

Airport slots, secondary trading, and congestion pricing at an airport with a dominant network airline

FFAC Aviation Research Executive Summary

Autor: Dr. Claudio Noto, Fellow am Center for Aviation Competence, Universität St. Gallen (CFAC-HSG)

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Wenn an einem Grossflughafen mehrere Fluggesellschaften mit unterschiedlichen Geschäftsmodellen verkehren, könnte dies auf die Allokationseffizienz der Luftverkehrskapazitäten einen Einfluss haben. Noto (2020) untersucht theoretisch die ökonomischen Auswirkungen von Airport Slots, Slot-Handel und einer Lenkungsabgabe an einem Hub einer Netzwerkfluggesellschaft mit einem nicht-netzwerkgetriebenen Konkurrenten.

Executive Summary

This study investigates the efficiency of airport capacity allocation at a stylized, partly congested airport with a dominant hub carrier and a local airline that both enjoy market power. While the local airline provides direct travel utility only, the hub carrier provides additional, indirect travel utility from network density benefits. As the density benefits increase along with market concentration, they formally capture the dilemma of hub concentration. In equilibrium, the hub carrier is dominant but its network remains inefficiently small. Thus, the three common allocation instruments yield ambiguous welfare results: Airport slots only restore efficiency when a use obligation enforces slot utilization, secondary slot trading leads to market preemption by the hub carrier while the network undersize persists, and congestion pricing increases the known welfare caveat from market power; removing the network undersize requires a subsidy with a service obligation. In contrast with previous studies, which mostly consider flights as homogenous goods and airlines as symmetric, the results at hand illustrate that vertical product differentiation based on network density benefits may increase the allocation inefficiencies that arise from imperfect competition. This insight may be crucial for airport capacity allocation at a concentrated network hub with a dominant carrier.

Full Text (Link)

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