

Aviation and its Growing Role in Economic Growth and Development

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**“Only the psychologically disturbed or
inadequate want transport for its own sake.”**

Denys Munby, 1968

Air transport is a major industry

- 1,600 million passengers a year
- 3.9 million jobs
- \$260 billion turnover
- 18,000 aircraft
- 15 million kilometer network
- 10,000 airports
- 130 billion revenue ton kilometers
- 30 million tons of freight
- 1% of Western European GDP, more than 1% of US GDP
- High-tech management flies 60% more than traditional industries
- Half of tourists outside of Europe travel by air

Public policy phases

THE LEGACY

- To 1910 -> gentle assistance for innovation
- 1910-1918 -> military importance
- 1920s -> national integration (mail services)
- 1930s -> internationalism (esp. Empires)
- 1940s+ -> military development
- Late 1940s-1970s -> economic regulation
 - Chicago convention
 - domestic price/ market access controls

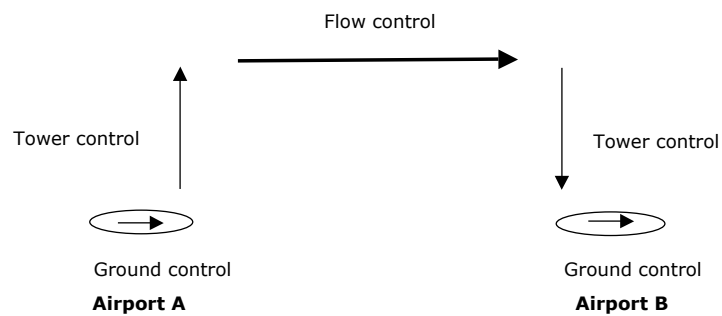
MODERN AGE

- 1970s+ -> “deregulation of operations”
 - domestic from late 1970s in US
 - international (Open Skies, EU packages, etc)
- 1980s+ -> “deregulation of infrastructure”
- 2000s+ -> environmental regulations

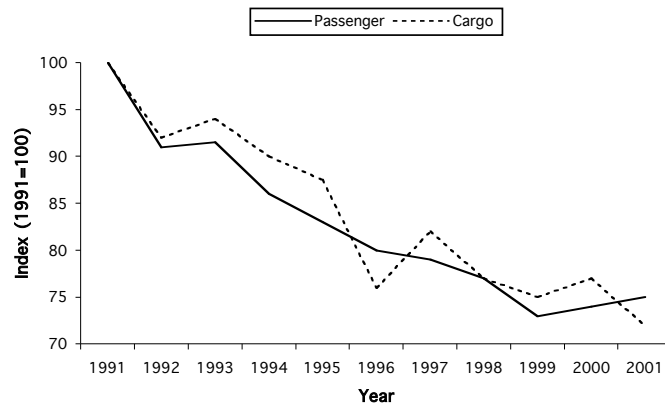
Characteristics of air transport

- Long/medium distance
- Fast and reliable (important for some types of freight)
- Highly flexible (spatially and temporally)
- Quick to put in place (relatively low fixed costs)
- Significant development about terminals
- Relatively secure (no track)
- Relatively safe
- Relatively easy to develop private/public structures

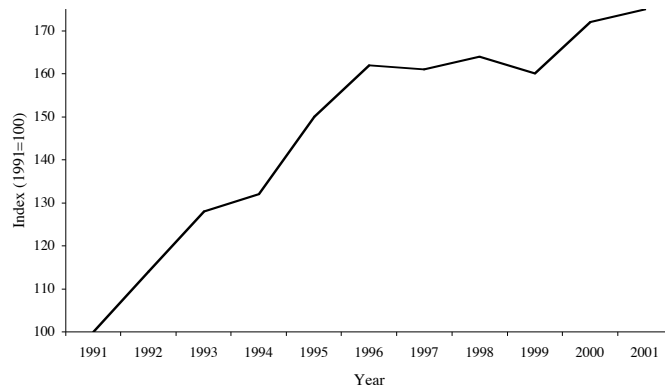
Airlines part of an air transport system



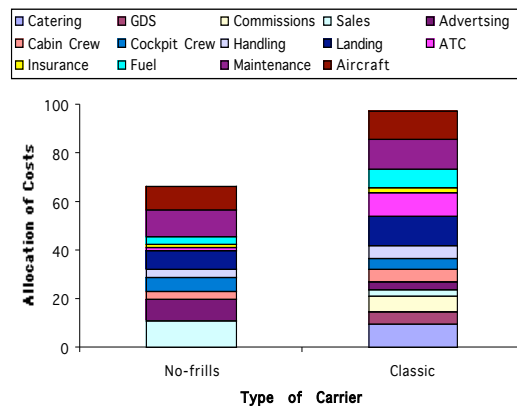
Passenger and cargo yield for EU scheduled airlines



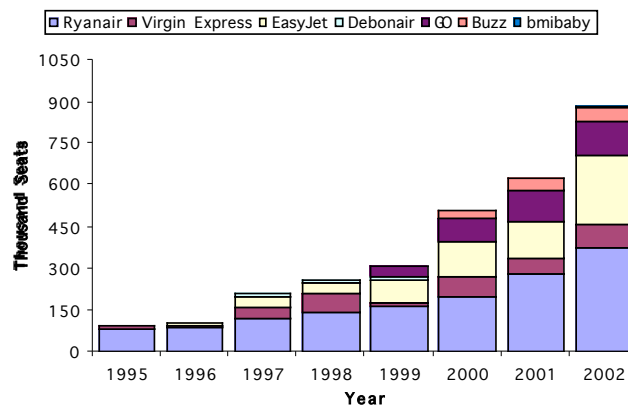
Airline labor physical productivity in EU (ATK per employee)



Costs: a no-frills and a legacy carrier

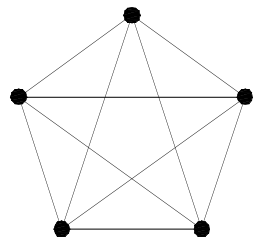


Growth of no-frill carriers



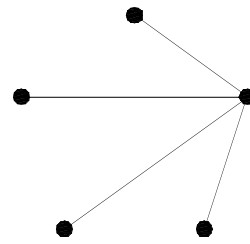
Hub-and-spoke networks

Point to Point Network



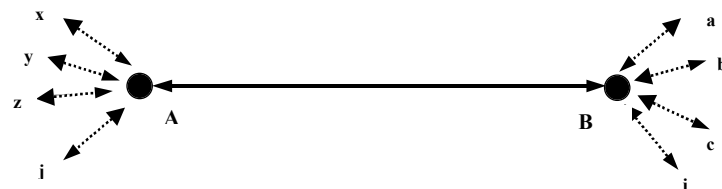
10 different routes

Hub and Spoke Network



4 different routes

“Dog-bone” international hub-and-spoke network



Air transport can benefit economic development

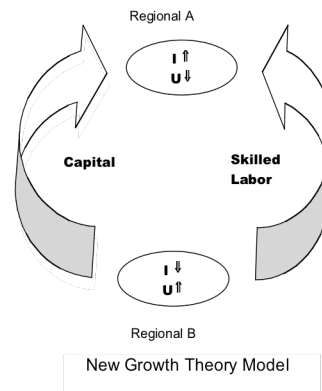
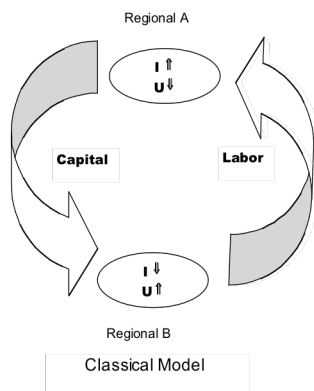
Primary effects. (e.g., building an airport)

Secondary effects. (e.g., running an airport)

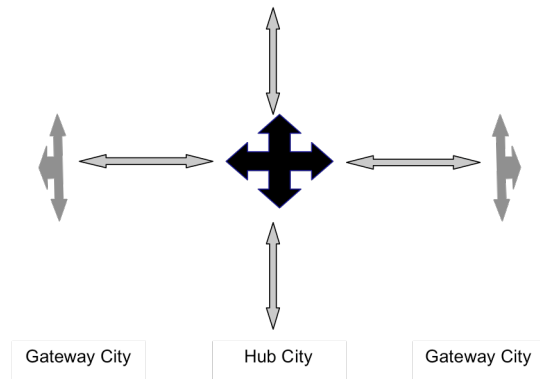
Tertiary effects. (e.g., using an airport)

Perpetuity effects. (e.g., changing the economy)

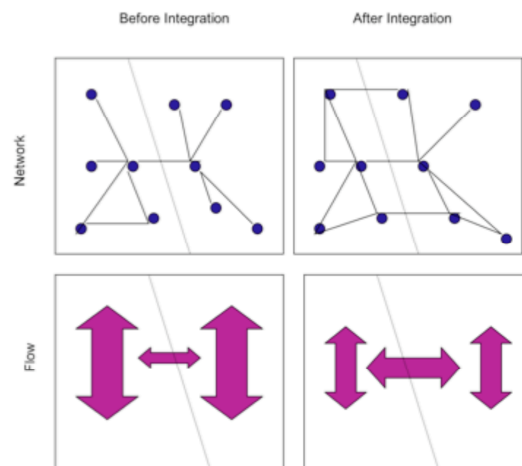
Simplified theories of migration



The notion of gateways



Impact of opening more gateways



Some studies of airport impacts

- US MSAs - hub airport increases region's employment by 12000
- Chicago O'Hare – 50% increase in traffic will increase employment in the region by 185,000.
- Atlanta - 264 foreign-based firms, direct international services was 3rd most important thing in location
- 57 companies in Europe – air transport network the 3rd most important factor in location.
- Zurich – 34% of firms considered the airport as 'very important' and 38% as 'important' as location factor.
- Schiphol Airport (Netherlands) – 85,000 jobs for the country.

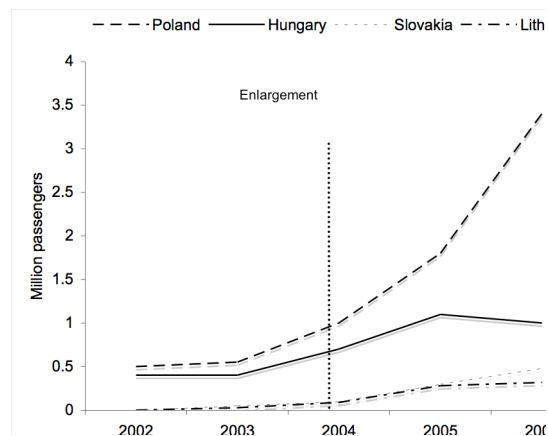
Jobs and income from having a local airport (per million passengers)

	Jobs		Economic Impact (\$millions)	
	Direct	Total	Direct	Total
High	2000	8000	225	1600
Medium	1500	6000	75	650
Low	750	2500	35	130

World migration

Year	Estimated number of international migrants at mid-year (both sexes)
1960	75 463 35 2
1965	78 443 93 3
1970	81 335 77 9
1975	86 789 30 4
1980	99 275 89 8
1985	111 013 230
1990	154 945 333
1995	165 080 235
2000	176 735 772
2005	190 633 564

Air travel between the UK and selected transition economies



Inbound passengers from the EU to the UK using Stansted and Luton airports

Passenger type	Passengers 2000	Passengers 2005	2000 to 2005 change	Percentage of total in 2000	Percentage of total in 2005
Business	0.9 million	1.8 million	98 %	22 %	17 %
Leisure	1.6 million	4.0 million	150%	39 %	38 %
Visiting friends & relatives	1.6 million	4.8 million	198%	39 %	45 %

Some quotes

"These days no one can make money on the goddam airline business. The economics represent sheer hell"

C.R. Smith American Airlines

"People who invest in aviation are the biggest suckers in the world"

David Neeleman, jetBlue Airways, 1999

"If the Wright brothers were alive today Wilbur would have to fire Orville to reduce costs"

Herb Kelleher, Southwest Airlines, 1994

"They don't realize that while you're sitting here talking, someone is f**king you. Changing a fare, changing a flight, moving something. There's no autopilot, and that's why I've seen a lot of guys come and go"

Gordon Bethune, Continental Airlines, 2004

"There are always going to be some stupid people who will invest in airlines"

Kenneth Button, Washington Post, 2005

Queensland and Northern Territory Aerial Services

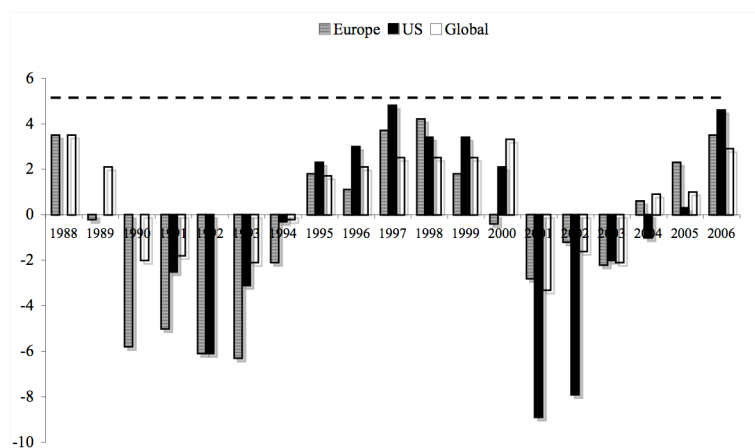
“Qantas' expectations of a surge in next year's pretax profit to \$1.3 billion could swell a further \$100 million after analysts upgraded their earnings targets.”

August 20, 2007

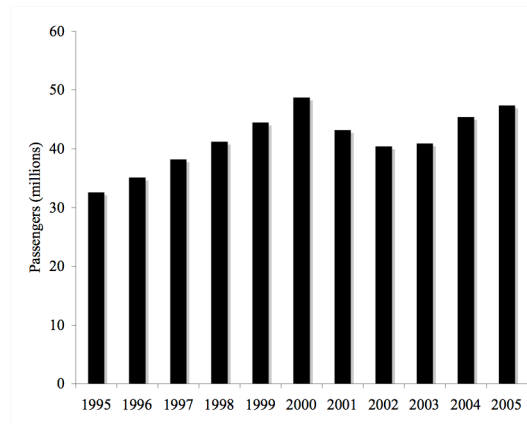
“JPMorgan issued a note estimating Qantas could post a \$982 million pre-tax loss.”

May 31, 2008

Operating margins of airlines (1988-2006)



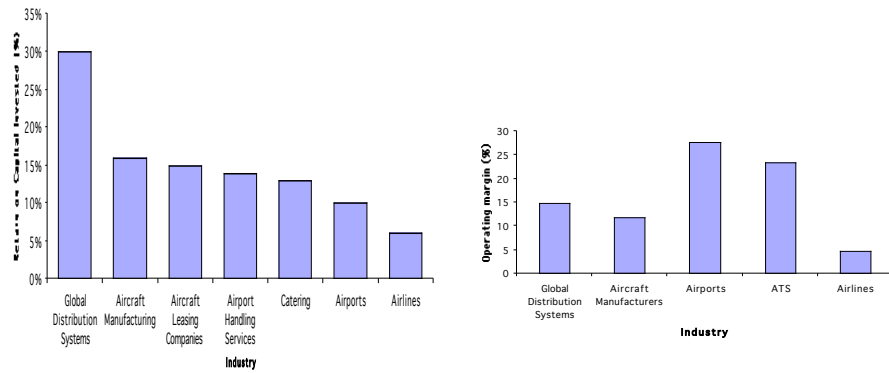
EU-US transatlantic air passengers



A few failed airlines

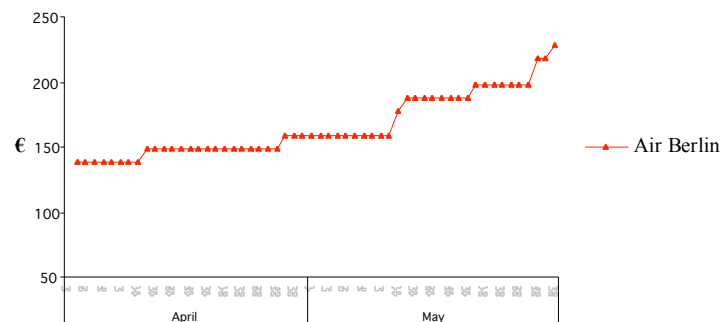
Air Canada Tango	Pacific Southwest Airlines
Air South	Pan Am
America West Airlines	Pearl Air
ATA Airlines	PEOPLExpress
Canada 3000	Safe Air
Compass	Saro
East-West	Skybus Airlines
Eastwind Airlines	SkyValue
Greyhound Air	Song (Delta)
Hooters Air	Southeast Airlines
Impulse Airlines	TAESA
Independence Air	Tower Air
JetGreen Airways	U Air
Kiwi Airlines	United Shuttle
Kiwi International Air Lines	ValuJet
LAPA	Vanguard Airlines
MetroJet	Vistajet
Midway Airlines	Western Pacific Airlines
National Airlines	Zip
Oasis Hong Kong Airlines	

Economic margins in the air transport sector



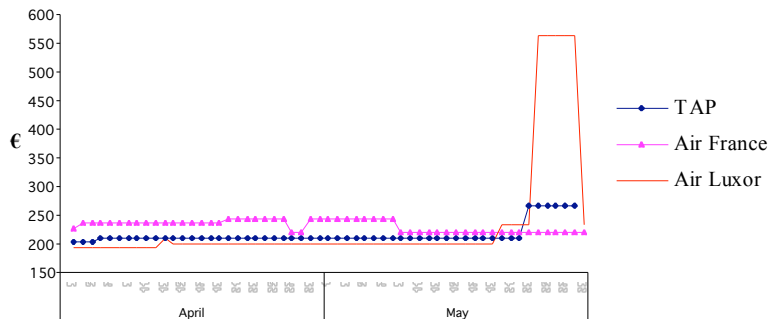
Temporal fares-offered curve - a monopoly

Porto - Palma : 30 May



Temporal fares-offered curve - three carriers

Porto - Paris : 30 May



Why do people still invest in airlines?

- Still some protection
- “Las Vegas effect”
- “Cash cow argument”
- Airlines as “Tills”
- Airlines are “Sexy”
- Institutional bale-outs (Chapter 11 in US)

Problems with air transport as a growth driver

- Limited to certain types of economic activity
- Vulnerable to shifts in the airline market
 - Oil costs
- Potential capture by an individual, monopoly carrier
- Potential rent extraction by the local airport
- Local externality issues
 - Noise
 - Surface transport congestion
- Problems of political interference