Oceanic Transport

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Overview

- History
- Advancements in Industry
- Major Companies
- Factors Affecting Oceanic Transport
- Economics of the Industry
- Current Events
- How is the Market doing now?
- Futures Market
- Questions?

History

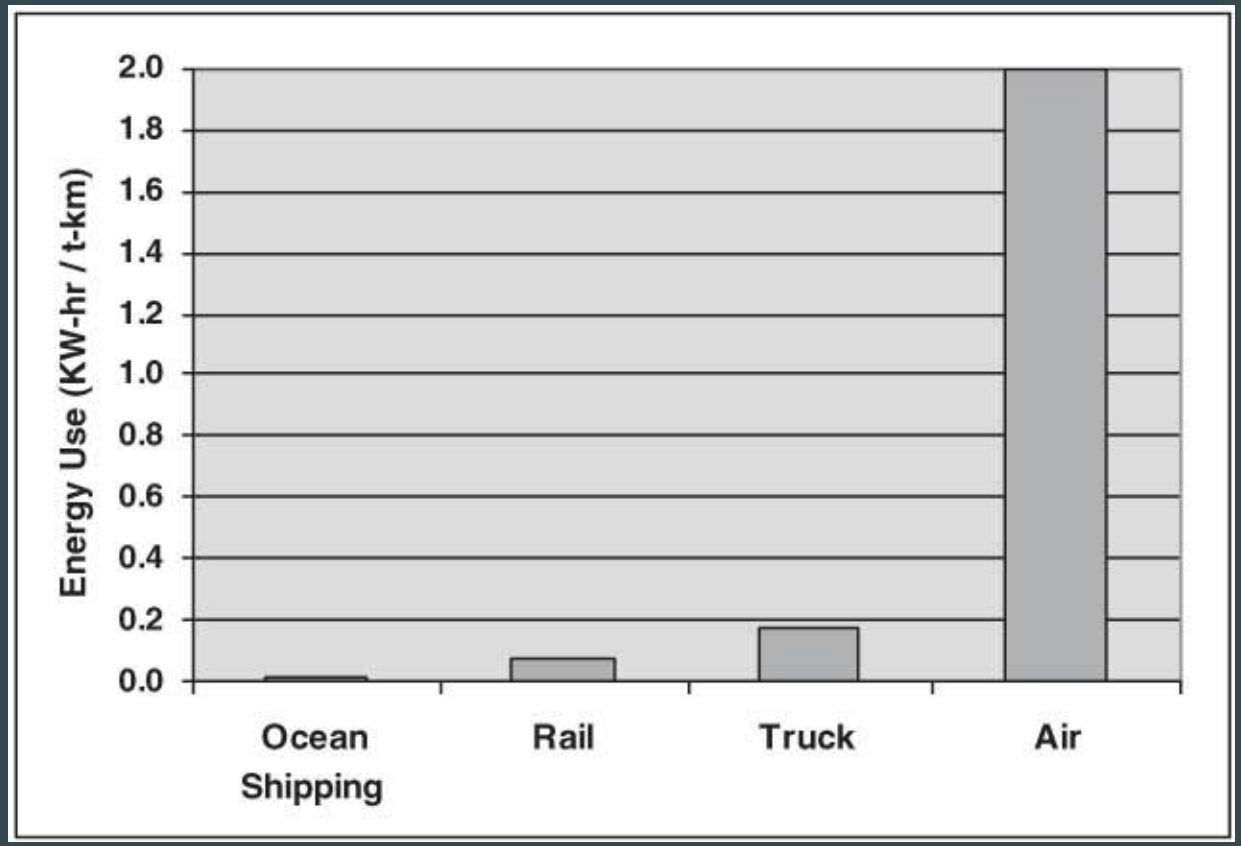
- Oceanic Transport dates as far back as 45,000 B.C. ; when humans first arrived in Australia presumably by boat.
- Technology eventually evolved into more advanced sailboats, that were able to travel across Oceans.
- The history of Oceanic travel involves a great deal of exploration and settling of new lands.
- In 1783, Claude de Jouffroy built the first recorded steamboat.
- 1845, the SS Great Britain becomes the first iron steamer to cross the Atlantic.
- 1912, Titanic sinks, leading to innovations and improvements in oceanic travel.
- 1914, the Panama Canal opens leading to increased trade between the Atlantic and Pacific Oceans.

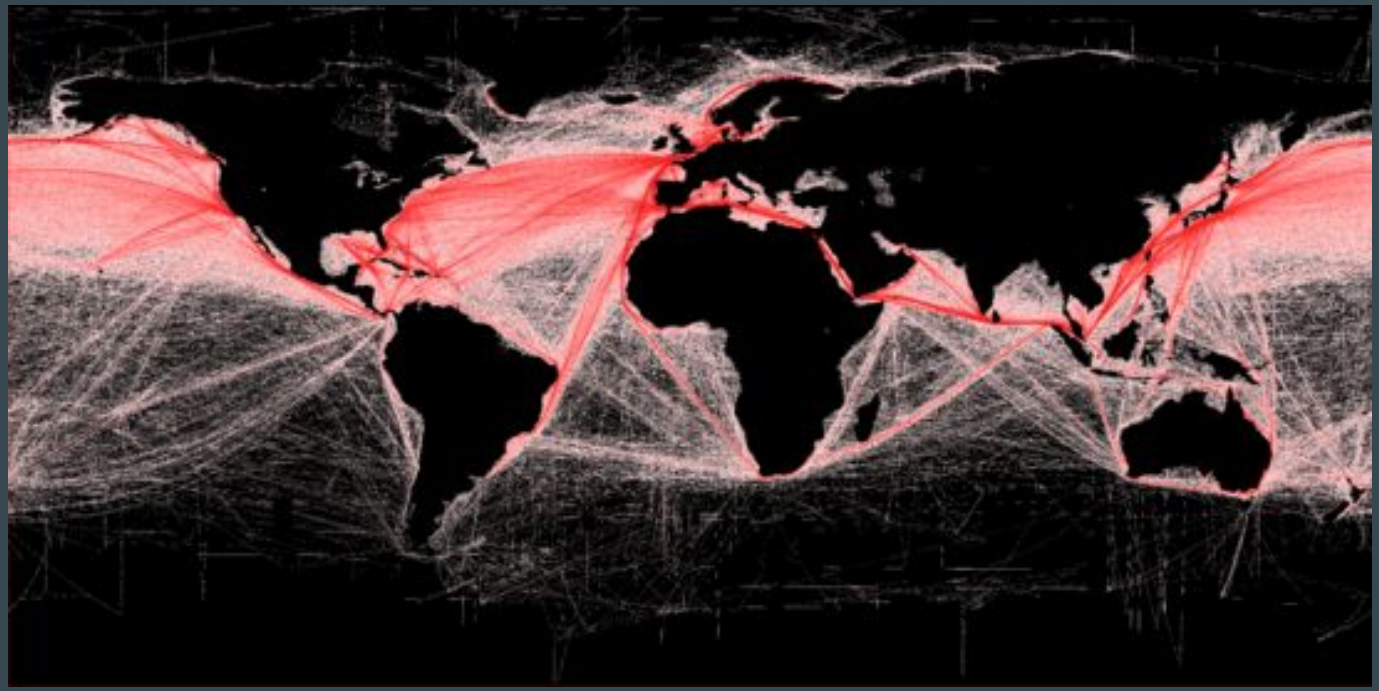
Advancements in the Industry

- More than 90% of world trade is moved by the maritime commercial shipping industry.
- The cost to transports goods Internationally via oceanic transport has greatly decreased, for example, in the United States oceanic transportation adds just 2 cents to the price of a gallon of gasoline, $10 to the cost of a television, and a few hundred dollars to the cost of a car.
- New concepts, such as container ships, LNG carriers (oil tankers), open-hatch forest-product ships, and car carriers have revolutionized the way products are moved
- Container Ships are the largest vessel for maritime transport and there are more than 4,000 Container Ships in use today.

Source: "Technological Advances in Maritime Transportation." NAE Website, 1 June 2008, www.nae.edu/7712/TechnologicalAdvancesinMaritimeTransportation.

Comparative Efficiencies of Transportation Modes





This map of shipping routes illustrates the relative density of commercial shipping in the world's oceans.

Major Companies

Company	Headquarters	Ships	Total TEU	Average TEU	Market share
Maersk Line	Denmark	700	3,879,439	5,542	15.3%
Mediterranean Shipping Company	Switzerland Italy	473	3,118,108	6,592	12.3%
CMA-CGM	France	476	2,554,264	5,366	10.1%
China Ocean Shipping (Group) Company	China	330	1,972,491	5,977	7.8%
Hapag-Lloyd	Germany	217	1,550,874	7,147	6.1%
Ocean Network Express	Japan	228	1,536,312	6,738	6.1%
Evergreen	Taiwan	200	1,110,708	5,554	4.4%
Orient Overseas Container Line	Hong Kong	99	689,986	6,970	2.7%
Yang Ming	Taiwan	100	609,749	6,097	2.4%
Pacific International Lines	Singapore	132	413,334	3,131	1.6%

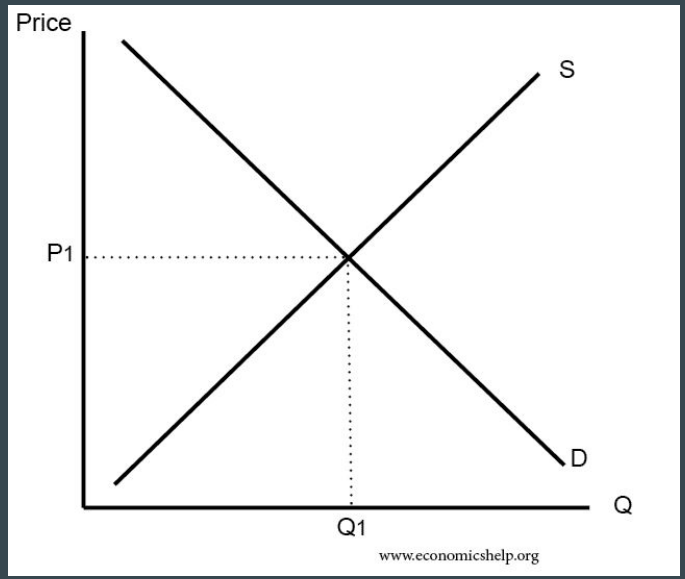
Factors Affecting Oceanic Transport

- Intended Destination
- Service Charges
- Season
- Currency
- Fines and Fees
- Bunker Capacity
- Container Capacity

Economics of The Industry

Findings

- Ocean freight rates' fluctuation is driven by a supply/demand relationship like any other price determination in the international trade system.



Current Events

- Issues US exporters are facing in ocean shipments:
  - 1. Container/Equipment Shortages
  - 2. Space Availability Issues
  - 3. Ocean Freight Rate Increases
  - 4. Bunker Price Decreases

How is the Market doing Now?

- Coronavirus has had large impacts
  - Annual port volume in China has fallen for just the second time since 1970
  - US Ports are facing lots of congestion
  - Impacts from the virus are threatening to halt ag exports from the US to Asia
  - Sailings are being blanked- more than 100 cancelled so far (as of March 20)
  - US imports from China hit a 4 year low in February
  - In the US, non-essential goods are piling up at terminals, disrupting the supply chain
  - The full effect of the Coronavirus on the shipping industry remains to be seen

Future of Oceanic Transport

- The shipping industry will continue to work to become more sustainable and environmentally friendly
- 15 of the world largest cargo ships produce the same amount of sulfur emissions than all the cars in the world
- Shipping costs will increase (IMO Low-Sulfur Act)
- Autonomous ships

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Questions?