



UNIVERSITY OF
MARYLAND

ROBERT H. SMITH
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International Seminar on “Issues and Perspectives in Global Aviation Industry”

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Key Issues Raised by Prof. Oum - 1

- Global economic events, including the Ukraine War and US-China tensions, are reshaping the international trade regime.
- Research is required on how the transport and SC networks need to adjust to the new world order.



Key Issues Raised by Prof. Oum - 2

- The Covid-19 pandemic resulted in unprecedented government intervention in the aviation industry.
- Research is needed on the impacts of the various intervention instruments.
 - What works?
 - What are the implications of the interventions?



Key Issues Raised by Prof. Oum - 3

- What are the long-term implications of Covid-19 on the aviation network?
- How should the aviation industry adjust to climate change and climate policies?
- How can the current Chicago-era bilateral regulatory structure be updated?
- Who should take the lead on the implementation of new aviation technologies?

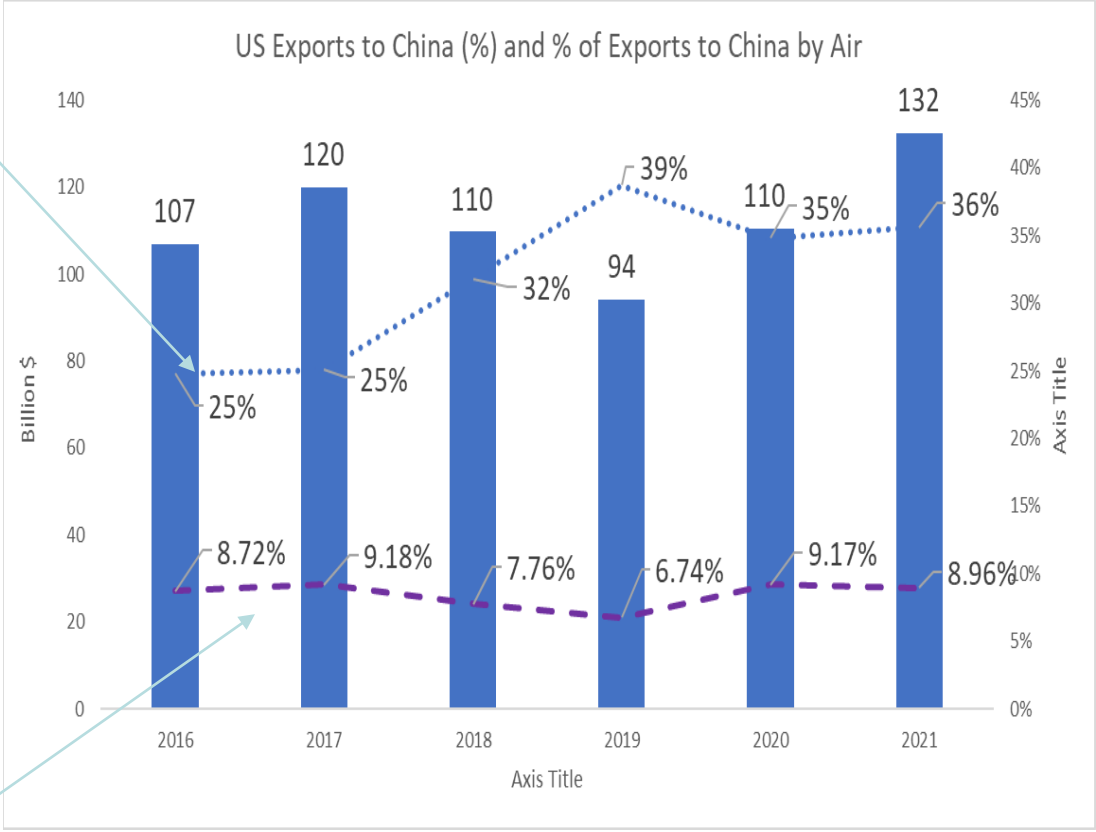
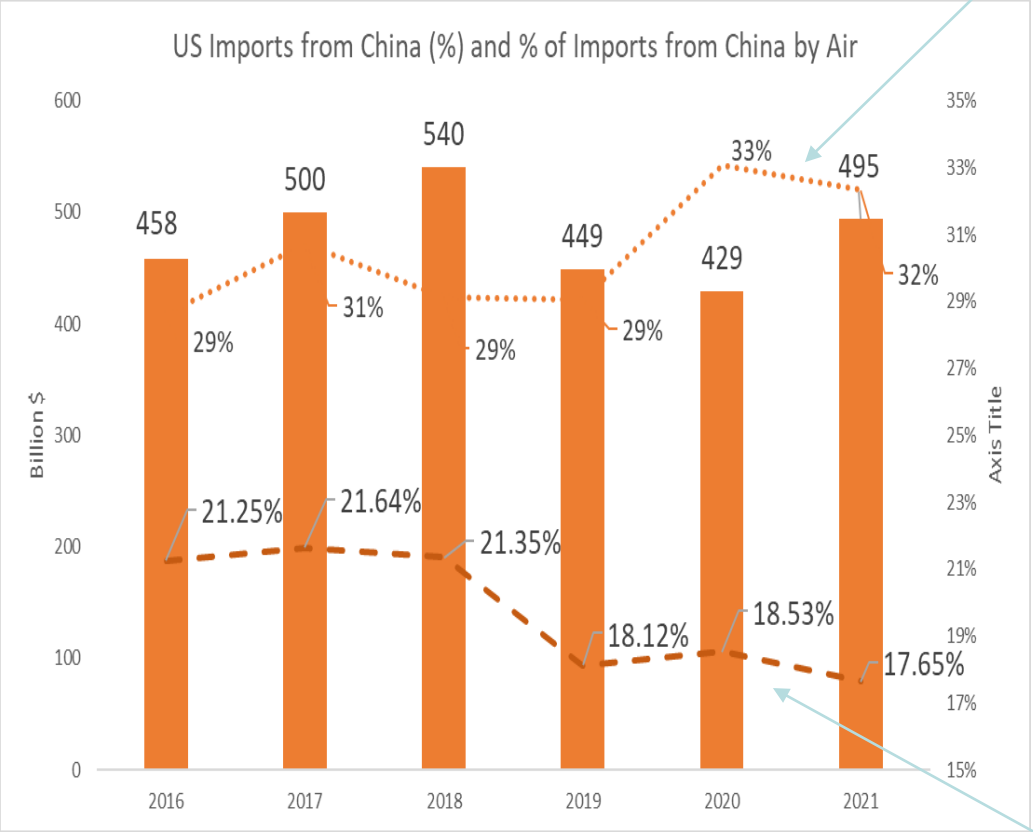


Answers to Questions May Be Surprising

- What are the implications of China-US trade tensions and higher tariff rates on international trade movements?
- Current research with Professors Li Zou and Chunyan Yu at Embry-Riddle Aeronautical University

The US-China Trade Volume During Trade War

Percent of Import and Export Value by Air Transport



US Imports

Trade with China as a Percent of US World Trade

US Exports



Impact of US-China Trade War

- Air transport cargo trade between the US and China increased at the expense of sea trade.
- The trade war could lead to a long-term shift in US-China trade to air transport (likely due to trade in higher-value products).



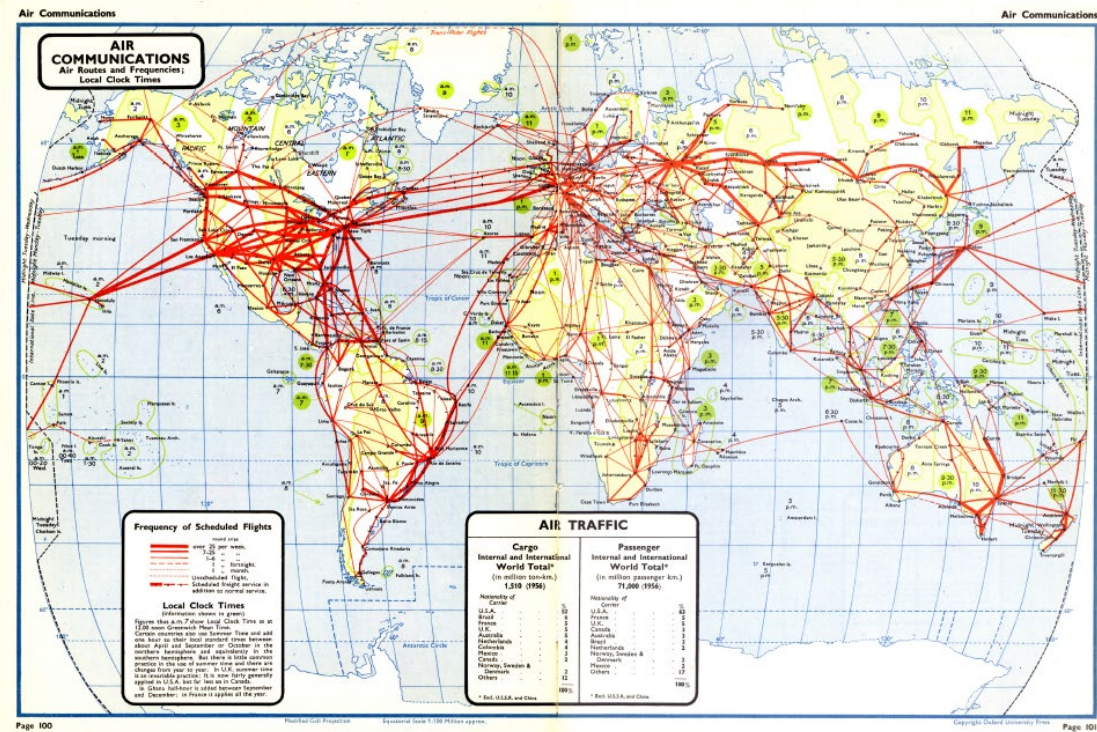
Role for Japanese Researchers

- Given its location in Asia (close to China and Russia), its advanced technology and its prominent position in the international trade system, Japanese researchers may be in a unique position to address many of the issues raised by Prof. Oum in his presentation.
- Three examples ...



Role for Japanese Researchers - 1

How does the closure of Russian airspace impact international air networks, including the role of Tokyo's airports as passenger and cargo hubs?





Role for Japanese Researchers - 2

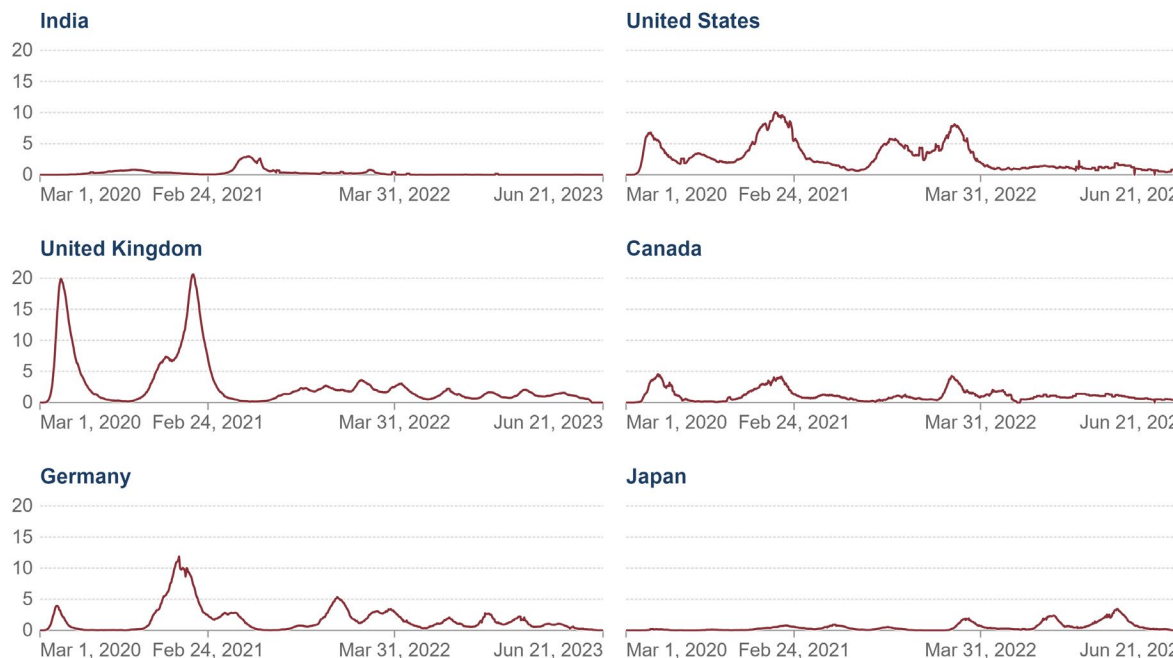
Why was Japan relatively successful at containing covid-19?

What was the impact of Japanese air travel restrictions on this result?

Daily new confirmed COVID-19 deaths per million people



7-day rolling average. Due to varying protocols and challenges in the attribution of the cause of death, the number of confirmed deaths may not accurately represent the true number of deaths caused by COVID-19.



Source: WHO COVID-19 Dashboard

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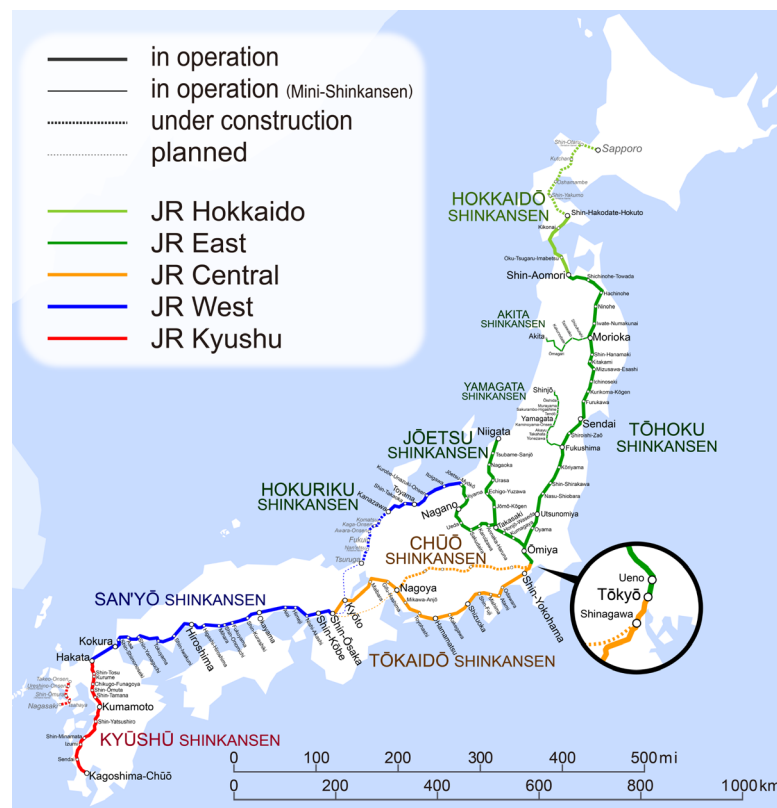
Source: <https://ourworldindata.org/covid-deaths>



Role for Japanese Researchers - 3

How has high speed rail impacted the aviation industry and travel patterns?

What is the contribution of HSR to the reduction in greenhouse gas emissions?



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Thank you very much!

ありがとうございます