

Restricting ride-hailing apps makes transportation systems less efficient, finds research

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New University of Florida research shows that policies restricting the use of ride-hailing apps like Uber or Lyft can hurt the transportation

ecosystem of a city.

In 2015, the city of Shanghai saw an issue with their taxi fleet using ride-hailing apps to find customers. Riders trying to hail a cab on the street weren't getting picked up as much.

In response, the city blacked out the ride-hailing apps during morning and evening rush hour for 12% of the taxi fleet every workday.

Kyung Sun (Melissa) Rhee, a professor in the UF Warrington College of Business, worked with Jinyang Zheng, Youwei Wang and Yong Tan to analyze how this regulation affected drivers and customers and the city's overall transportation network.

"The intention was to protect customers, but in the end we saw a decrease in taxi ridership and an increase in traffic jams. And the worst outcome for drivers is that their profits actually fell," Rhee said.

The numbers

- Restricting information sharing via these apps during rush hour dropped taxi rides by 4.7%.
- Driver profits went down by 2.8%.
- Public transportation absorbed more riders during this period, increasing ridership from 0.4% to 0.9% depending on the mode of transit.
- Some taxi rides shifted to happening before or after the restricted period.
- Congestion went up.

The takeaway

While Shanghai's highly regulated taxi industry works differently than how Uber and Lyft operate in the U.S., the new research shows how valuable the information provided by ride-hailing apps can be. The information exchanged between customers and drivers can increase the efficiency of the transportation system.

The same likely applies to other two-sided platform that connect customers to suppliers, like Grubhub for food or Freelancer.com for workers.

"When policymakers are regulating an industry, they have to think beyond the specific activities they are regulating. They have to think about spillover effects on other areas," Rhee said.

The paper is published in the journal *Information Systems Research*.

More information: Kyung Sun (Melissa) Rhee et al, Value of Information Sharing via Ride-Hailing Apps: An Empirical Analysis, *Information Systems Research* (2022). [DOI: 10.1287/isre.2022.1181](https://doi.org/10.1287/isre.2022.1181)

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