Taxes and Subsidies for the air transport industry in Europe

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Presentation outline

- **Motivation and overview**
- **Definitions /principles**
- **Analysis of specific measures**
  - **'Ticket tax'**
  - **Selected airline subsidies**
  - **Selected airport subsidies**
- **Conclusions and discussion**

Motivation and overview I

- **(International) air transport** is exempted from **VAT** and air transport in general is exempted from **fuel taxation**

- **However, some European countries levy specific taxes on the air transport industry:**
  - UK APD (since 1994)
  - Germany (since 2011)
  - France (two types of taxes, including rather symbolic solidarity tax)

- **Other countries have abolished/reduced/only discussed taxes**
  - Netherlands (2009/2010)
  - Austria (Introduction 2011 – 50% cut in 2018)
  - Ireland (3 EUR/PAX)
  - Malta

- Airlines and airports in countries with taxes complain about **competitive disadvantages/distortions**

Motivation and overview II

- **Subsidies in aviation often receive less attention than taxes, however, some stakeholder 'complain':**
  - Intramodal competitors
    (e.g. US and EU airlines against presumed subsidies to Gulf carriers)
  - Intermodal competitors
    (e.g. railroad operators against presumed subsidies to air transport)
  - Environmental protection action groups and organizations

- **European Commission** – with respect to competitive distortions in the Common Market – in 2014 issued **Guidelines** on state aid to airlines and airports (substituting previous guidelines)

- **Subsidies may be one reason for the growth of the industry** (and therefore also for the positive effects on regional development attributed to the industry)

- **Positive economic effects may be a justification for granting subsidies**

Definitions and principles I

- **Subsidies in a narrow sense (usual definition / national accounting):**
  Payment from the government to a firm in order to support the firm or its specific activities (i.e. unrequited)

- **Subsidies in a broader sense (e.g. EU communication):**
  - direct grants
  - tax rebates
  - soft loans and other preferential financial conditions
  - subsidized services from the government
  - "hidden subsidies" (e. g., purchase of assets above market price, sale of assets below market price)

- Any other **specific advantage** that keeps costs/prices below market level (OECD), e. g., exemptions from technical regulations

Definitions and principles II

- **Aviation specific subsidies vs.**
  general subsidies with relevance to the aviation industry:
  e.g. export guarantees to aircraft manufacturers, grants for investment (job creation) in specific regions

- **Positive theory** of subsidies (politicians want to be (re-)elected)
  vs. **normative theory** of subsidies (next slide)

Definitions and principles III

Justifications of subsidies in the air transport industry brought forward in the literature and/or by politicians

- **Allocation**
  Compensation of market failure
  e.g., positive externalities (WEB?), Mohring effect, compensation of other subsidies (as 'second best')

- **Distribution**
  e.g., air transport to remote regions, PSO

- **Strategic**
  e.g., first mover advantage for domestic firms if economies of scale are significant

- **Side effects** of other policies (especially defense policy)

Subsidies in the value chain

- **Manufacturers**
  (aircraft, engines – reducing costs for airlines)
- **ATC** (reducing costs for airlines – no incentive to grant subsidy for flyover of foreign airline)
- **Airports** – and ground handling service providers
  (enabling air transport in a region, reducing costs for airlines)
- **Airlines**
  (selective subsidies, e.g. to 'flag carriers', vs. general subsidies)
- Firms offering complements (esp. duty free shopping)

General difficulties in assessing effects of subsidies (theoretical and empirical)

- Many different types of subsidies along the value chain (with effects on fixed costs, variable costs, demand)
- Limited information on the amount of subsidies
- Market structure matters (manufacturers, airlines, airports) => Pass through rates

Ticket tax I

Case study Germany

- **Introduction in 2011 –** Purely for revenue generation (government needed 1 bn EUR, tax rates were calculated accordingly)

- **Similar** design to UK APD, NL ticket tax:
  - **Quantity tax** (EUR/**departing and originating** PAX)
  - Different tax rates for (three) **different distance classes** (final destination)
  - **No** different tax rates for **different classes of travel** (unlike UK and France)

- **Rates (2011): 8 / 25 / 45 EUR**
  Since 2012:
  slight reduction – compensating additional burden due to ETS

Ticket tax II

- **'Natural experiment'** – however, several other changes between 2010 and 2011:
  - **GDP** growth
  - **Fuel price** (and other costs)
  - **Special effects** in 2010: Icelandic volcano eruption, strikes, (and in 2011: 'Arab spring')

- **Methodology:** Ex post 'forecast' for PAX numbers in 2011 (without tax) compared to actual PAX numbers

- Three 'commissioned' **studies** (air transport industry, ministry, 'environmental' NGOs)
- Two independent studies: one older (aggregated), and one more recent (disaggregated on country level)

Ticket tax III

- **Results – and areas for debate:**
  - Stronger effect on **domestic market** (since tax is levied twice for a return flight and additional VAT, HSR as substitute)
  - Stronger effect in **border regions** (if foreign airports nearby)
  - Stronger effect in **LCC segment**
    (but maybe also some 'signaling' by Ryanair?)
  - Weaker effect at **slot constraint airports**
    (tax reduces slot rent)
  - Increasing share of **transfer passengers** at hubs
    (due to airline revenue management systems)
  - Total reduction O&D passengers between **1.2 and 2.8%.**

Airline subsidies I

- Focus: **General airline subsidies**, not route specific (PSO) and not due to extraordinary situations (9/11, Icelandic volcano)

- **Three types of subsidized airlines**
  - State owned airlines
  - State owned airlines with intended privatization
  - Privately owned airlines

- **Objective** for subsidies:
  - Avoiding **short-term distortions** (e.g., Air Berlin) – Rescue aid
  - **Restructuring** – aiming at medium- / long-term profitability (often connected to privatization)
  - Keeping loss-making airline alive (not in line with EU law)

- Some airlines went bankrupt, after state aid was declared illegal (e.g., Malev), results:
  - (Slightly) negative effect on connectivity
  - Loss of 'headquarter functions' / Service imports instead of exports

Airline subsidies II

- For state owned airlines (as well as airports):
  Private investor principle / test:
  Would the specific measure (e.g. soft loan, additional equity) also have been taken by a (profit maximizing) private owner?
  If yes, it is not 'state aid'.

- **EU rules** on state aid for airlines:
- Only 'rescue' and 'restructuring aid' with perspective for profitability (business/restructuring plan), and 'one time, last time' principle (i.e. 10 years)

Airline subsidies III

- Recent cases

+ State minority shareholder

* State majority shareholder

Year of decision	Country	Airline	Subsidy	Legal assessment
2002	Greece	Olympic*	Restructuring aid	Not compatible with common market
2005	Greece	Olympic*	'Hidden subsidies'	Some measures declared to be illegal
2005	Italy	Alitalia*	Restructuring aid	Measures do not constitute state aid
2007	Cyprus	Cyprus Airways*	Restructuring aid	Compatible with common market
2008	Greece	Olympic*	'Hidden subsidies'	Measures declared to be illegal
2009	Austria	Austrian Airlines+	Restructuring aid	Compatible with common market
2012	Czech Republic	CSA*	Restructuring aid	Compatible with common market
2012	Hungary	Malev*	Restructuring aid	Measures declared to be illegal
2012	Malta	Air Malta*	Restructuring aid	Compatible with common market
2014	Latvia	Air Baltic*	Restructuring aid	Compatible with common market
2014	Slovenia	Adria Airways*	Restructuring aid	Compatible with common market
2015	Cyprus	Cyprus Airways*	Restructuring aid	Not compatible with common market
2015	Estonia	Estonian Air*	Restructuring aid	Not compatible with common market

Source: DG COMP state aid database

Airport subsidies I

- What determines the **profitability** (and therefore the potential dependence on subsidies) of an airport?
  - Passenger/cargo/movement numbers (Fixed cost / economies of scale)
  - External factors (e.g., weather)
  - Efficiency of management (linked to incentives / regulation)
  - Scope of an airport's responsibility with respect to security
  - Original endowment with resources, in particular land (providing opportunities for additional non aeronautical revue, but might sometimes also cause additional cost)

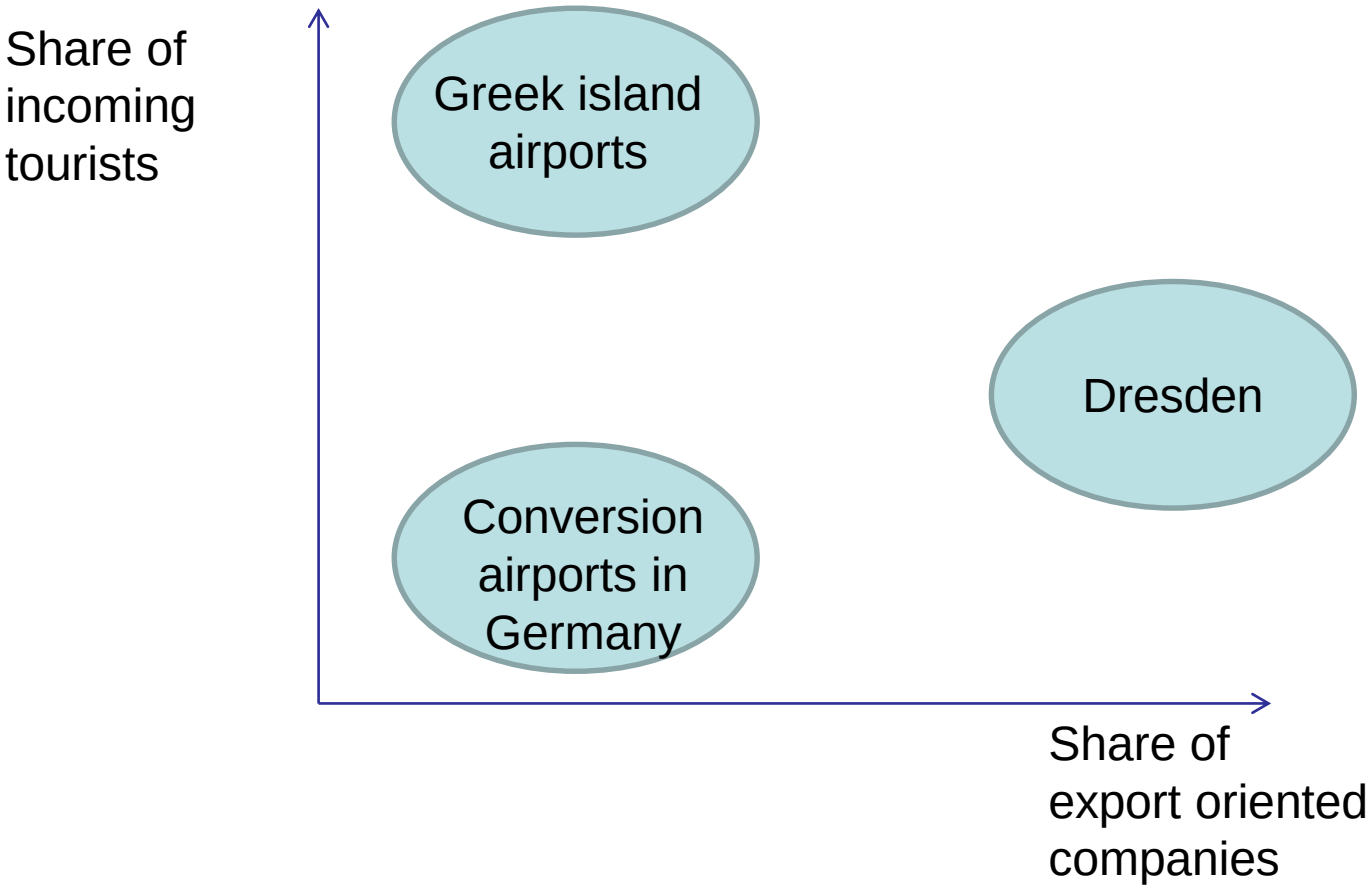
Airport subsidies II

- Types of airports

Size	Profitability / Subsidies	Examples
Small	Dependent on subsidies, even for operation. Connecting remote regions.	Northern Scandinavia, Scottish Islands and Highlands
Medium	Many specific constellations, often investment aid necessary, regional policy objectives (next slide)	See next slide
Large/hub	Profitable (even regulated), unless huge inefficient investment. Competition with other hubs.	Berlin Amsterdam tax exemption (till 2000)

Airport subsidies III

- What determines the regional economic benefit of an airport?



Airport subsidies IV

Example Germany - Regional and Low Cost airports

- **In general not very transparent**
  Sometimes some grants already deducted from costs.
- **Revenue below total cost**
  However depreciation and interest payments as sunk costs.
- **Revenue below variable cost**
  E.g. Erfurt, Saarbrücken, Zweibrücken

- **Example Zweibrücken 2012** (243.000 PAX)
  Total loss: 4.5 m EUR (plus 2 m EUR grants)
  Losses per PAX above 18 EUR (without grants) /
  above 26 EUR (with grants)
  Insolvency in 2014 because 56 m EUR grants have to be paid back (EU decision on state aid)
  New private investor: business park, maybe with runway/airfield.

Airport subsidies V

Rationale for EU restrictions on subsidies to airports

- Preventing inefficient **over-investment**, in particular in case of neighboring airports (e.g., Saarbrücken – Zweibrücken)
- 'Footloose' LCCs might provoke **'race to the top'**
- If airport subsidies are 'passed through', this will also affect **competition between airlines** (serving different airports)
  => Hub carrier are not 'footloose'
- Some general principles on charging:
  - Non discriminatory
  - Incentives (e.g. new route, growth, etc.) legal, if requirements are fulfilled
  - Start-up aid (marketing support etc.) as 'risk sharing' between airport and airline => should not be permanent
  - However, some charging schemes seem to be 'tailor-made'

Conclusions and discussion

- Low transparency / heterogeneous situations
- Entire industry benefits from subsidies to aircraft manufacturers and from VAT and fuel tax exemption
- Direct subsidies to airlines only in few countries
- Airport subsidies are an issue of growing importance – EU guidelines
- Many options for theoretical and in particular empirical research

Thank you very much for your attention

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