

Faculti Summary

<https://faculti.net/supply-shocks-and-emissions-when-firms-can-adapt/>

This video discusses a study on how airlines respond to supply shocks, particularly focusing on the grounding of Boeing 737 MAX planes following two fatal crashes in 2018 and 2019. This video incident represented a significant negative shock to airlines' capital since planes are their most crucial asset. The study examines how the grounding affected airline operations and emissions, utilizing comprehensive data from the U.S. airline industry.

Key findings include:

1. **Adaptation to Supply Shock**: Airlines were able to adapt somewhat to the supply shock by changing schedules and reallocating planes to more valuable routes, indicating that while some adaptation occurred, it was imperfect.
2. **Emissions Impact**: The grounding led to a reduction in flights and overall emissions, aligned with expectations during a negative supply shock. However, specific routes that previously operated the 737 MAX experienced more significant reductions in both flights and emissions.
3. **Mechanisms of Adaptation**: The airlines struggled to expand their fleets quickly due to long production times for new planes and strict regulations affecting the leasing of older planes. Consequently, existing planes were used more intensively, but there were instances where total emissions increased locally due to the types of planes allocated to different routes.
4. **Social and Environmental Implications**: The study emphasizes the importance of understanding adaptation mechanisms across different contexts and assesses the uneven environmental impacts of airline operations on local emissions.

In summary, the research highlights the complexities of corporate responses to supply shocks in the airline industry, revealing challenges in adaptation and the resulting implications for emissions and environmental justice. Future research could explore different industries and contexts to further understand these dynamics.