

# “CROWN SHYNESS” IN INTERCITY AIRPORT SHUTTLE SERVICES: A SPATIAL ECONOMETRIC ANALYSIS OF THE YANGTZE RIVER DELTA AIRPORT CLUSTER

## Speaker

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### Abstract

This study investigates the phenomenon of “crown shyness” within the context of intercity airport shuttle bus services in the Yangtze River Delta (YRD) airport cluster, a key economic and transportation hub in China. Drawing parallels from forest ecology, where trees maintain gaps between their crowns, we examine whether airports exhibit similar spatial avoidance by not launching overlapping shuttle routes in areas where their catchments intersect. This study employs spatial zero-inflated negative binomial mixed models to analyze the daily frequency of shuttle bus routes from airports to county-level cities within the cluster as a function of a range of airport- and county-specific variables. The research seeks to understand the spatial correlations and competitive dynamics that influence the deployment of these landside transportation services. Our findings reveal significant patterns of spatial organization among airports in the YRD, contributing to the discourse on airport competition, cooperation, and landside access optimization. The study not only enhances our understanding of the strategic behaviors of airports in overlapping catchments but also offers practical insights for transportation planning and policy in densely populated regions with multiple airports. Through this analysis, the paper adds a novel dimension to the literature on transportation economics and airport management, highlighting the importance of spatial econometrics in unraveling the complex interplay between transportation infrastructure and regional development.

### Biography

Anming Zhang is a Full Professor in Operations and Logistics and holds Vancouver International Airport Authority Chair Professor in Air Transportation at Sauder School of Business, University of British Columbia (UBC). He served as the Chair of the Operations and Logistics Division, Sauder School of Business (2003-2005), and as the Director of UBC’s Centre for Transport Studies (2003-2004). He has been the Vice President (Academic & Program) for the World Air Transport Research Society (ATRS) since 2006. Dr. Zhang is the recipient of the “Yokohama Special Prize for Outstanding Young Researcher” awarded at the 7th World Conference on Transportation Research (WCTR) in Sydney, Australia in 1995, and of the “WCTR-Society Prize”, awarded to the overall best paper of the 8th WCTR in Antwerp, Belgium, in 1998. In June 2014, he won the “Best Overall Paper Prize” at the ITEA (International Transport Economics Association) Conference on Transportation Economics, Toulouse School of Economics, France. Dr. Zhang has published over 270 refereed journal papers in the areas of transportation, logistics, industrial organization and trade policy. He has co-authored three recent books: *Globalization and Strategic Alliances: The Case of the Airline Industry*, 2000, Pergamon Press, Oxford; *Air Cargo in Mainland China and Hong Kong*, 2004, Ashgate, London (Chinese editions published both in Hong Kong and Mainland China); and *Air Cargo in China (in Chinese)*, Aviation Industry Publishers, 2005, Beijing.



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