The Hong Kong University of Science and Technology

Department of Information Systems, Business Statistics and Operations Management

Seminar Announcement



Zoom Details

Wage Elasticity of Labor Supply in Real-Time Ridesharing Markets: An Empirical Analysis

by

Prof. Liangfei QIU
PricewaterhouseCoopers Associate Professor
University of Florida

Date : Wednesday, 12 May 2021

Time : 9:00 am - 10:30 am (Hong Kong Time)

Click here to join Zoom

Meeting ID: 926 0939 1562 (Passcode: 099847)



Abstract: The prominence of real-time ridesharing services, such as Uber and Lyft, has dramatically changed the landscape of traditional industries. In this study, we provide a comprehensive analysis on the wage elasticity of labor supply in real-time ridesharing markets using data from a major ridesharing platform in China. By exploiting an exogenous shock from uneven driving restrictions as an instrumental variable, we find a negative labor supply elasticity for ridesharing drivers, suggesting that drivers tend to drive less during days with a higher average hourly wage. Specifically, a one percent increase in hourly wage will lead to a 0.374 percent decrease in daily working hours. This surprising finding is consistent with the behavioral income-targeting model based on the theory of reference-dependent preferences: Drivers have heuristic daily targets for total earnings and are more motivated to supply labor when they are below their income target than above it. Therefore, they work less on days when earnings per hour are high and quit the market once their income target is reached. In addition, we find that taxi drivers are more rational and have positive labor supply elasticity, which implies that drivers are more rational when they have repeated opportunities of learning. Estimating labor supply elasticity is critical to understand the economic efficiency of various surge pricing algorithms and driver subsidization programs for ridesharing platforms and policymakers. Our research suggests that a uniform price surging or driver subsidization to all ridesharing drivers may not incentivize labor supply of drivers effectively. A more efficient approach is to implement personalized price surging algorithms and driver subsidization programs targeting more experienced and patterned drivers.

Bio: Liangfei Qiu is the PricewaterhouseCoopers Associate Professor in the, Warrington College of Business, University of Florida. He received his Ph.D. in 2014 from the University of Texas at Austin. His current research focuses on prediction markets, social networks and social media platforms, telecommunications networks, and economics of information systems. His research has appeared in premier academic journals, such as Information Systems Research, MIS Quarterly, Production and Operations Management, Journal of Management Information Systems, and Decision Support Systems. He received the INFORMS Information Systems Society Sandy Slaughter Early Career Award and AIS Early Career Award in 2019. He serves on the editorial board of MIS Quarterly as an Associate Editor, Production and Operations Management as a Senior Editor, and Decision Support Systems as an Associate Editor.