Role of the Privatization of Airports in the Dynamics of Multi-Airport Systems

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Motivation & Problem

- Growth of demand for air transportation
  - Organic growth in the United States and Western Europe
  - Strong growth in Asia Pacific & Middle East

- Key airport infrastructure constraints in the air transportation system
  - Limited ability to add capacity (i.e. runway capacity) at some primary airports

- Ability to meet demand will rely on the development of multi-airport systems
  - Shift from single airport systems to multi-airport systems
  - Shift from a situation of natural monopoly to an oligopoly

- In parallel, airports have been and are privatized around the world
  - Privatization can bring:
    - Improvements in operating efficiency,
    - Ability to raise investment funds for airport infrastructure development,
    - New revenue streams for local, state and international governments.
  - but also,
    - Conflicting objectives between public good and profit generation

- Objective of the project:
  - Better understand the implications of different forms & combinations of ownership and management of airports in the development of multi-airport systems
Methodology & Agenda

- **Literature Review**
  - Privatization of airports
  - Multi-airport systems

- **Analysis:**
  - Identify owner and operator for each airport within a set of cases of multi-airport systems
  - Isolate cases of multi-airport systems that involve airports with different degree of privatization
  - Conduct detailed analysis of these cases
    - Review the history and understand the process of privatization
    - Identify key issues in the privatization process

- **Synthesis of case studies:**
  - Consolidate findings from the detailed case study analysis

- **Conclusions**
Background on Airport Privatization

- **General trend of privatization;**
  - started in 1987 when Great Britain sold seven airports, London’s three primary airports (London Heathrow Airport, London Gatwick Airport, Stansted Airport) and Prestwick International Airport, Glasgow International Airport, Edinburgh Airport and Aberdeen Airport in Scotland - operated by British Airports Authority (BAA),
  - several other countries followed this privatization trend,
  - as of 2007, at least 39 countries have one or more of their airport privatized.

- **Experience of the privatization of airports showed that it can have several benefits:**
  - Ability to raise investment funds for airport infrastructure development,
  - New revenue streams for local, state and international governments,
  - Improvements in operating efficiency (reducing operating costs).

- **but also several potential downsides:**
  - Conflicting objectives between public good and profit generation
  - Lead to natural monopolies
  - Concentration of wealth
  - Corruption
  - Lack of transparency and accountability
  - Cuts in essential services
Case study analysis of 74 airport systems:
- 62 cases of multi-airport systems, 12 cases of single airport systems in transition
- accounting for 178 airports,
- in 37 different countries.
Forms of Ownership and Management of Airports

A. Government-owned; operated by Department or Agency of national government

B. Government-owned; operated by a municipal or regional Department or Agency

C. Government-owned; operated and managed by a private corporation

D. Operated by an independent Airport Authority, which is fully owned by municipal and/or regional and/or national government

E. Operated by an independent Airport Authority, which is fully owned by municipal and/or regional and/or national government but with minority private shareholders (some shares may be publicly traded)

F. Privately-owned (fully or in majority, possibly with some or all shares publicly traded); operated as independent airport authority
Forms of Ownership and Management of Airports (across all 74 cases, accounting for 178 airports)

- **A.** Government-owned; operated by Department or Agency of national government
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Analysis of Forms of Ownership and Management of Airports

Analysis of the Forms of Ownership and Management of Airports (by world regions)

North America

Europe

Middle East

Asia/Pacific

Latin America

Africa

Number of airports
## Analysis of Forms of Ownership and Management of Airports

### Combinations of Forms of Ownership and Management of Airports

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<th>Primary Airport</th>
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This table outlines various combinations of forms of ownership and management for airports, where the primary and secondary airports can have different ownership structures.
### Analysis of the Forms of Ownership and Management of Airports within the 70 cases of Multi-Airport Systems

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#### Single Airport Systems in Transition

- Hyderabad
- Taipei
- Mumbai
- Aucklander
- New Delhi

**Note:** Cases of multi airport systems with three or more airports were partially aggregated into set of primary and set of secondary airports.
## Sample of Illustrative Cases

<table>
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<tr>
<th>Single Airport Systems in Transition</th>
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Frankfurt Multi-Airport System

Primary (E) / Secondary (E) (Single operator)

**Airports:**
- Primary airport: Frankfurt International (FRA)
- Secondary airport: Frankfurt Hahn (HHN) (operated by Fraport; E)

**Key Events in the Evolution of the Multi-Airport System and Results of the Privatization Experience:**
- Growth of the primary airport
  - *Plan to expand Frankfurt Airport (addition of a fourth runway) delayed several times due to environmental constraints (mediation process engaged in 1999)*
  - *Potential operation of 4th runway in 2010*
- Development and emergence of Frankfurt Hahn
  - *Constructed in 1947 as a NATO military base*
  - *Returned to civil traffic in 1993*
  - *Experienced entry of low cost carriers (Ryanair in 1999 & Wizzair)*
  - *Expanded airport capacity (terminal in 2005, runway extension in 2007)*
- Centralized development (one developer/operator) leading to controlled product differentiation; high cost hub airport and low-cost secondary airport
Johannesburg Multi-Airport System

Primary (E) / Secondary (F)

- **Airports:**
  - Johannesburg International (operated by Airports Company South Africa; E)
  - Lanseira airport (operated by a private investor group; F)

- **Key Events in the Evolution of the Multi-Airport System:**
  - Emergence of Lanseira as a secondary airport

- **Result of the Privatization & Development Process:**
  - Investment in airport infrastructure
  - Successful entry of low cost carriers
  - Still low volume of traffic and significant risk with respect to the success of this airport (rely on one major low cost carrier)
Berlin Multi-Airport System

Primary (D) / Secondary (C->F)

**Airports:**
- Primary airports:
  - Berlin Tegel (operated by Berlin Airports; D)
  - Berlin Tempelhof (operated by Berlin Airports; D)
  - Berlin Schonefeld (operated by Berlin Airports; D)
- Potential secondary airport:
  - Finow (military base, acquire option by Infratil)

**Key Events in the Evolution of the Multi-Airport System:**
- Consolidation of the three primary airports into one airport (BBI)
- Expected closure of Tegel and Tempelhof (in 2008 and 2011)

**Potential Privatization:**
- Despite this centralized and controlled approach to consolidate airports, a new secondary airport may emerge
- In 2003, Infratil (New Zealand private infrastructure investment group) entered into a 10 year option to purchase Finow airport
- Plan to develop the airport into a secondary airport serving low-cost carriers (long-term investment program of approx. €25 million)
Vienna Multi-Airport System

Primary (E) / Secondary (D)

- **Airports:**
  - Primary airport: Vienna (operated by Flughafen Wien AG; E)
  - Secondary airport: Bratislava (Airport Bratislava, a.s.; D)

- **Key Events in the Evolution of the Multi-Airport System:**
  - Vienna airport is reaching its capacity limit
  - Bratislava airport was run by the state until 2004. Now run by a public limited company (Airport Bratislava, a.s. (BTS)).

- **Privatization Process and Key Issues:**
  - Attempt of Vienna airport led consortium (Two One; Flughafen Wien AG and PENTA Investments Limited) to take over Bratislava airport,
  - Cancellation of the sale on the basis of concerns about restriction of competition in the market and a situation resulting in a dominant position,
  - Political issues involved in the process.
Tehran Multi-Airport System

**Primary (D) / Secondary (F)**

- **Airports:**
  - Tehran Mehrabad International (owned and operated by Iran Airports Company; D)
  - Tehran Imam Khomeini (owned and operated by Turkish and Austrian TAV group F) under BOT contract

- **Key Events in the Evolution of the Multi-Airport System and Key Issues in the Privatization Experience:**
  - Imam Khomeini International Airport opened in May 2004
  - Immediately closed;
    - *two Iranian airlines refused to switch to an airport run by foreigners,*
    - *military argued security problems.*
  - TAV officials were forced to clear out personnel and equipment and return control of the airport,
  - Exclusion of the Turkish part of consortium,
  - Iranians refusing the foreign control of the airport.
New Delhi Single Airport System

Primary (F) / New Primary (?)

- **Airports:**
  - New Delhi, Indira Gandhi International (Delhi International Airport Limited DIAL; F)
  - New airport in New Delhi (?)

- **Key Events in the Evolution of the Multi-Airport System and Key Issues in the Privatization Experience:**
  - DIAL; Public Private Partnership Initiative
  - Mandate to modernize and restructure Indira Gandhi International Airport.
  - DIAL comprises the GMR Group, Airports Authority of India, Fraport AG, Eraman Malaysia and India Development Fund.
  - Plan to set up a greenfield airport under Built Own and Operate (BOO) model.
  - Constraint from a 150 km clause in the 1997 Airport Infrastructure Policy, that prohibits setting up of a new airport within 150 km of an existing airport,
  - Mechanism for attracting and keeping foreign investments.
Auckland **Single** Airport System

**Primary (F) / New Secondary (A->F)**

- **Airports:**
  - Auckland international airport (owned and operated by Auckland International Airport Limited; F)
  - Auckland / Whenuapai airport (New Zealand Defense Forces -> Potentially: Infratil)

- **Key Events in the Evolution of the Multi-Airport System and Key Issues in the Privatization Experience:**
  - Auckland international airport enjoying monopolistic situation (fully privatized airport)
  - "happy monopoly" with profit margins above 40% according to IATA CEO Giovanni Bisignani, in 2006
  - Potential emergence of a secondary airport in the Auckland region: Auckland Whenuapai
  - Proposed by Infratil (Private infrastructure investment and management company)
  - Still military airport status conversion and political issues to resolve
  - Privatization as a way to combat adverse effects of privatization in a lightly regulated system
Summary of Findings & Conclusions

- Wide array and distribution of combinations of forms of ownership and management of airports
- Privatization of airports has diverse effects based on;
  - multi-airport system configuration/conditions (i.e. primary vs. secondary airport)
  - geographic location (regulatory framework and political system)

- Positive effects of the privatization of airports in multi-airport systems:
  - Provision of investment capital for the development of under-utilized airports that can result in the successful emergence into a secondary airport
  - Off set the monopolistic situation of the primary airport

- Key issues with privatization in multi-airport systems:
  - Significant risk in the investment of non-utilized airports (no guaranty to successfully attract airlines)
  - Effect on regional and national airport planning policy to protect investment – but limit competition and infrastructure development (i.e. perimeter rule in India)
  - Risk for foreign investment
  - Issues of control and decision making process with multiple shareholder structures

- Conclusion: The privatization and development of secondary airports off sets the monopolistic situation of single airport systems and allow the private sector to share the risk of airport development, not necessarily justified and feasible by local public sector.
Questions & Comments

Thank you!