Time-Distance as a Development Factor for Czech Regions

Filip Drda, Karel Maier, Ondřej Mulíček, Jakub Vorel

Accessibility is an important factor of competitiveness among particular cities and regions and, consequently, improved transportation infrastructure can bring important impulses for regional development. Therefore, construction of new motorways, highways and speed railways is believed to help significantly in economic revitalisation of problem regions. The presented model shows the current as well as future time accessibility of centres of regions as well as of local labour systems.

Key words: spatial planning, accessibility, regional development

1. Time accessibility of regional centres

Regional centres are pretty evenly spread on the territory of the Czech Republic. They offer higher-rank facilities as specialised hospitals, higher educational facilities and regional tier of administration. The model showed up that most urbanised areas of micro-regions can reach their regional centres in less than 45 minute driving time. However, there are remote parts of the country which need more than 60 minutes to reach the regional centre, mostly situated in the western part of Czech Silesia, south-central Bohemia, Bohemian-Moravian highlands, and Šumava. Among these remote parts, the existing projects for motorways and speed roads will improve the access for south-central Bohemian and Bohemian-Moravian highlands, while the problem area of western part of Czech Silesia (high unemployment, low share of educated people, low GDP per capita) will not be affected – but the project of improved road between Šumperk and Jeseník can apparently help.

The time-distance potential for job commuting to regional centres has not been fully utilised yet, as well as the decentralisation potential for jobs (particularly in some branches) within the area of acceptable commuting time from the regional centres. It is shown that even 15 minutes’ time distance exceeds the existing the extent of functional urban areas (FUAs) of regional centres, particularly in the cases of Olomouc, Hradec Králové / Pardubice and Liberec as well as weaker regional centres of Karlovy Vary and Jihlava. On the other hand, the time accessibility of Prague has been already fully utilised, the commuting time exceeding the 30 minute limit from some parts of the FUA.
The existing projects for new extensions of motorways and speed roads will enhance the interconnectivity of regional centres especially in Moravia and Silesia, establishing thus precondition for a polycentric pattern of higher-rank facilities and jobs in this part of the country (Brno – Olomouc / Zlín – Ostrava). In Bohemia, the traditional hierarchic gap between Praha and regional centres will be supported also by larger time-distance between the centres, even when the time-distance will be reduced by new infrastructures between Praha and Hradec Králové / Pardubice, Praha and Karlovy Vary, Praha and České Budějovice, and Praha and Ústí nad Labem. It can be estimated that the currently emerging reciprocal links between Praha and Plzeň as well as Praha and Liberec (which already enjoy speed road connections) will emerge also in other cases after the new speed connections are introduced.

The model of accessibility also shows potentials for cross-border linkage especially for the regional centres of Ostrava (Katowice), Liberec (Zittau, Görlitz / Zgorzelec, further on Dresden) and possibly also Ústí nad Labem (Dresden).

### 2. Accessibility of local centres

Centres of local labour systems in communities with more than 1000 jobs, provided the municipality is the main commuting destination at least for one another municipality were considered as the local centres. There are 376 such centres in the Czech Republic.

Most territory has time-distance to local functional urban area (FUA) centres less than 30 minutes. In general, the areas outside the 30 minute access are less populated. Metropolitan centres of Praha and Brno are partly surrounded by some areas that cannot reach local FUA centre in less than 30 minutes: here apparently the magnitude of the metropolis prevented from establishing local job centre.

The influence of the new “heavy” infrastructure projects is apparently quite limited as the new motorways, speedways and improved railways concentrate in the existing urbanised corridors and consequently they bypass remotest parts of the country. This would be rather
improvements of local and regional transportation that could influence the local accessibility for the remote, poorly accessible local labour systems (LLSs).

Figure 2: Existing time accessibility of FUA centres (15 minutes)

Figure 3: Future time accessibility of FUA centres (15 minutes)

The areas that are affected by highest unemployment rate do not show increased commuting to jobs. Apparently, long-distance commuting has not been a commonly accepted solution to unemployment.
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**Literature**

