

## 14. Transport and agglomeration as a location factor of industries

Transportation as a development factor = controversial theme

- suggestion – transport is a requirement (condition) of increasing development
- **but** studies show that transportation (traffic) infrastructure has a little effect (value)

Industrial revolution = huge influence of transportation (raw material supplies → harbours → railroad). Along railway small activities => *railway = development line*.

Theories **core-periphery** show that typical character (feature) of periphery was distance from main centres of a country (on the other hand, in peripheral regions = lower costs for rent, for real estates, lower salaries, etc.)

Example: Ireland vs. Portugal: Portugal invested to highway infrastructure from Lisboa to all directions, i.e. highway from nowhere to nowhere. Ireland invested mostly to human resources and stimulated infrastructure, which was forced (necessary) by later big development of regions.

Main problem of peripheral areas is their economic structure => 2 major cumulative mechanisms influence inequalities between a central and remote area:

1. *economies of scale*
2. *agglomeration effects/advantages* (closeness to other companies, sharing of the same infrastructure, higher mobility of workforce)

These only in urban (agglomeration) areas.

New communications (links) “discover” new (peripheral) regions (nodes) but also *run a risk of higher competition*.

However, in general **transport enlarges action radius** (possibilities of selection, of choose) **of all the industries**.

### **Highways** (highroads)

= connection between centres of a country (e.g. BA-ZA, Prague-Brno, Vienna-Linz-Salzburg-Munich) => speeds up development of core regions. But localization of “primitive services” (“primitive tertiary”) along a highway: e.g. gas stations, fast food restaurants, wholesale, exhibition halls, storages).

### **High-speed railways (HSR)**

= connection of at least 1 million agglomerations (Berlin-Munich, Paris-Lyon). Harder to construct (arc radius/semi-diameter, problems with plots/parcels owners). Advantageous to construct HSR along a highway (e.g. France). More advantages than road transport, e.g. *less noise, more ecological, faster* (TGV 320 kph, Nozomi 285 kph). But disadvantage of *flexibility...*

HSR and highways = *physical and psychological barrier* in a countryside, e.g. villages are splitted (bounded). Large *maintain costs* too.

### **Airport**

= most important socio-economic transportation centres (nodes) in a region ⇔ huge employment of high-qualified labour in shopping centres, hotels, restaurants, travel agencies, car rentals, hotel reservation systems, i.e. *widely in services* (Heathrow = 150 000 employees). Selective clientele. Emphasis to prices, quality, image and prestige.

### **Harbours** (ports) **and other transport centres**

= industrial production, cargo stations, tranships centres. Lot of shops also in main railway and bus stations.

### **Problem of traffic congestions**

= often bigger problem than transport of peripheral areas = traffic congestions and parking => potential solutions: pedestrian zones, preference of mass transport, taxis without parking (NYC), underground transport (underground crossroads in Brussels), polycentric system of a city.

In general, there is larger concentration of services to urban areas ( $\Leftrightarrow$  agglomeration effects), and of light industry mainly to the edges of cities/towns or to industrial parks (estates).

Urban areas = higher competition, higher concentration of similar companies and customers, higher salaries but also higher costs for all the maintenance.

Investments to social infrastructure can be much more effective than investments to transport infrastructure (e.g. Ireland). However, improved transport infrastructure increases potential for economic growth of a region.

### **Keywords:**

core-periphery, economies of scale, agglomeration effects, action radius, competition, primitive tertiary, car rentals, cargo services, traffic congestions, human resources, urban areas