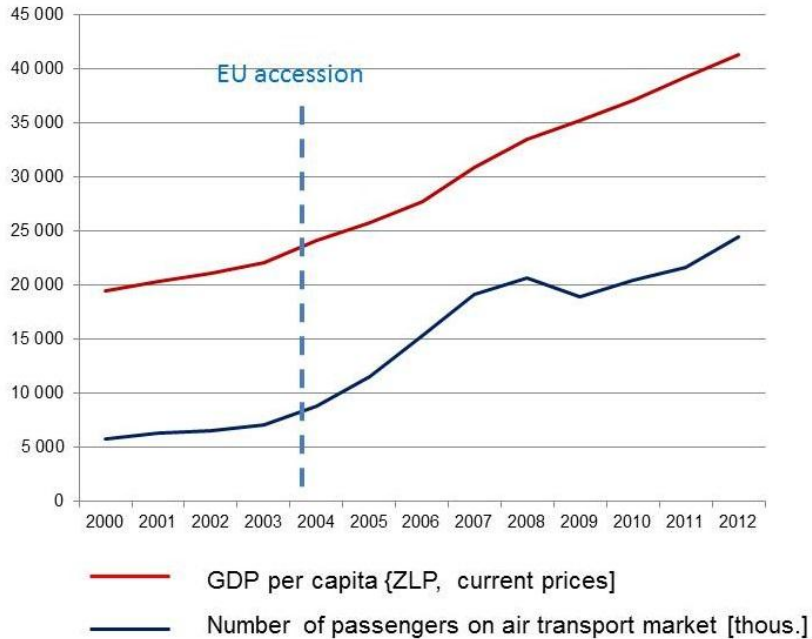


**High speed rail vs. low - cost air:  
competing or complimentary modes?**

**A view from Poland**

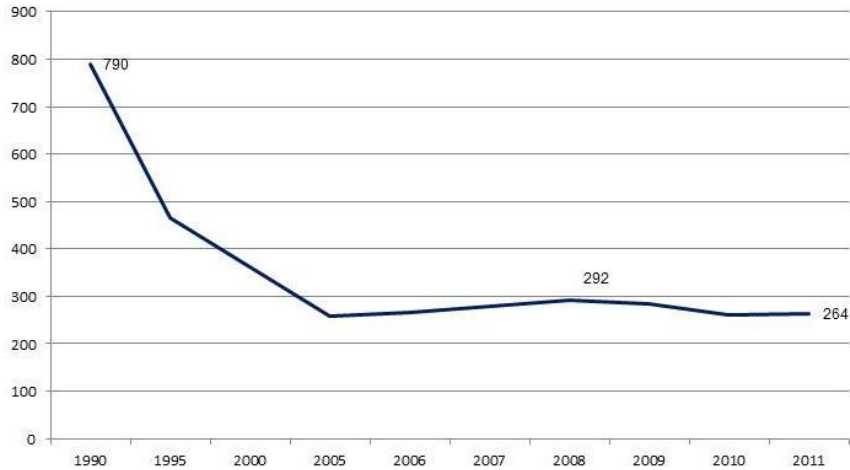
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# Polish evidence: air market



- Early stage of development – a very low air mobility rate;
- Strong dynamics of growth, accelerated after EU accession;
- Share of LCC on air passenger market is ca. 50%;
- Major destination is London (15% of all trips by air in 2012);
- Domination of international trips;
- Releasing from dominant role of Warsaw airport;
- Strong spatial concentration: 5 biggest airports serviced ca. 83% of total passengers in Poland;
- First attempts of LCC entries on domestic market (Ryanair).

# Polish evidence: rail market



Number of passengers by rail in 1990-2011 [mio. pass.]



Distances by rail between main Polish cities [km]

- Huge upgrading process of railway infrastructure: a classic story for 160-200 km/h in the period of 2007-2015;
- According to EU forecast, Polish railway market in 2030 will be bigger than Spanish by more than 5 bill. pass-km.;
- Plans to develop a „classic” HSR line were postponed by 2020 (?);
- Geography perfectly matches a dense railway concept, including potential for HSR;
- Majority of passengers are price – sensitive;
- Competition mainly from individual motorisation and rapidly developing long distance coaches.

# Two types of regulation

## Top-down process

- Support for air-rail links (both regional and national/international railway networks) – a policy level;
- Financial support of air – rail operations;
- Strong support for HSR in European Transport Policy.

## Bottom-up process

- Different stages of cooperation between air and rail;
- If there exists, mainly cooperation between railway companies, big airports and „traditional” (regular) air carriers;
- Complex cooperation of differentiated stakeholders.

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### **But there are differences between HSR and LCC:**

- international/ domestic dimension,
- different customers,
- different business models,
- different provision and access to the infrastructure,
- different ownership structure,
- different spatial model of operation.

# Different levels of integration between air and rail



Similar to joint venture. Example: AIRail of DB, Lufthansa, Fraport since 2011. It is not limited only to Lufthansa. A lot of investments has been done in Frankfurt Airport according to development of AIRail.

Code share agreements: may differ in number of destinations being serviced. They could include air operators from different continents and European rail operators. Example: Air France and SNCF (tgvair), integrated with frequent flyer programme of Air France KLM (Flying Blue). Also Deutsche Bahn with American Airlines, Thalys with Jet Airways (India, on route Brussels – Paris) and SkyTeam (on Amsterdam Schiphol)

Interlining agreements between air/tour and rail operators. Example: Rail&Fly available since 1992, developed by air and tour operators in cooperation with DB, 73 air operators + ca. 75 tour operators . Mainly ticket sales.

# Questions instead of summary

- Can HSR be a tool for securing (defending) domestic railway market by increasing barriers of entry?
- Does travel time really matter for majority of LCC passengers? (Are competitive tools the same, both for HSR and LCC)?
- Traditionally, we claim that HSR might be competitive to air operators at a distance up to 500 kms. But could LCC be competitive to rail at a distance below 300kms? Ryanair started to investigate this in Poland.
- Is a formal top-down regulation efficient?
- What are the main barriers for bottom-up scenario of integration between HSR and air operators?
- Why there are almost no examples of integration between rail and LCC?

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