Extended Abstract Johanna Trager

Cross-border commuting as a special form of migration takes place in regions geographically close to national borders. Whilst potentially motivated by the same factors that motivate migration, research on cross-border commuting is often limited to the economic incentives and therefore to the neoclassical theory of migration. Network impacts, for example, are only briefly mentioned and often not supported by theory – even if discovered. The forces that drive companies along national borders to hire cross-border commuters are also not included in current research, however, crucial to understand the dynamics of the development of cross-border commuting - especially in times of digitalization and skill shortage. This research focuses on the motivation of Czech labor force to commute to Germany and the motivation of German companies to hire Czech cross-border commuters.

In general, what impacts the number of cross-border commuters from the Czech Republic to Germany was never a subject of research. When investigating cross-border commuting in the region, the labor force was seen as an impact factor on the German or Czech economy and not as the depended variable itself. The COVID-19 pandemic has shown, as in many other border regions as well, that the economic entanglement across the Czech-German border is too strong and to co-dependent to be able to close the border and hinder the labor force to follow their work obligations. In the Czech-German border region, cross-border commuting vastly takes place in professions that require physical presence and show a lower or medium skill level. Even though the Czech wages catch up, one of the highest wags gaps within the EU is still observable between Germany and the Czech Republic. Together with a high language barrier, a recent historical and political past, and a highly rural area on both sides of the border, the Czech-German border region offers great opportunities to research the development of cross-border commuting within the EU.

Special attention is set on the impact of networks, the commuters' household and family situation, the skill shortage, as well as digitalization and automatization in German companies. Preliminary findings of a quantitative analysis show that economic incentives play a crucial role, however, do not fully describe the dynamics of commuting. Furthermore, the analysis shows only little explanatory power and leads to the assumption, that motivation factors might be highly individual and not measurable by statistical analysis of aggregated labor market data. Branch and county specific differences were obtained. Factors like the household of a cross-border commuter or the private network of cross-border commuters are not measurable at all

with the available data, and neither is the factor of a random possibility of starting a new job that happened to be in Germany.

A commuter's household and regional belonging is part of the bigger picture. Turning away from individual decision-making and including the approach used in the new economic of migration, namely a household-based rather than an individual decision of whether to migrate (commute) or not, allows to adapt to multi-earner households. These households then need to coordinate more than one job around a living situation. The regional belonging can influence the decision-making process and loosens the rational decision of where to live.

Networks of Czech cross-border commuters can be helpful in finding a job in Germany. Cross-border commuters can communicate – according to migration theory – vacant positions to Czech labor force that does not (yet) commute. But – contrasting migration theory – also the network in the home country can play a role because of which labor force commutes across national borders and does not, for example, migrate. This network can be again connected to the household of a cross-border commuter, but also to the extended family, peers, but also to the living situation. Owning property in the country of residence might also influence the decision of whether to commute across borders. Regional belonging can be impacted by the existence of a private network as well.

Skill shortage in Germany, and in many other countries, is on the rise. Companies that are located in a border region can benefit from the access to a foreign labor market. Especially, when comparing with companies that are located more centrally in a country.

To analyse the above described (potential) impact factors on Czech cross-border commuters that work in Germany, 20 interviews with companies that settle in the border region of Germany and currently employ cross-border commuters from the Czech Republic as well as 20 interviews with Czech cross-border commuters are conducted. The interviews take place in a semi-structured form. Companies are approached via the official economic development centres of the counties in the border region, as well as via random selection online. Cross-border commuters are approached via Facebook groups that were created during the COVID-19 pandemic and exist ever since, as well as the word of mouth.

The preliminary findings of the study show that economic incentives in form of higher wages and child benefits indeed play a crucial role when starting to commute. When asked whether the decision to start commuting was an individual or a household decision, the cross-border commuters initially answer that it was their own decision. But when asked what the higher

wages will be used for, the commuters reply that the money is used for the education of the children, a new family car, or to pay a mortgage for the family house. Thus, even if not actively, the household, in most cases the family of a commuter, plays a role in the decision-making and so does the job of a spouse.

Cross-border commuters helped their peers to find a job in Germany, but also received help when looking for a job. Thus, a network effect among the commuters is detectable. The companies as well actively use the networks of their Czech employees and offer financial rewards for recruiting new employers – the rewards are a tool to work against the skill shortage. Even though, German companies also use the network strategy to hire German employees, they answered that especially when the workers do not speak German, the network strategy is most helpful. In this case, the Czech cross-border commuters that already work in the company help explaining and advertising the job offer in Czech language and are able to provide their personal opinion on the work as well. Digitalization eases the language barriers and automatization changes the jobs of cross-border commuters but not the labor demand. In logistics, digitalization eases the navigation of routes and the loading and unloading process. In manufacturing, machine settings can be adopted to the workers mother tongue. In general, language plays a less crucial role than before digitalization. However, this does not hold for the health sector. Here, Czech cross-border commuters are needed to cover skill shortage, but the strong dialects in the border region create a risk of treatment errors. Automatization in manufacturing does not decrease the need of Czech cross-border commuters in the German companies and risks of substitution of manual human work is not detectable. However, the job description of the worker, especially the Czech cross-border commuters, changes due to automatization. The location of companies in the border region delayed the need for digitalization when compared to companies in more central areas of German. The access to cheaper labor force in the past didn't make it necessary to invest in digitalization. However, the willingness of Czech crossborder commuters to commute long distances decreases and at the same time, wages in the Czech Republic increase. Therefore, some German companies lack behind in digitalization due to the changing dynamics in cross-border commuting from the Czech Republic. Finally, the difference in vocational training on a low to medium-skilled level in Germany and the Czech Republic creates a spill-over effect of knowledge useful for German companies. In some of the investigated branches, companies actively distribute the Czech cross-border commuters among their working teams to generate a spill over effect.