Effects of Deregulation on Airports

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Objective: To explore implications of airline deregulation on airports operations and management

Topics
- Hub-and-Spoke Operations
- Instability of Traffic
- Short Term Horizons
- Conclusions
Essence of Economic Deregulation

- Consumer Orientation
to define objectives
- New Decision-Makers
  companies not governments
- Faster changes
  more risk

Consumer Orientation

- When governments cannot determine profit levels
  (by fare levels, route protection)
- Consumer desires will define criteria for efficiency
- Main consumer desires:
  - **Business Market**
    - Speed: time saved = money
    - Comfort: third party pays
    - Frequency: schedule flexibility
  - **Consumer Market**
    - Cheap fares
    - Speed and access secondary
    - Package deals
Hub - and - Spoke Operations I

- One way to satisfy consumer desires
- Description
  - Drop direct flights between secondary points
  - Substitute flights via hubs central to market, system
    - Higher fuels costs
  - Passengers change at hubs (maybe not to same airline - examples: Continental - SAS at New York/Newark; KLM - NW at Amsterdam)

Hub - and - Spoke Operations I (cont.)

- Description (cont.)
  - Concentrate traffic to hubs
    - More frequency on routes
    - Larger aircraft -- lower cost per seat-km.
    - Higher load factor - lower breakeven per flight
    - Economies in crew basing, inventories
Waves or Banks

Average Arrivals, DFW, June 2000

Average Departures, DFW, June 2000
Hub - and - Spoke Operations II

- Net Effects:
  - Lower Overall Costs, Fares for network
  - More Frequency
  - Lower average speed (maybe not more time when schedule delay included)

- Hub - and - Spoke operations
  - Cost-Effective
  - Pattern in US, Increasing in Europe, Somewhat in Asia

Point to Point Service

- Direct Flights, Thin Routes
  - Low Frequency
  - Low Load Factor
  - Smaller Aircraft
Hub and Spoke Service

- Indirect, Heavy Routes via Hub Central to Market
  - High Frequency
  - Higher Load Factor
  - Larger Aircraft

US Transcontinental
- Traffic from one coast (San Francisco, Los Angeles...)
- Sent to a Midcontinental Airport (Chicago, Denver, Dallas/Ft. Worth...)
- Distributed to Destinations (Boston, Philadelphia...)

Intercontinental
- Traffic from Europe
- Goes to Distribution hubs (Bangkok, Singapore...)
- Distributed to - Australia, Japan, Hong Kong
Hub - and - Spoke Operations IV

- Criteria for a good Hub
  - Centrality to Market
  - High Capacity
  - Reliability for Schedules -- uncongested, good weather
  - Control by Airline -- to maintain schedules
- Airports with 3/4 traffic with one airline
  - Minneapolis -- Northwest/KLM
  - Houston/Bush -- Continental
  - Dallas/Fort Worth -- American
  - Atlanta, "Cincinnati" -- Delta

Major US East-West Hubs

- An Airline dominates at each major US East-West Hub
- Hubbing Airline may have up to 80% of the traffic at hub airport
East Coast
North-South Hubs

- Specific markets have their own Hubs
- Along US East Coast, most serve US
  - Miami serves US-Latin America and is central to its market

Major European Hubs
Major East Asian Hubs

Hub - and - Spoke Cargo Operations

- **UPS in United States**
  - Louisville (1 billion items/day)
  - Regional Hub – Cologne, Germany --
    - Rockford, IL - Ontario, CA - Columbia SC
    - Dallas, TX
- **Fedex Memphis**
  - Guangdong
  - Paris
- **Emery Dayton**
- **TNT Liege (Belgium)**
- **DHL Cincinnati East Midlands (UK)**
Instability of Traffic I

- Deregulation removes barriers to change
  - immediate readjustments
  - frequent bumps

- Automobile Analogy
  - Regulation like shock absorbers
  - Taking shock absorbers out
    - adjustment to new level
    - you feel every bump
Instability of Traffic II
Examples

- “Southwest effect”
  - Providence 1 to 5 million in a few years
  - Liverpool -- similar effect with easyjet
- Memphis
  - Fedex creates it (Likewise UPS and Louisville)
- Boston -- Northwest
  - Many ‘definitive’ choices
- Hub operations appear, disappear
  - New York/Newark -- Peoples Express
  - Raleigh-Durham -- American

Short Term Horizons

- Because of Uncertainties
  Airlines less ready to make long term commitments only good for short term leases
- Incompatibility with
  long term capital investments
- Therefore, need for
  - smaller building additions
  - more flexible space
  - more operational solutions
  - more aggressive management!!!
## Summary

Deregulation had and does mean:

- Significant reorganizations
- Strategic planning required
- Greater risks than ever
- ...and less security!!!