

# Global Shipment

## How large container shipment companies benefited from Covid-19

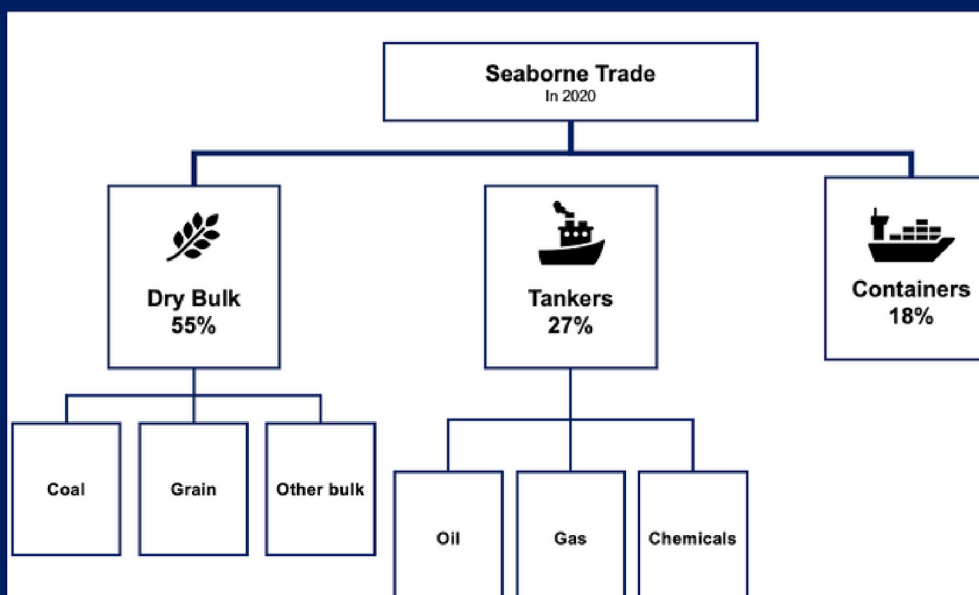
by Group 7



The background and preparation for conducting the project. How did you prepare for the project? What sources or background readings did you consult? What information did you use in developing your ideas from the conceptual stage to the finished project?

(3) Methodology. What did you do, and how did you do it? What statistical techniques did you use – for instance, scatterplots, correlation, confidence intervals, linear/logistic regression?

## Overview of Global Shipment

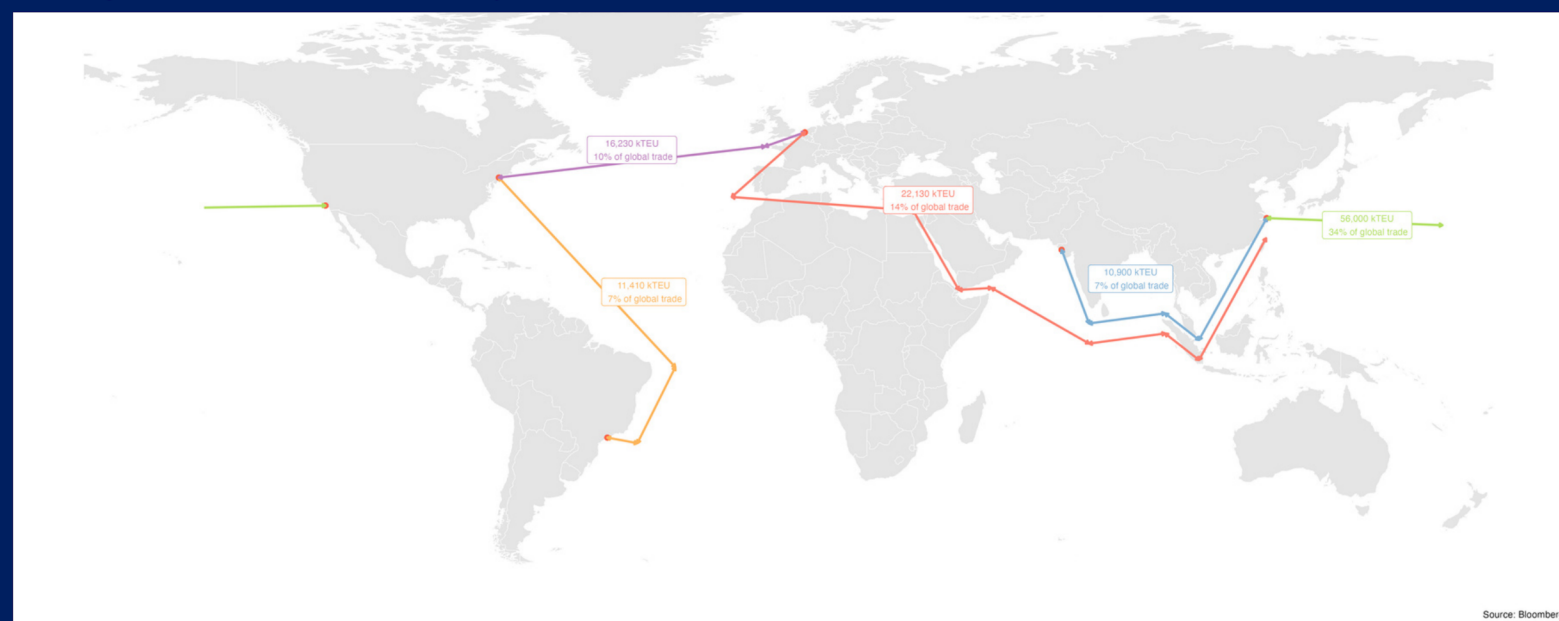


Global shipping can be divided into three broad groups: dry bulk, tanker trade and container shipping. Covid-19 impacted the three groups differently, with the most tangible impact on containers.



# Top 5 major trade routes account for 72% of global container trade

Top 5 global container routes by total TEU\*, 2022



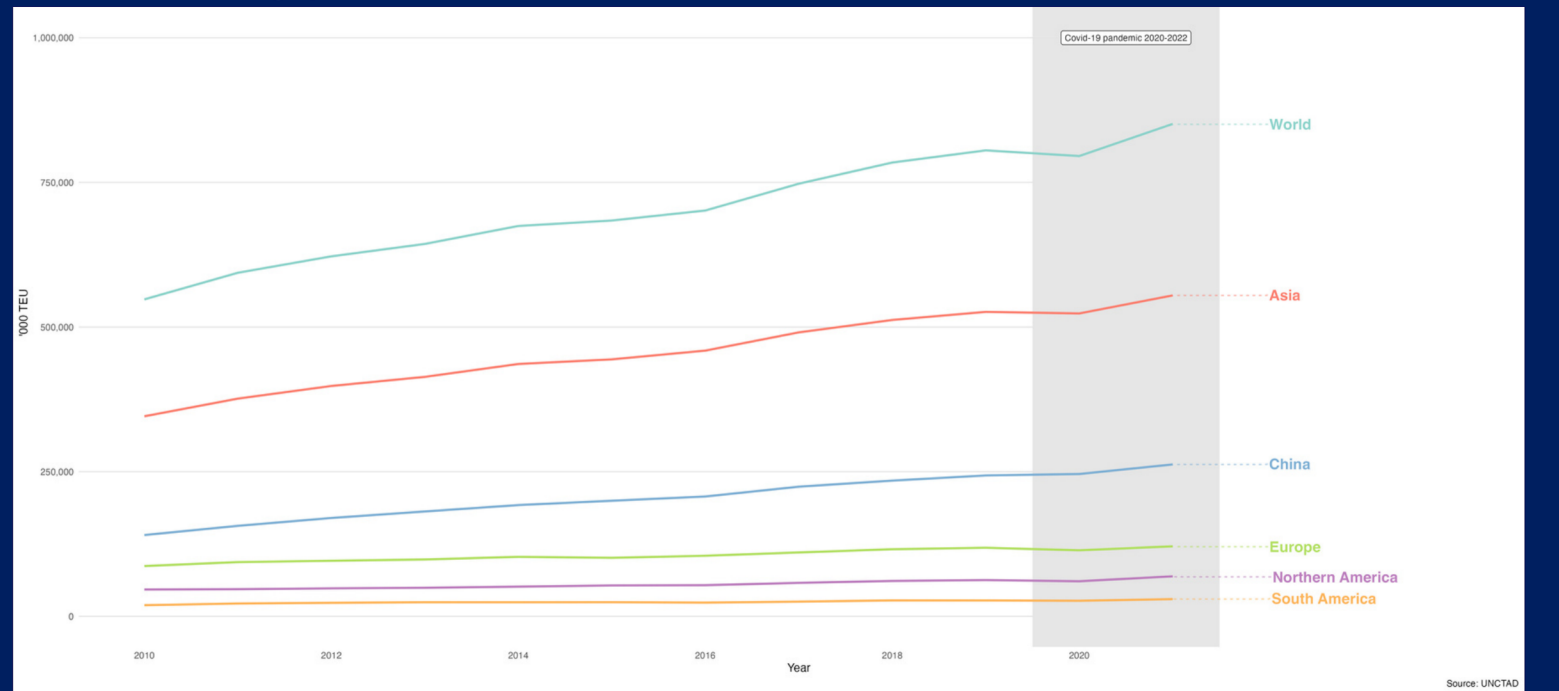
\*Twenty Foot Equivalent

The current globalized world relies on these 5 major trading routes for 72% of the trading goods. Therefore, externalities can significantly impact the global trading balance. Let's have a look of Covid-19 impact on global container shipping.



## Covid-19 had no Material Impact on Yearly Port Throughput...

Total Port Throughput in TEU, 2010-2022

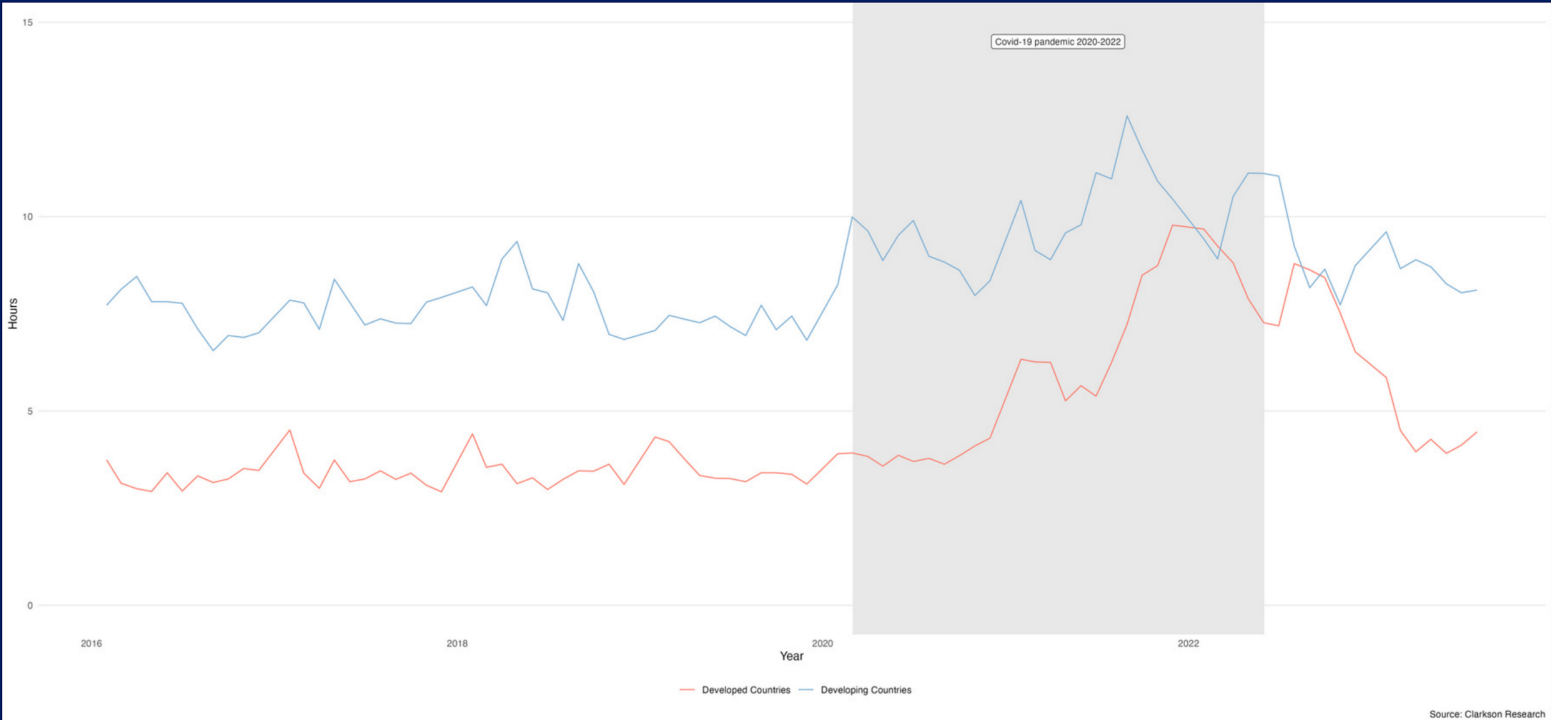


This graph shows how Covid-19 only had a minor impact on the yearly port throughput. It is visible how there was a short-term stagnation in 2020, which, however, was followed by a bounce back in 2021.



...but significantly increased the Average Wait Time in Ports...

Average Wait Time in Ports for Container Vessels, 2016-2023

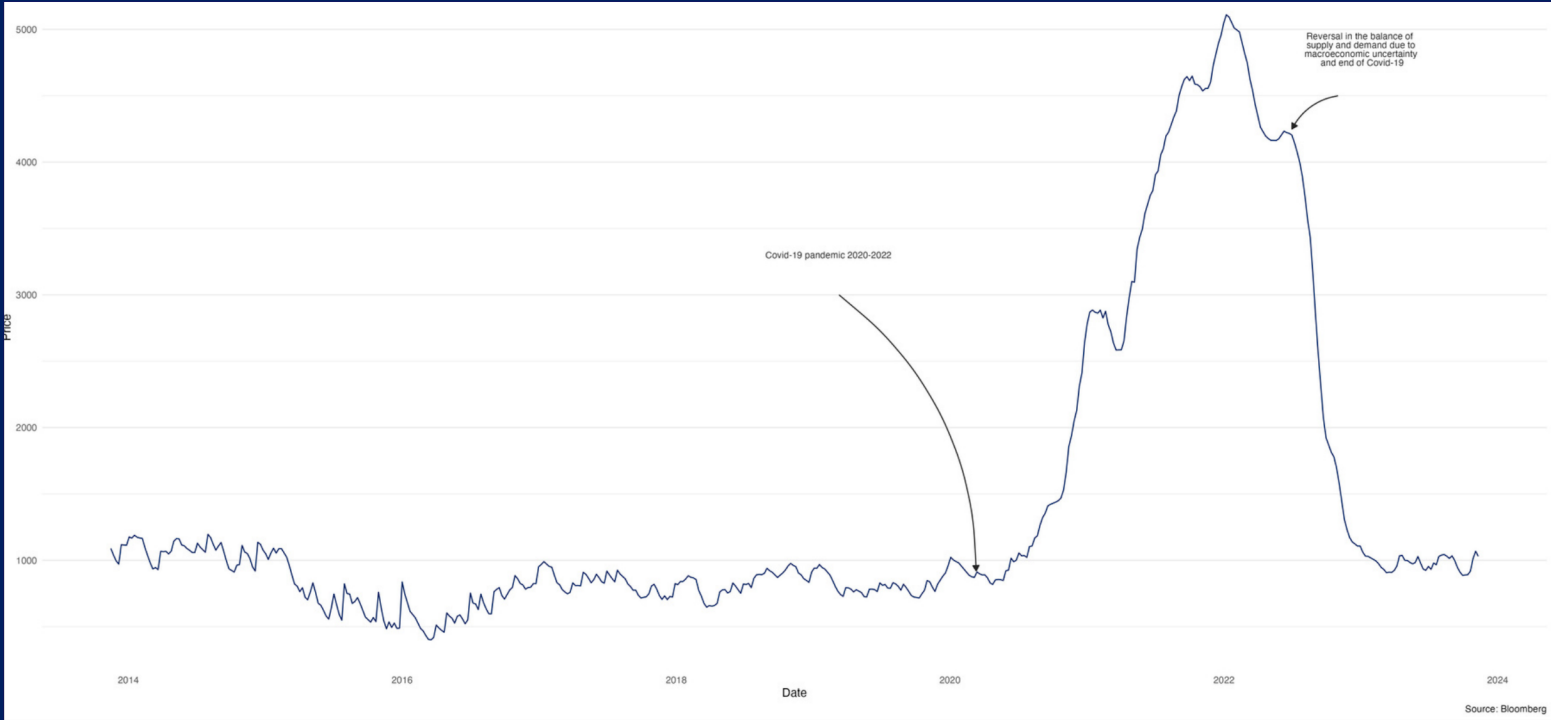


However, Covid-19 lockdowns and safety measures impacted the average wait time in ports, with the wait time in developed countries more than doubling at the peak. Increasing wait time means increasing freight times, which flows through to the cost of shipment.



...leading to a 5x increase in the price of container freight...

Shanghai Containerized Freight Index, 2014-2023

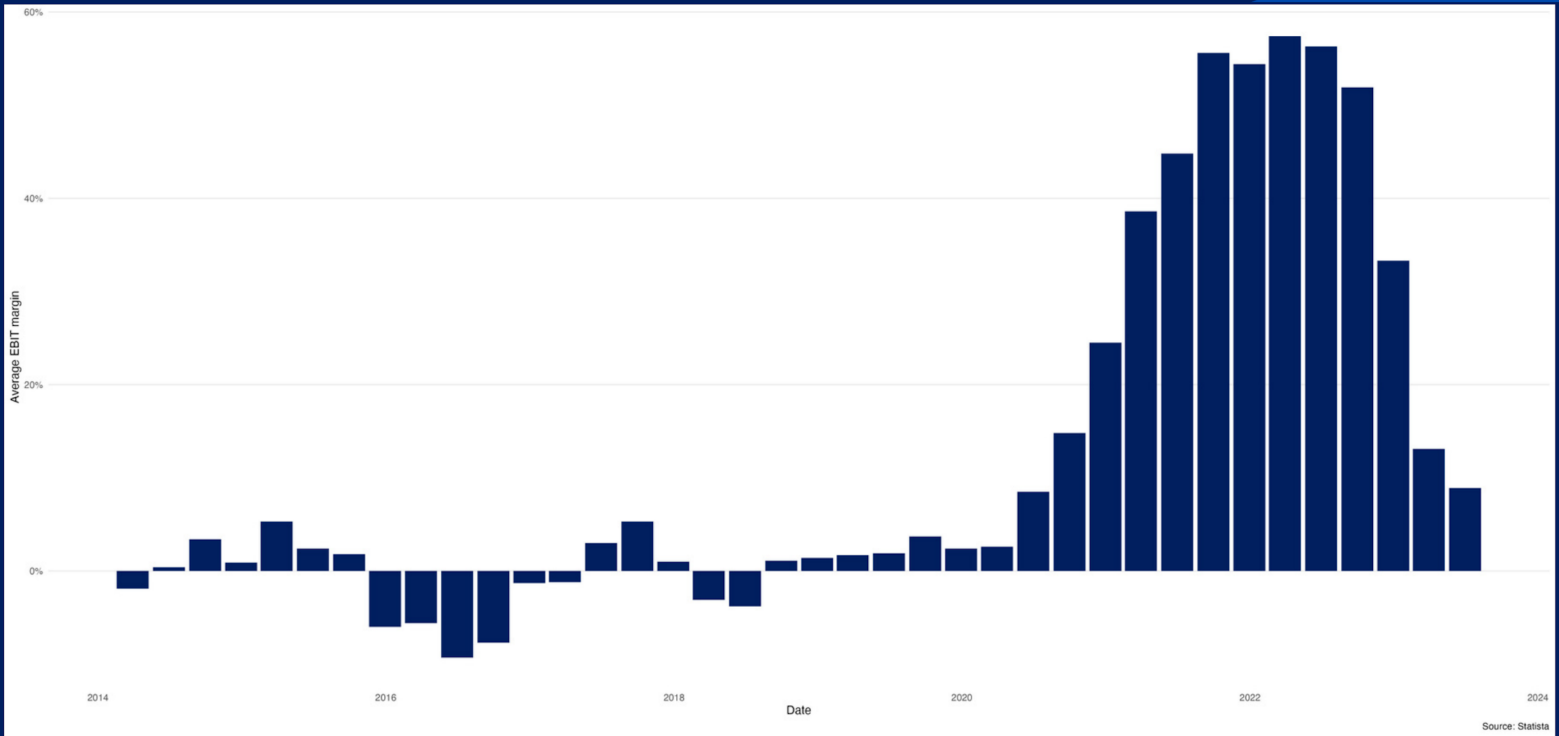


The Shanghai Containerized Freight Index reflects the cost of ocean freight and the associated seaborne surcharges on the spot market. Covid-19 lockdowns, safety measures and other supply chain issues caused the prices of containerized freight to surge 5x from pre-Covid levels.



...significantly favouring the large container shipping companies

Average EBIT margins for top container shipping companies, 2014-2023



It's easy to assume that the price surge was due to cost increases for the global shipping companies, but judging from the graph above, their profit margins experienced a similar pattern, almost rising to 60% during Covid, from <10% pre-Covid. Hence, the shipping companies benefitted tremendously from the impact that Covid-19 had on maritime freight.

Discussion and critique. What did you learn about the process of carrying out your project? What went wrong, and how could you improve it next time? For instance, did any sources of bias creep into your survey or experiment? What advice would you give future students?

--- Lack of container in China also affected the numbers