

The Hong Kong Polytechnic University
Department of Logistics and Maritime Studies
Research Seminar

A Pricing Versus Slots Game in Airport Networks

by

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Date: 8 May 2019 (Wednesday)
Time: 2:30pm-3:30pm
Venue: M802, Li Ka Shing Tower
The Hong Kong Polytechnic University

(Conducted in English)

Abstract:

This paper considers networks with two or three complementary airports. In each case, two airports independently choose between slot and pricing policies, where slot policies involve grandfather rules. We show that equilibrium policies involve slots when airport profits do not matter and pricing policies when airport profits matter. We further show that the equilibrium slot policies reach the first-best passenger quantities when congestion effects are absent. Otherwise, equilibrium slot policies will lead to excessive and equilibrium pricing policies to too low passenger quantities relative to the first best. Numerical examples indicate that slot policies can be beneficial relative to pricing policies when time valuations are low and vice versa when time valuations are high. The analysis formally distinguishes the sources for the different outcomes under slot and pricing policies by distinguishing between a variable effect and a distribution effect. The variable effect captures that decision variables are quantities in the case of slot policies and prices in the case of pricing policies. The distribution effect captures that airport slot allocation is based on grandfather rules.

Bio:

LANG Hao is currently a PhD student under the supervision of Dr. CZERNY, Achim I.. His research interests are air transport economics and city logistics.

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All are welcome!