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Planned construction of HSR in Czechia and occasional long-distance work commuting: impact of passenger income

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Abstract: This article analyses occasional work commuting mobility within three major metropolitan areas in Czechia in the context of future HSR routes. The main aim is to explain uneven commuting flows of inter-metropolitan travelers through their level of income, given their potential for the use of HSR from a demand perspective. To achieve the goals, the paper uses quantitative data analysis methods performed on a selection of 228 respondents who realized at least one business trip between Prague and Brno or Prague and Ostrava between January and September 2019. The results reveal that the level of income plays a significant role in the issue of using potential high-speed lines for occasional long-distance commutes.

Keywords: high-speed railway, income behavior, inter-urban mobility, irregular mobility, mode choice

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Introduction

Human mobility is an extremely dynamic phenomenon in today's world, which is why it rightly belongs to the most frequent research topics in many disciplines, including social and transport geography. Mobility in an elementary sense is perceived as the movement of people in physical space (Hanson 2009). One of the most common reasons for human mobility is commuting to work, which people of working age do mostly on a regular, daily basis. Mobility research in geography has often focused on the assumed similarity and stability of commuting patterns. The time spent commuting regularly to work is between 25 and 30 minutes worldwide (Levinson 1998; Kenworthy and Laube 1999) and this time has remained almost unchanged over the long term. However, the time spent commuting to work increases as the distance between work and home increases. The general trend in several European countries shows both an increase in commuting in terms of the number of longer daily journeys between home and work, and an increase in the number of long-distance weekly commuters (Lyons and Chatterjee 2008, Sultana and Weber 2007). However, very few global transport studies address occasional long-distance work commuting. In the Czech environment and Central Europe region, the

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occasional work commute is a completely unexplored topic. Given the potential for increased mobility between the three dynamically developing metropolises of Czechia (Prague, Brno and Ostrava) in connection with the future construction of a high-speed line, irregular work trips can contribute to understanding the demand and transport decision-making of these passengers on the future HSR route.

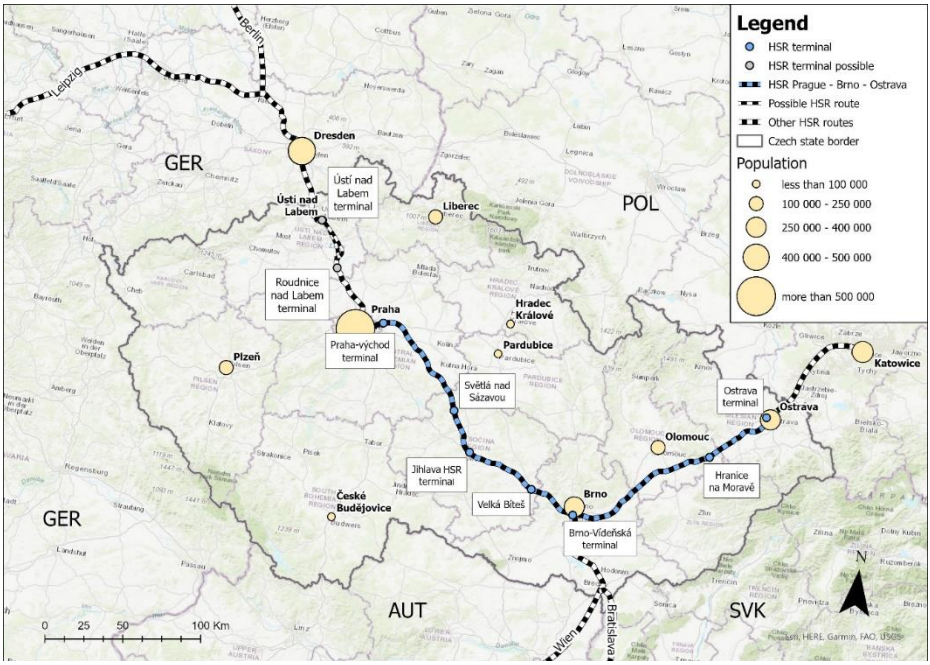
HSR in Czech and European context

To identify irregular travel, it is necessary to take into account the irregular and specific distribution of settlements and their size in the Czech environment. For this study, Prague and its metropolitan area form the main starting point for traffic flows to the other two metropolitan areas of the Czech Republic – Brno and Ostrava. In terms of regional organization, Hampl and Marada (2016) describe Prague as the hierarchically highest metropolitan area, extreme both in terms of size (approx. 20% of the population of Czechia) and in terms of economic maturity, but also in terms of migration growth and development dynamics. The following metropolitan areas of Ostrava (approx. 9% of the population) and Brno (approx. 7%) fall in a hierarchically lower level in terms of size. Their size clearly separates them from the following metropolitan areas, but their other characteristics are essential. The Brno metropolitan area is one of the most successful ones, growing in terms of population and economy, but the growth dynamics is weaker than in the case of Prague and is comparable to smaller metropolises. As a result of a difficult transformation of the economy based on coal mining and heavy industry, the Ostrava metropolitan area is economically problematic and also shows a decrease in the number of inhabitants (SLDB, CZSO). For these reasons (further described by Hampl, Marada 2016), we limited the monitoring to the routes between Prague and Brno and Prague and Ostrava, that is, to the contact of lower-order metropolitan areas with the dominant metropolis of the state.

In terms of the settlement structure and the size of the settlement centers, Czechia does not have ideal conditions for the development of HSR. The domestic connection has the advantage of a relatively high frequency as a result of the highest travel demand between Prague and Brno or Prague and Ostrava, but the construction of the HSR must take into account, given the relatively small size of Czechia (less than 79 thousand km^2), also connections with foreign centers. E.g., Vickerman et. Al (2012) originally considered high-speed rail as a means of improving accessibility between national capitals over a distance of 400–600 km. In this sense, the route Prague – Brno speeds up the connection on the international axis Vienna – Berlin, and the connection to Ostrava shortens the links with Polish Upper Silesia and other Polish metropolitan regions (Kraków, Warsaw). From other foreign centers, you can consider directions to Munich and Nuremberg, to Wrocław in Poland or to Bratislava and Budapest. The connection to Bratislava and Budapest is a natural extension of the connection Prague – Brno. However, later studies of the development of the high-speed rail network in European countries showed the positive effects of HSR construction even between cities located within shorter distances (Vickerman 2014). For example, research in Spain, published by Garmendia et al. (2012), showed how the construction of HSR over shorter distances can create entirely new travel opportunities with a positive impact on regional labor markets or decisions about future residence and workplace. In addition to major intercity routes, the construction of HSR for shorter distances within regions can have the effect of reinforcing the existing travel

patterns to a major regional center (Cheng et al. 2015). Research in the Czech environment (e.g., Pařil and Viturka 2020) demonstrated the most significant positive impacts of the construction of the HSR on the job attractiveness of Prague, followed by the job attractiveness of Brno. Occasional long-distance work commuting between Ostrava and Brno is not considered in our research due to insufficient travel demand caused by, among other things, the smaller population size of these cities than in the case of the connection with Prague; and the mutual proximity of the cities, where occasional commuting is not primarily expected. We can therefore consider monitoring irregular commuting between Prague – Brno and Prague – Ostrava to be relevant.

Figure 1. Planned HSR route according to SŽ (Správa železnic - Railway Administration)[3]



[3] According to the Railway Administration transport model, the new high-speed railway between Prague and Brno will attract up to 60 thousand passengers a day. Particularly attractive will be the travel time between these cities, which will be reduced from the current almost three hours to approximately 50 minutes. Passengers on the Ostrava-Prague route will also experience significant time savings after the completion of the HSR. They should spend around an hour and a half on the train. In addition to express trains with a speed of up to 320 km/h, other railway connections serving smaller towns along the route will also run on the line, which will enable rail connections between high-speed and existing conventional railways.

Factors influencing occasional commuting to work relative to travel distance

The findings of authors from different countries provide evidence that journeys over distances similar to HSR routes are most often significantly influenced by the passenger's income, gender, age, socio-professional group and education. Simplistically, it can be argued that long-distance travel is associated with higher incomes, masculinity, middle-aged travelers from higher socio-professional groups, in addition to higher educational attainment (Hubert and Potier 2003; Dargay and Clark 2012; Rohr et al. 2013). It is generally claimed that the factors mentioned above affect medium and long-distance mobility more than local mobility. For shorter journeys (up to 80 km), patterns in mobility characteristics can be more difficult to observe than for medium and longer journeys, where time availability plays a primary role. Czapkiewicz et al. (2018) present a comparison of the mobility behavior of the residents of large cities with the residents of rural areas in their research, concluding that the residents of large cities travel longer distances than those living in smaller cities and rural areas.

Dargay and Clark (2012) showed a positive association of long-distance commuting with income, depending on the mode of transport chosen. Short commuting distances are more likely to be done by car, medium distances by bus. On the other hand, journeys made by rail and air transport have the longest travel times compared to other modes of transport (Börjesson 2014, De Vos et al. 2022; Mao et al. 2018; Morris and Guerra 2015; Páez and Whalen 2010; Schwanen et al. 2002).

Heterogeneity of income groups is also among the relevant explanatory variables and determines the choice of the transport mode (Vlak 1980; Kitamura 1989; Jara Diaz and Videla 1989; Goodwin et al. 2004). Low-income travelers apparently choose slower modes of transportation to save financial costs (Jara Diaz and Videla 1989). It follows that the value of time is positively dependent on passenger income (Wardman 2001) and that the chosen speed level of the means of transport is positively dependent on income. As a consequence, as incomes rise, commuters choose faster modes of transport, despite their higher financial costs (Van Ommeren & Dargay 2006).

The results of the study by Dobruszkes et al. (2022), which focused on the study of social inequalities among HSR users, show that HSR is dominated by passengers coming from specific social groups, most often men between the ages of 30 and 50, with higher incomes, higher job positions and higher education; with the authors emphasizing that income, job position and the education level are key indicators of social inequality among HSR users. In general, it can therefore be assumed that high-income groups will be potential customers of HSR in the Czech environment as well, which we statistically verify in the empirical part of our research.

Data collection and methodology

A standardized questionnaire was used to determine the potential interest in using HSR for work commuting in the future. The questionnaire was validated by a pilot study. The data collection itself was carried out by a face-to-face interview method, using paper questionnaires of the PAPI (Paper And Pen Interviewing) type. Data collection took place in October 2019 through field workers (interviewers) from a private company. After the end of the field phase of data collection, the work of the interviewers was checked on a

group of 10% of randomly selected respondents through telephone interviews and e-mail correspondence. The sample consists of 1200 respondents. This is a representative sample of residents of the agglomeration of Prague, Brno and Ostrava. The selection of respondents was determined by quota selection, the questioning took place in frequented places, e.g., at supermarkets, sports grounds (e.g., swimming pool) etc.

A limit was set beforehand on the number of respondents who had not traveled between the selected cities in the last year. The interviewers were informed that among the included interviewees, there could be a maximum of one out of ten respondents who did not travel between the given cities. After filling this number, the questionnaire was not implemented with any additional "non-traveler". As it was a deliberate (quota) selection of respondents who travel between Czech metropolises, the said effort to represent the lowest possible number of non-travelers in the sample group was reflected in the difference between the base and sample group regarding the representation of respondents in individual age groups. Elderly persons (60 years and over) are represented in the sample group by a smaller proportion than in the base group. This age group travels to a lesser extent than the others, so the interview with them was very often terminated due to non-travel.

Due to the quantitative design of the research, the answers of the respondents were constructed so that they could be subsequently coded, converted into a primary data matrix (MS Excel) and evaluated using software for mass statistical data analysis SPSS. The results are presented in the following chapter in the form of annotated overview graphs and tables.

From all 1,200 respondents who took part in the questionnaire survey, a total of 228 were selected for the purposes of this article – those who completed at least one business trip between Prague and Brno or Prague and Ostrava between January and September 2019. This selection, therefore, does not include trips of a private nature (recreation, visits, etc.). On the other hand, the respondents who answered the question "What was the purpose of the trip" with e.g., "business", "work", "business trip", "deal", or also "conferences" and other similar variants of answers testifying to the work nature of the trip were included in the selection. The purpose of the trip was evaluated by the authors of the article for all more than 1,200 respondents in a semi-automated manner, when in case of uncertain classification (especially the missing root of the keyword) an individual assessment of the given respondent was performed. A total of 8 respondents were included in the selection in an individual way (e.g., a combination of private and work purposes was indicated), the remaining 220 respondents were included automatically without the need for further evaluation. Therefore, the final number of respondents is adequate for the presented results and the selection itself is not subject to any distortions.

Results: Characteristics of irregular travelers for work and their determining factors

As indicated above, men, middle-aged people from higher socio-professional groups and people with a higher level of education and higher income travel more often over longer distances (Hubert and Potier 2003, Dargay and Clark 2012, Rohr et al. 2013). All these assumptions are confirmed in the characteristics of the sample of 228 selected respondents (see Table 1). The majority of respondents are men (70%), their age slightly

exceeded the average of the entire Czech population, with a relatively long working career. More than half of the passengers had a university education, which is many times more compared to the entire Czech population, and the average net income of these respondents reached 37,451 CZK, i.e., significantly more than the net average of the entire Czech population at the time (less than 31 thousand CZK, depending on the setting of tax credits).

Table 1. Basic characteristics of respondents making irregular work trips

Characteristics		Number of respondents (their share in %)	Parameter value for Czechia
Sex (n=228)	Man	159 (70%)	5,272 thous. (49.3%)
	Woman	69 (30%)	5,421 thous. (50.7%)
Age (n=228)	Average	44.5 years	42.5 years
Income (net, n=228)	Average	CZK 37,451	approx. 31k CZK
Education (n=225)	PS	2 (0.9%)	1,613 thous. (18%) *
	HS without diploma	23 (10%)	2,952 thous. (33%) *
	HS with diploma	77 (34%)	2,789 thous. (31%) *
	University	123 (55%)	1,114 thous. (12.5%) *
Socio-professional group (n=225)	An employee in the commercial sphere	115 (51%)	4,411 thous. (41.2%)
	Employee in the public sector	52 (23%)	470 thous. (4.4%)
	Businessperson, entrepreneur	56 (25%)	891 thous. (8.3%)
	Pensioner	0 (0%)	2415 thous. (22.5%)
	Maternity leave / at home	1 (0.4%)	285 thous. (2.7%)
	Student, apprentice, pupil	1 (0.4%)	1698 thous. (15.8%)

Source: Study of the OP RDE project New Mobility – High-Speed Transport Systems and Transport-Related Human Behaviour, CZSO and data from the Census Questionnaire 2011 (*)

In order to demonstrate the connection between the price of transport and its speed, the questionnaire used hypothetical situations where individual respondents expressed their willingness to travel between Prague and Brno, or Prague and Ostrava, for a specific price in relation to the travel time. The price increased as the travel time decreased. One of the

four variants corresponded to the real travel time and ticket price at the time of the study. The situations were determined as follows (Table No. 2).

Table 2. Overview of assessed situations in the questionnaire

Situation	Prague – Brno (air distance 185 km)	Prague – Ostrava (air distance 275 km)
1	2 hr. 30 min., 175 CZK	3 hr., 300 CZK
2	2 hr., 250 CZK	2 hr. 40 min., 400 CZK
3	1 hr. 40 min., 350 CZK	2 hr. 20 min., 600 CZK
4	1 hr. 20 min., 500 CZK	2 hr., 800 CZK

Source: Study of the OP RDE project New Mobility – High-Speed Transport Systems and Transport-Related Human Behaviour
Note: On October 4th, 2022: 1 Euro = 24.55 CZK

As a proof of the influence of the respondents' income on the decision whether they would prefer to travel for a shorter time for more money or a longer time for less money, a comparison of the average incomes of the respondents according to their preferred hypothetical situation can be used. Analysis of variance (ANOVA) was used for this comparison. It showed that the income averages of the individual groups of respondents (shown in Table No. 3), according to their preferences divided between four hypothetical situations (in the case of expressing support for several hypothetical situations, the respondent could be counted in more than one situation), differ statistically significantly. Tables 4 and 5 reveal which specific situations for the connection between Prague and Brno or Prague and Ostrava statistically differ from each other, depending on the average income of the respondents.

Following the theoretical basis of this paper, we assumed that the preferences of the mentioned scenarios will differ significantly based on the income of the respondents. In the case of the connection on the route Prague – Brno, it is possible to state that with the increasing level of average income, the willingness to pay a higher amount (specifically 500 CZK) for a shorter journey time (specifically 1 hour 20 min.) increases, which corresponds to the findings in the works of Jara Diaz and Videla (1989), Wardman (2001) or Van Ommerem & Dargay (2006).

On the route between Prague and Ostrava, the difference based on the respondents' income was only partially demonstrated. The cheapest and longest hypothetical situations No. 1 and 2 hardly differ from each other in terms of respondents' income. On the contrary, the most expensive and most time-saving option No. 4 would be chosen by high-income groups of people, in particular over the two cheapest and longest hypothetical situations. An interesting paradox (which, however, does not reach statistical significance) is the support for cheaper and longer travel between Prague and Ostrava by people with a slightly higher income over option two. Specifically, in the first hypothetical situation, the trip would take 3 hours and the ticket would cost 300 CZK; in the second situation, the trip is 20 minutes shorter, and the ticket is 100 CZK more expensive. This "paradox", together with the absolute value of income, confirm the difference in both monitored destinations. It is clear that passengers between Prague and Ostrava show an overall lower average salary than "Brno" passengers and that even passengers with the lowest average income of all the four groups are willing to pay extra

for speed (specifically for situation 2). In the case of the connection with Ostrava, even option 1 appears to people with a lower income to be less than optimal, while in the case of Brno, situation 1 is probably suitable. However, this fact requires more detailed research.

Table 3. Average income of respondents according to the selected hypothetical situation

Situation No.	Route Prague – Brno		Route Prague – Ostrava	
	Number of respondents	Income (CZK)	Number of respondents	Income (CZK)
1	78	36,049	67	36,810
2	70	38,019	65	36,019
3	58	39,138	43	39,300
4	28	45,321	32	43,388

Source: Study of the OP RDE project New Mobility – High-Speed Transport Systems and Transport-Related Human Behaviour

Tables 4 and 5 statistically assess the differences between the situations based on the average income of the respondents. Table 4 confirms the significance of the apparent "bounce" of the incomes of the respondents who chose situation 4 in the case of the Prague – Brno destination from all others, because situation 4 is statistically different from situations 1, 2 and 3 (while there is no statistical difference between situations 1, 2 and 3). In this sense, we can consider the fastest situation (1 hour 20-minute drive for 500 CZK) as odd, usable mostly by the richest respondents. This fastest situation corresponds to the planned high-speed rail which will potentially have its own users characterized, among other things, by a higher average income.

In the case of the connection Prague – Ostrava (Table 5), situation 4 is statistically significantly separated from situations 1 and 2. This fact indicates that usability by high-income groups can start with situation 3, i.e., travel time 2 hour. 20 minutes for 600 CZK. This travel time more or less corresponds to the current connection time between Prague and Brno. On the other hand, the slightly slower and cheaper situation 2 (travel time 2 hour. 40 minutes for 400 CZK) is acceptable to most people and it is a good compromise for them. The results from Table 5 show that the fastest situation (no. 4) is the most probable choice for people with the highest income. As in the case of the Prague – Brno destination, the planned high-speed rail between Prague and Ostrava (approx. situation 4) will be intended primarily for users with a higher average income or it will be used for individual travels.

Looking at the above statistics in Table 5, a high-quality connection between Prague and Ostrava by a conventional modernized railway would be sufficient, or the price would have to be subsidized more than in the current state. On the route Prague – Brno (Table 4), it can potentially be assumed that people with higher incomes would be willing to pay for a more expensive high-speed connection, but the option of 1 hour and 20 minutes of travel is sufficient. However, not only the real income expressed as a specific amount, but

the perception of one's own income by individual respondents turned out to be important. In addition to stating the exact amount of their net income, the respondents had the opportunity to indicate whether they consider their income to be below average, average or above average. A fundamental finding is the fact that only 21 respondents from the total sample group of 228 respondents (that is, less than 10%) consider their income to be below average. Approximately 46% of people describe their income as average, and approximately 43% of people describe it as above average. This distribution of the perception of one's own income, where the below-average income category is almost absent, indicates that occasional work trips are primarily a matter of medium or high-income individuals.

Table 4. Statistical mutual difference of individual hypothetical situations on the route Prague - Brno

Situation No.	Hypothetical situation	Situation No.	Hypothetical situation	Average deviation	Standard deviation	Significance
2	2 hr., 250 CZK	1	2 hr. 30 min., 175 CZK	1969.927	2645.333	0.457
3	1 hr. 40 min., 350 CZK	1	2 hr. 30 min., 175 CZK	3088.572	2785.826	0.269
		2	2 hr., 250 CZK	1118.645	2852.909	0.695
4	1 hr. 20 min., 500 CZK	1	2 hr. 30 min., 175 CZK	9272.070	3539.749	.009***
		2	2 hr., 250 CZK	7302.143	3592.782	.043**
		3	1 hr. 40 min., 350 CZK	6183.498	3697.448	.096*

Note: Significance at different significance levels (0.1, 0.05**, 0.01***), n=234.*

Table 5. Statistical mutual difference of individual hypothetical situations on the route Prague - Ostrava

Situation No.	Hypothetical situation	Situation No.	Hypothetical situation	Average deviation	Standard deviation	Significance
2	2 hr. 40 min., 400 CZK	1	3 hr., 300 CZK	-790.471	2935.948	0.788
3	2 hr. 20 min., 600 CZK	1	3 hr., 300 CZK	2490.299	3295.188	0.451
		2	2 hr. 40 min., 400 CZK	3280.769	3314.946	0.324
4	2 hr., 800 CZK	1	3 hr., 300 CZK	6577.799	3623.77	.071*
		2	2 hr. 40 min., 400 CZK	7368.269*	3641.746	.044**
		3	2 hr. 20 min., 600 CZK	4087.5	3937.104	0.3

Note: Significance at different significance levels (0.1, 0.05**, 0.01***), n=207.*

In Table 6 below, we can also observe a statistically significant difference in willingness to travel based on the perceived income for a hypothetical situation where the connection from Prague to Brno would take 1 hour and 40 minutes, and the ticket would cost 350 CZK. People with the below-average incomes, of which there are relatively few in the sample group, would strongly refuse to travel between Prague and Brno under these conditions. People with the average or above-average incomes would then be able to realistically imagine this option, even if their opinions are quite heterogeneous. In total, more than a third (36%) of respondents would then support a hypothetical situation in the form of a trip lasting 1 hour and 40 minutes for 350 CZK. In the case of all other hypothetical situations (on both studied routes), no difference in willingness to pay was demonstrated based on the comparison of perceived income.

Table 6. Chi-square test for hypothetical situation No. 3 on the route Prague – Brno according to the perceived level of income

	Value	Degrees of freedom	Significance
Pearson's chi-square	16.785	6	0.010**

Note: Significance at different significance levels (0.1, 0.05**, 0.01***), N=154.*

An average respondent who wants to travel on the Prague – Brno line, above all cheaply and without significant regard for the travel time, is (approx. 2.5x) more often a man, with an average age of 45.5 years, with a lower level of education, an average net income of 32,526 CZK and most often a public sector employee, which basically also applies to the line Prague – Ostrava, where the average age is 0.2 years lower and the income is 652 CZK higher.

On the contrary, the average respondent with the goal of traveling primarily quickly without significant regard for financial costs on the Prague – Brno line is a man (approx. 3x more often) with an average age of 43.5 years, a slightly higher education than in the previous case, an average net income of 45,321 CZK and mostly employed in the private sector. The same again applies to the line Prague – Ostrava, where, however, the average age is about 1.6 years higher, the average income is 1,934 CZK lower (in absolute terms, however, it is still a high amount of 43,387 CZK), and from the point of view of employment, the majority of employees are still in the private sector, but, compared to the Prague - Brno line, more public sector employees are also represented (however, they still make up less than half of the representation compared to the employees in the private sector).

Conclusions and discussion

The paper dealt with whether the high-income population groups can be potential customers of high-speed lines in the Czech context, which was verified using statistical analyses of data from questionnaire surveys. The basic finding is the fact that incomes play a significant role in the issue of using potential high-speed lines. It should be noted that the selection of respondents for this research (occasional work commuters between Prague and Brno and Prague and Ostrava) had higher average income than the average Czech citizen in 2019. In contrast, a direct influence of education on the use of high-speed

lines was not demonstrated, which is rather surprising, given that more educated people generally earn more money, and thus the paper did not delve deeper into the influence of education. The effect of education on the potential use of (faster, but also more expensive) high-speed connections is certainly a potential subject of further, similar research.

The presented paper brings several new important findings for application in transport policies and strategies related to the planned construction of high-speed lines in Czechia. Similar research with a selected group of occasional commuters has not yet been carried out in Central European research, therefore our findings cannot be directly compared to existing studies. Comparison with other European regions can be misleading due to their different economical situations. Our findings showed that in the case of business trips between Prague and Ostrava, there was basically no significant willingness of occasional commuters to pay for a faster journey by train. In the case of trips between Prague and Brno, the differences were more significant and statistically different. Above all, the potentially fastest but also most expensive connection was significantly dependent on the income of potential passengers. The limit of our finding is that business trips could be imagined by the respondents as paid by the employer and not by themselves, hence these respondents might be less price-sensitive. Despite that, the study furthermore showed that the most expensive and fastest connection was preferred by people with an average net income of more than 43 or 45 thousand CZK, which was 7 or 9 thousand more than the average net income of people preferring the slowest and cheapest option. In general, it can be said that most of the potential occasional commuters would welcome the reduction in the current travel time, but their financial ceiling was apparent. This fact will certainly be amplified by the economic crisis, which will force many to reconsider even this type of expenditure. However, the current railway connection between Prague and Brno, or Prague and Ostrava, is generally considered to be very slow, which is why there is a relatively large number of people in the sample group of occasional work commuters who strongly prefer cars.

The price of transportation, based on the findings, taking into account the economic crisis, will play a significant role in the resulting demand for HSR in Czechia. The role of geography is also important, but not explored in this paper. Among other things, the current transport behavior of the respondents, who, in the current state of the railway network, can already travel between Prague and Brno on a one-day basis without having to spend the night in the destination city, could be reflected in the evaluation of the offered scenarios. Commuting is commonly used to prepare for meetings and for work. This advantage can be eliminated by the fast connection, which may not suit everyone. The current connection between Prague and Ostrava is qualitatively of a completely different nature, where a journey on a one-day basis is difficult to realize by train or car. Here, speeding up and getting closer to the current status of the Prague – Brno destination could potentially be welcome, and respondents indicate that they are willing to pay extra for speed there. Route Administration claims that the most important and hence most prioritized and realistic route on the HSR network in Czechia is the new section Prague – Brno (officially known as RS1 VRT). The subsequent connecting Brno – Ostrava route is currently being considered for partial modernization only. According to the current transport flows (railways + highways), it can be assumed that high-speed railways will transport the most passengers in domestic transport. Given the current state of state and European budget planning, fast rail connection with Ostrava is very difficult to imagine.

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