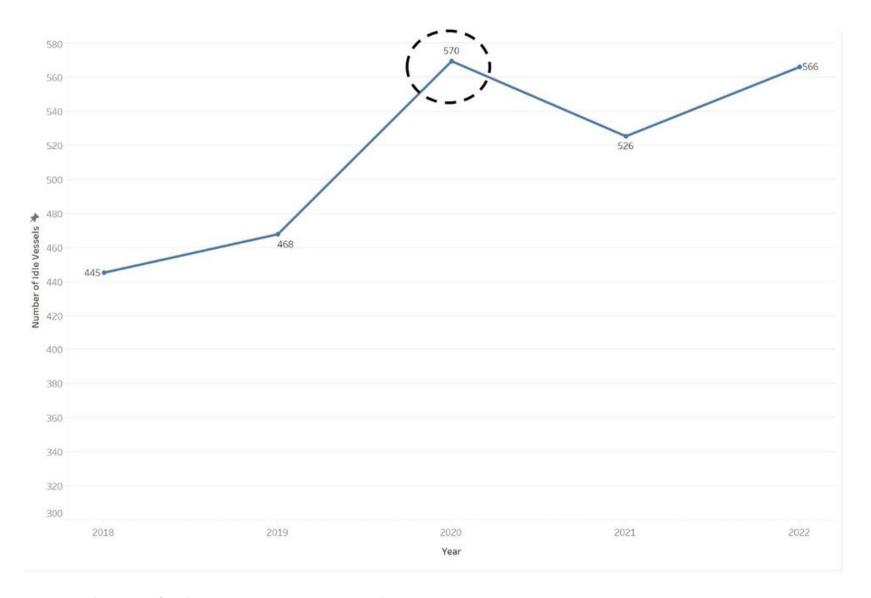
Analyzing market reactions due to Covid 19 and how it has affected post-Q2 2020

In Q2 2020, the S&P activity was reduced by 13.8% from Q1



S&P Activities of new vessels across the years 2018-2022

2020 recorded the highest number of idle vessels ~570 vessels due to port congestion that created delays along with the effects of Covid-19



Number of Idle Vessels over the years 2018-2022

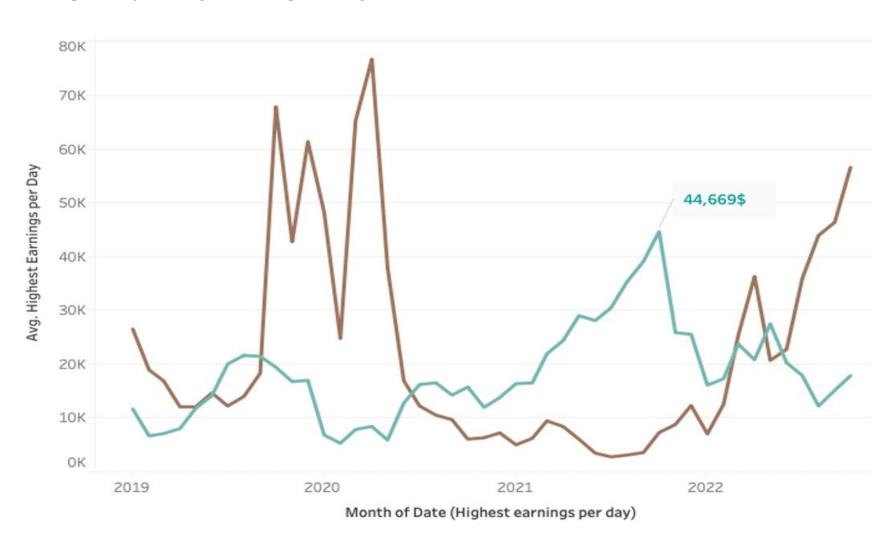
Comparison of Average daily earnings

Analyzing daily earnings of different vessel types (dry & wet) based on monthly averages over the years 2019-2022

The average daily earnings of **Bulk carriers** had remained fairly the same, except for **Q3 of 2021**, which skyrocketed to \$44,669.

Tankers experienced high volatility in 2020 and 2021 due to the impacts of the pandemic on global oil demand and the deep oil output cuts; however, **they** showed improvements in 2022.

Highest per day earnings every month since 2018-2022



Bulkcarriers had firm market conditions post-covid although it seems that earnings are now normalized to pre-covid levels. **Tankers** have experienced an extended period of low rates since mid-2020 with conditions remaining weak into early 2022; however, after that point, the conditions were and still are in favor of tanker shipowners. The outlook for 2023-2024 also remains promising for **tankers**.

Ranking of Average Daily Earnings of Tankers



The ranking of earnings for VLCCs dropped from 1 to 5, while the rank of **Aframax** and **Handysize Tanker** improved after the pandemic.

The average daily earnings of an **Aframax** (\$45,480)and a **Handysize** (\$40,353) are higher than those in the **VLCCs** (\$13,854) even though VLCC is the largest vessel.

(The size of an Aframax and a Handysize is less than % of the size of VLCC)

Average Daily Earnings of different vessels over the years 2019 - 2022



Sales Activity & Orderbook

Handysize and Aframax were the most sold tankers across the years but they witnessed a sales growth of **~6%** in 2021 and 2022.

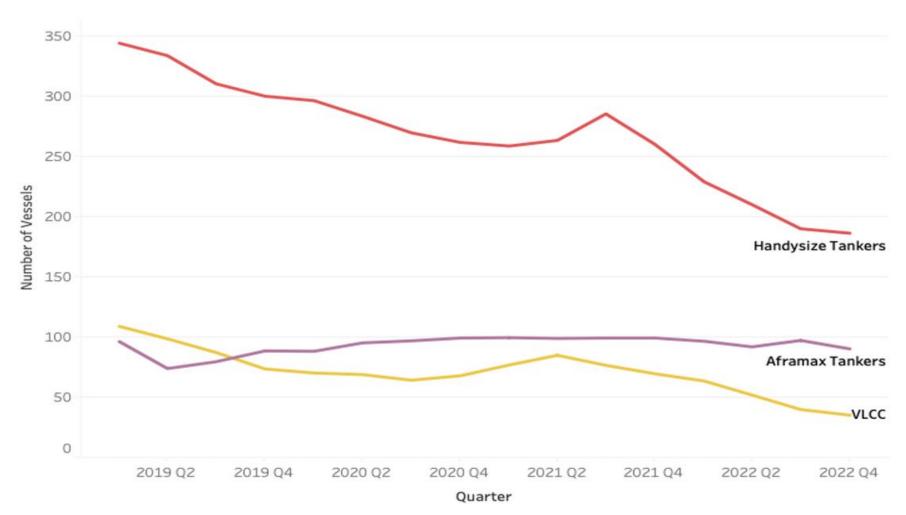
Orders placed for each vessel have declined in 2022.

Shipowners seem to be more interested in buying secondhand vessels instead of placing new orders.

Number of sales for every tanker vessel across the years 2018 -2022

	2018	2019	2020	2021	2022
Aframax Tankers	64	51	48	106	120
Handysize Tankers	190	230	158	232	341
Panamax Tankers	19	24	20	33	67
Suezmax Tankers	22	30	45	37	51
VLCC Tankers	40	45	69	92	75
Grand Total	335	380	340	500	654

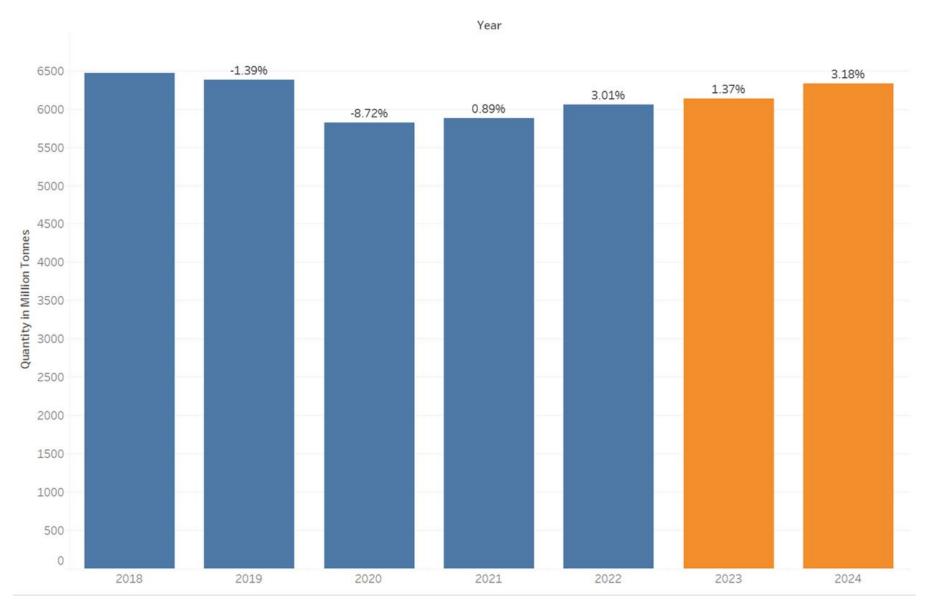
Orderbook trends of tanker over the years 2019-2022



Forecast for Crude Oil and Oil Products for 2023 & 2024

- There is an improvement in demand for Wet trade in 2023 and 2024 by an average of 2% compared to the last 3 years (2020-22).
- Based on recent earnings, we can find that Aframax and Handysize tankers have the highest earnings despite being mid-sized vessels.
- Also, the orderbook of wet vessels, at the end of 2022, experienced a decline compared to the last few years with demand for oil raising in the next two years, the vessel supply will be tight; therefore, spot freight rates will rise.
- Trade flows are expected to continue to shift towards longer routes, owing to the rerouting of Russian cargoes and strong export growth from typically longer-haul suppliers such as the US and Brazil.

From 2022 to 2023, the demand for Crude Oil and Oil Product is estimated to increase by 1.37%, and in 2024, it is estimated to increase by 3.18%



Total Demand for Crude Oil and Oil Products across the years 2018-2022

Next Investment

Aframax and/or Handysize

Current Spot Freight Rates

Aframax \$142,987/day

Handysize \$37,379/day

