

GitHub Repository:

- [UC-Berkeley-I-School/Project2_Hart_Lustig_Passan.git](https://github.com/UC-Berkeley-I-School/Project2_Hart_Lustig_Passan.git)

Project Context

Situated between the South China Sea to its east and the Strait of Malacca, the port of Singapore is one of the busiest container ports in the world. When the COVID-19 pandemic started, activity at Singapore's port also took a hit. This project aims to go in depth to investigate relevant trends in the port's shipping activity and any potential relations with changes in employment before and during the pandemic.

Gaining deeper insight on how activity in the port evolved prior to and during the COVID-19 pandemic, and its effects on employment in the relevant sectors can shed light on how Singapore was able to handle the changes brought about by the pandemic and could provide some lessons learned that could be useful knowledge for other countries managing large ports.

Primary Dataset:

- Dataset 1: [Vessel Calls, Monthly](#) (*Vessel calls* refer to vessels stopping at Singapore's port as an intermediary destination)
- Dataset 2: [Vessel Arrivals, Monthly](#) (*Vessel arrivals* refer to vessels arriving at Singapore's port as their final destination)
- We have two primary datasets, as they are very closely related, but differences between them may reveal interesting trends in shipping activity during the pandemic.
- Source: Maritime and Port Authority of Singapore.

Initial Plots, Figures, or Tables:

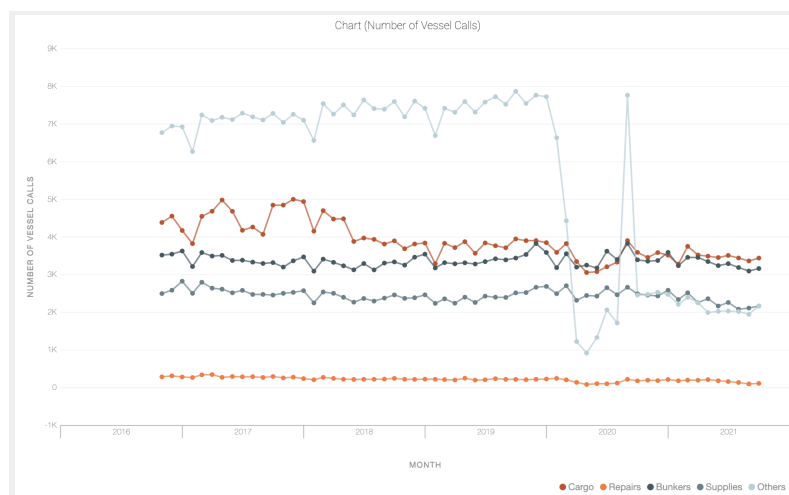


Figure 1: Vessel Calls, Monthly

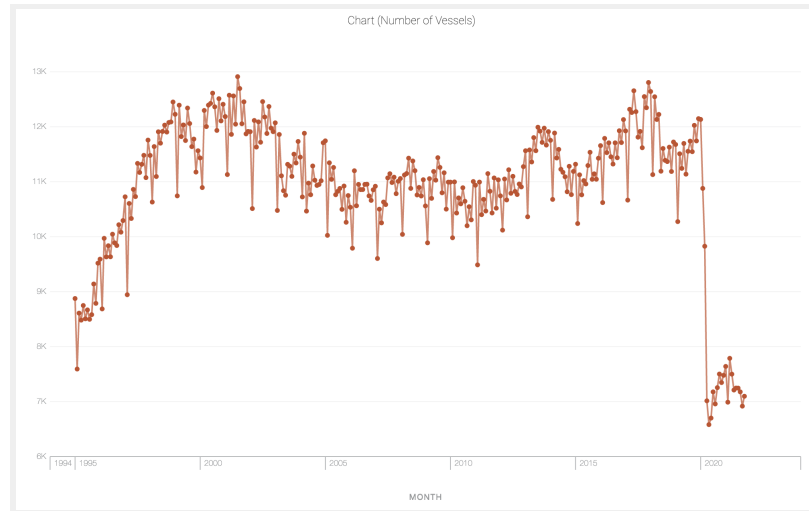


Figure 2: Vessel Arrivals, Monthly

Variables & Insights:

- The data include: month, vessel type (for vessel arrivals), purpose type (for vessel calls) number of vessels, and gross tonnage
- We are hoping to derive insights on port activity pre-COVID and during COVID, to see if there were any noticeable changes.

Supplemental Datasets:

- [Short Work-Week & Temporary Layoffs By Industry And Occupational Group, Quarterly](#)
 - Short Work-Week are employees whose normal number of working days per week has been temporarily reduced due to lack of work, at any time during the reference period.
 - Temporary Lay-Offs are employees whose services are suspended temporarily due to lack of work, at any time during the reference period. They may or may not have been paid during this period.
- [Job Vacancy Rate, by Industry, Quarterly](#)
 - *Job Vacancy Rate* is defined as the total number of job vacancies divided by the total demand for labour at the end of the quarter. The total demand for labour is defined as the sum of the number of employees and job vacancies at the end of the quarter.
- Source: Manpower Research and Statistics Department
- The above two datasets will be joined on the date columns with the vessel activity datasets.
- Where quarterly supplemental data are analyzed along with monthly vessel activity data, the monthly data will be summed to produce quarterly totals for comparison

Final Report:

- We plan on organizing our reports into the following sections: Summary, Background & Contextual Information, Data Analysis, Conclusion, References