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# THE IMPACT OF COVID-19 ON LIFE IN A CROSS-BORDER AGGLOMERATION OF BRATISLAVA

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#### Abstract

The emergence of cross-border suburbanisation is based on the geographical proximity of a large city and the unrestricted permeability of state borders. A social group, the 'transnational borderlanders', is emerging (Martinez, 1994), who use the territory of both states on both sides of the border daily, e.g. they live on one side and work on the other. In our case, a cross-border suburbanisation has developed, with Bratislava residents moving to nearby villages in Hungary. The open border is a prerequisite for their daily life, and they took a risk when they bought a property in another country. The study examines how the closing of borders during the COVID-19 epidemic affected the lifestyle of Slovak citizens who settled in Hungary and commuted to Bratislava and the new situation of the cross-border area. To this end, a questionnaire survey and interviews were conducted in four settlements in Hungary inhabited by Slovaks. The study summarises the results of these surveys and concludes that the temporary closure of borders did not have a significant impact on the satisfaction with cross-border lifestyle, and the willingness to move. In fact, there are signs that the lockdown has dissolved the previously entirely Bratislava-centric way of life (shopping, using services, registering an address, etc.).

Keywords: COVID-19 impacts, agglomeration, Bratislava, cross-border, suburbanisation

#### INTRODUCTION

In Europe, with its increasingly open borders, it is becoming more and more common to be resident in one country and work in another. A large cross-border commuting pool of workers has emerged. The introduction of the Schengen border regime has reinforced this process, but cross-border commuting still requires specific geographical, economic and social characteristics. Free border crossing has created the conditions for daily cross-border commuting only in certain places and regions. The majority of people live and work in the same country, and a very small proportion of the total working population commutes to other

countries, crossing national borders daily. This group can be called transnational borderlanders (Martinez, 1994), who live in two states at the same time and this is their daily routine. They should not be confused with those who live and work (study) in a state as a citizen of another country, as immigrants, or as foreign workers. The transnational borderlander group is situationally specific, as they move in a local, micro-regional space while crossing a national border. Their problems generally arise from the fact that the legislation on foreign workers in all countries, including the European Union, is designed to deal with cases where a worker moves to a country for a shorter or longer period, establishes residence and takes up employment there. It is more difficult for the administrations to deal with cases where a worker is employed in one member state and is entitled to a pension or health care there, but is resident in another member state and does not have a domicile in that State. The Schengen border regime creates many such situations, but the number of such situations is negligible in terms of the total population, so the various regulations do not take such cases into account, and this leads to numerous conflicts, which are resolved in a grey, individualised manner. The COVID-19 virus epidemic was the time when this problem became visible to everyone. At the beginning of the epidemic, each state tried to protect its citizens by closing its borders to traffic and restricting the entry of foreign nationals. The European Commission and its President criticised the unilateral decisions and took a stand in favour of keeping internal borders open without restrictions on 13 March. The reintroduction of internal border controls by Member States has prompted the EU Commission to take action. With the help of Commission President Ursula von der Leyen, a draft has been drawn up that would close the external borders to the movement of people for 30 days, allowing only EU citizens to enter, and only doctors, nurses and researchers to travel. At internal borders, different governments have put in place different border regimes. Citizens abroad, commuters across the border, have been put in a very uncomfortable situation by these quick decisions. Uncertainty, even unpredictability, has become the experience of the masses. On 30 March, the European Commission formally requested Member State Governments to allow seasonal agricultural workers and health workers to cross borders in order to ensure food supplies (Hajdú & Rácz, 2020). For those who commuted within the state, the restrictions ensured access to the workplace, but no one thought about those who were forced to cross the border to get to their workplace every day. Of course, solutions to these situations were quickly found, but the case highlights the additional risks of living transnationally as a borderlander.

#### THEORETICAL BACKGROUND AND LITERATURE REVIEW

### The phenomenon of cross-border suburbanisation

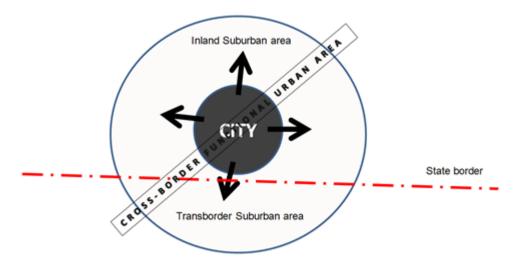
A particular variant of this lifestyle is when the place of residence is moved to the other side of the state border, and the worker becomes a cross-border commuter (Hardi & Lampl, 2008). This is typically found around large cities along the border, where a typical phase of urban development, suburbanisation, occurs and the spread of built-up areas reaches and then crosses the border. If the border can be easily crossed and the real estate market situation is favourable, mass resettlement on the other side of the border will start. Relatively few examples of this can be found in Europe, as it requires a truly unique geographical location. However, it is characterised by rapid and mass movement locally. Compared to the more common situation of looking for a job on the other side of the border, in this case, one establishes a residence there. This entails a much greater personal risk than setting up a workplace on the other side of the border, especially if the place of residence is an owner-occupied property and not a rented dwelling. (In our case, the resettlers almost exclusively buy their property.) The family's assets are invested (as in all property purchases), but here in another state. This mass movement affects a few municipalities, where it poses serious challenges for the management and development of the municipality.

The rules today are permissive and the customer rarely assumes that the freedom to cross borders may change. Property is typically purchased for decades, and it is difficult to predict (especially in Central Europe) how political relations between countries will evolve over such a long period (Krejčí, 2005).

Language skills or cultural integration are less problematic when setting up a home than when working abroad (Lampl, 2010). A resident who is settled in a foreign country has fewer language constraints than a worker who needs to speak the language (or an intermediate language) of the other country to work effectively. Moreover, in the suburbs, mass relocation creates a linguistic community of its own, and the host community has to adapt to the language of the new population. The resident, the property owner, has far more rights and entitlements than the worker, as he or she with the house/plot purchased becomes also the 'owner' of a theoretical part of the municipality.

Cross-border suburbanisation takes place when the urban sprawl of a city near the border reaches the state border and crosses that, in the presence of adequate conditions. The result may be the birth of a cross-border functional urban area (Fig. 1.).

Figure 1 Transborder suburbanisation



Source: by Authors

The progress of the integration of the EU and the breaking down of the barriers to international movements and acquisitions of property led to the increasing frequency of the appearance of similar situations (e.g. in the case of Trieste of Copenhagen [Jagodič 2010]). The strengthening of the freedom of movement not only results in new forms of migration but also the transformation of migration strategies, which then create migration forms of new quality (Pijpers & van der Velde, 2007).

Accordingly, it is an international migration which is not simply a specific form of migration but a qualitatively new phenomenon. We do not have to distinguish this phenomenon from other types of international mobility. The most frequently researched phenomenon is international migration which is realised between two states, and its main trigger is the disparity of incomes between the two countries (Tóth & Kincses, 2009). This migration often involves large distances. It has several impacts on society and spatial development both in the area of origin and the receiving area (Williams, 2009). We have to distinguish, however, the phenomenon of cross-border mobility (Hardi, 2010), which is also driven by an economic advantage, but an important motivation is spatial proximity, in certain cases even stronger than the financial gains. Cross-border employment can be motivated by the accessibility of the workplace as well as income disparities. Cross-border movement and activity can be triggered by smaller disparities in potential financial gains, thanks to geographical proximity. Because the birth of functional regions is built on the long-term spatial movement tracks (Haggett, 2006), the appearance of spatial proximity-motivated forms of cross-border movements and interactions can serve as the foundation of the birth of

transborder regions, which are already separate spatial entities and qualitatively different from the programming and institutional regions organised along the border (Rechnitzer, 1997; Hardi, 2010). In a structural approach, these can be called transnational local spaces. These cross-border regions can, as regards their functions, be labour or retail trade catchment areas, cross-border urban spaces (suburbanisation), or their most advanced form, cross-border agglomerations.

The problem arises from the fact that the persons involved are linked by their nationality to one state, but by their workplace, place or residence or the service used (e.g. health care services) to the other state, so their everyday life takes place on both sides of the border. The national administrative systems usually treat persons with other nationalities according to the rules of international migration, where habitual living and nationality are easy to separate geographically. This disparity is the source of many difficulties for the inhabitants of the cross-border regions but sometimes also offers the possibility for illegal or semi-legal benefits, due to the lack of regulation and legal clarification. This is why some authors suggest that the term "transnational migrant" or "transmigrant" should be introduced: these are persons who use habitually, actually simultaneously the territories of two states (Strüver, 2005; Jagodič, 2010; van Houtum & Gielis, 2006; Gielis, 2009). Such persons can only be called migrants because of their nationality and the use of the different state territories as the distances managed in their daily routine and their other features are no different than the movement of an ordinary citizen; the only difference is that they cross a state border (maybe several state borders).

Cross-border suburbanisation is a distinctive spatial movement in transnational local space. The existence of this phenomenon is the function of the simultaneous presence of several conditions. Some of these conditions are related to the phenomenon of suburbanisation and are necessary in the case of all cities for this phenomenon to become massive: these are the development of the local economy, the intensity of the real estate market, and the concomitant dynamic increase of the demand for real estates. Another part of the conditions is necessary for the "urban sprawl" resulting from suburbanisation to cross the state border. These are as follows:

The specific geographical situation of the city. On the one hand, it refers to the proximity of the state border, which cuts across the optimum space of movement of outmigrants. It is also important to note that the expansion of the city to other directions within the home country is limited, either due to geographical constraints or the use of the areas for other purposes, presumably due to their low social status. Besides physical

space accessibility may also be of decisive importance, i.e. the endowments and the development potential of the transport infrastructure, the inner spatial structure of the functional parts of the central city and the location of the main commuting destinations also matter. These may lead to the use of the territory on the other side of the border, as a possibility and a must.

- The freedom of international movements. The former regimes restricted, even in case of relatively free border traffic, the multiple crossings of the border in one day, also, they made it difficult or impossible to settle down or buy real estate abroad. All these were allowed by the EU in its member states, even in places where it had been difficult or impossible before. It does not only mean the freedom of purchase but also the long-term security of keeping the real estate acquired. Owning real estate nowadays allows settling down for habitual living in another state, and not only travels for tourism purposes.
- The physical permeability of the border as a precondition of accessibility. It depends on the character of border guarding (or its mere existence) and the capacity of the infrastructure elements crossing the border.
- Besides all these, evidence depends on the character of border guarding (or its mere existence) and the capacity of the infrastructure elements crossing the border.
- In addition, financial aspects can also play a role in the birth and development of cross-border suburbanisation. There may be great differences between the costs of everyday life and real estate prices between neighbouring states. Real estate prices are heavily dependent on local conditions. In the case of closed or partially closed borders, the border regions are often peripheral, even in the presence of a central area on the other side of the border. The proximity to the city in the other country is rarely reflected in the real estate prices of the given country. If the borders are opened, it is only a peripheral area that directly meets a dynamic centre, and the price differences are substantially larger than we could expect based on the physical distance. This was the case for Bratislava and the neighbouring Austrian and Hungarian villages, but a similar phenomenon can be observed at the Romanian-Hungarian border, in the Hungarian neighbourhood of Oradea.
- Lastly, the existence and the features of the mental border should be emphasised. Nonetheless, this small-distance type of migration is not as traumatising for the individual as classic international migration (Ambrosini, 2008; Jagodič, 2010), since it occurs in the same space. The mental circumstances of migration should also be

highlighted for several reasons. On one hand, by moving to the other side of the border we transfer our property to the territory of another state and partly subordinate ourselves to its laws, which is not without risk, particularly if the neighbouring states are not in a long-term friendly relationship. The mental barrier, the "mental distance of the other state" can arise to large extent from the cognitive strength of national spaces, created by the school system, media, politics and socialisation of national character. The mental distance and prejudices may be significant, towards nationality, ethnicity and the spoken language. This may reinforce the opposition between "locals" and "in-migrants" typical in other suburban regions too, and this opposition may have an ethnic touch, notably in the case of disparities in the income level of in-migrants compared to local inhabitants, primarily if they come from a poorer country. Along the northern part of the German-Polish border, one can find the economically less advanced German regions. Outward migration from the city of Szczecin to the nearby German areas has started, and in some cases, the income level of the moving Polish middle class is higher relative to a substantial part of the inhabitants in the peripheral German region (Sontheimer, 2008), which has been a source of ethnic tension. Those who speak or understand the language of the other side and are familiar with its features are in a privileged position. In such cases, prejudice is also less frequent.

The study of the impact of the COVID-19 epidemic is a challenging task for spatial scientists (Baranyai & Ferencz, 2023; Bailey et al., 2020), especially in border regions, whose new types of processes are based on greater local autonomy, free border crossing and the decentralisation of power. It has had variable impacts from region to region, increasing or decreasing existing spatial inequalities (Czirfusz, 2021; Palomino et al., 2022). Particularly important for large cities and urban regions, it has changed their spatial processes, with urban regions being particularly affected (Florida et al., 2021; Szirmai, 2021). During the COVID-19 epidemic, as in all periods of crisis, it was common for central governments to take control of defence, a phenomenon known in the literature as 'coronationalism' (Baranyai & Ferencz, 2023; Bouckaert et al., 2020). This centralisation obviously leaves less room for local specificities such as transnational borderlander lifestyles. Centralised decisions, the closing of borders, is a national decision, which is of course temporary. The emergence of local interests and local decision-making can help to increase resilience in times of crisis (Pálné Kovács, 2023).

#### Cross-border suburbanisation around Bratislava

After the accession of Hungary and Slovakia to the EU (2004) and the introduction of the Schengen border system (2007), the Austrian and Hungarian border settlements became suburbs of Bratislava. In recent years, economy-driven commuting has shown a rising tendency (Kézai et al., 2022).

Cross-border suburbanisation around Bratislava represents a rare type of suburbanisation due to the geographic location of the Slovak capital city, on the border of three states. It is worth mentioning that Bratislava's population increased until 1990 as a result of the annexation of several surrounding settlements to the city and large-scale housing estate investments at that time. Since 1990, Bratislava's population has increasingly flowed out to the suburban settlements surrounding the city (Slavik et al., 2005; Zubrický, 2010; Tóth-Bodó, 2023). People are moving from the city centre to the suburbs for more space, better housing options, and a quieter lifestyle. Many residents of Bratislava's suburbs work in the city centre or nearby industrial zones. Improved transportation networks, including highways and public transportation options, make it possible for people to live in the suburbs and commute to their workplace in the city.

On the Austrian side of the border, three municipalities (Kittsee, Berg & Wolfsthal) are the most affected by cross-border suburbanisation processes. Huemer (2018) described them as the most dynamically growing villages in Austria (Farkas & Klobučnik, 2021).

As for the Hungarian side of the border, the suburbanisation of the Slovak capital is the most typical in Upper Szigetköz (Felső-Szigetköz in Hungarian), the northwestern part of the Szigetköz region, due to its greater proximity. In this region, the Danube River and the Mosoni-Danube arm of the river dominate the landscape. It shares many characteristics and attractions of the broader Szigetköz region (natural beauty, wetlands, meadows, lakes, and waterways), but it has its own features and communities. Upper Szigetköz is crossed by a network of rivers and water channels, providing opportunities for boating, fishing, and waterbased activities. The area is easily accessible from the nearby cities in Hungary and Slovakia. The most typical destinations of Slovak suburban outmigrants are Rajka, Dunakiliti, Feketeerdő, Dunasziget and typically (highest rates) the same as our study area (Fig 2.).

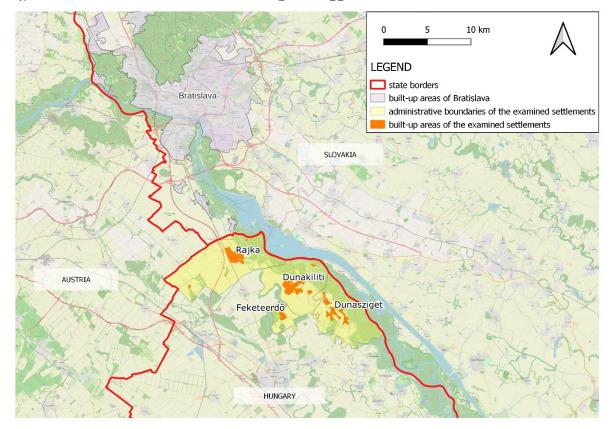


Figure 2 Examined settlements in the Hungarian agglomeration of Bratislava

Source: Edited by Andrea Pozsgai, 2023

Focusing on the Hungarian areas, a number of researchers have already examined cross-border suburbanisation processes in the last decades. Among them, it is worth highlighting the empirical research of MTA RKK NYUTI (Győr) and Forum Minority Research Institute (Somorja), carried out with the support of the Interreg project (2008-2010). Furthermore, Szekely's work (2013) deals with urban-rural relations as a source of knowledge transfer in the surroundings of Bratislava.

A few years later, Michniak (2016) examined the main trends in commuting in Slovakia, including cross-border commuters to and from Bratislava. Balizs and Bajmócy (2018, 2019) investigated cross-border suburbanisation around the Slovak capital and highlighted the changing social, ethnic and architectural character of the "Hungarian suburb".

Ocskay, Jaschitz and Scott's study (2021) is particularly relevant from the aspect of our research as it discusses cross-border urban functional cooperation along the Slovak-Hungarian border during COVID-19. According to their findings, Bratislava's functional urban area is continuously expanding, stretching over the state borders, including Austrian and Hungarian municipalities (Bogár, 2019). The main reasons for moving are the low price level of real estate compared to Bratislava, the semi-natural rural environment and the excellent

accessibility of the downtown (from Rajka or Dunakiliti, commuters reach the city centre faster than from Slovakian villages) (Šveda et al., 2019).

Likewise, relevant conclusions can be drawn from Domonkos-Pawera's paper (2022), which has examined socio-economic disparities caused by the pandemic in cross-border areas of Slovakia. Suburbanisation in Rajka formed the subject of a thesis as well. Tóth-Bodó's empirical research (2023), including a survey with permanent population and local government, and in-depth interviews, has provided valuable information about the life of the settlement during the post-pandemic period.

Kleemann, Struve and Spyra (2023) examined the conflicts in urban peripheries in Europe, including Rajka. According to their findings, the conflicts arise from the fact that new Slovak residents in Rajka, commuting for work to Bratislava, have a higher income compared to the long-established residents of this village and have introduced a different social life. Moreover, the language barrier has prevented integration into the local community.

# The purpose and methodology of the research

It is well known that many countries have implemented various COVID-19 measures and restrictions at their borders to control the spread of the virus. The impacts of this situation were examined from different aspects in the scientific literature of regional development. The study of Sikos T. et al. (2022) gives an analytical evaluation of customer and retail responses to today's market- and nonmarket-related challenges. The authors focus on analysing the effects of the COVID-19 pandemic on trade and consumption. Research has also examined the tourism and travel aspects of COVID-19 (e.g. Kubíčková & Holešinská, 2021; Čaušević & Osmanović, 2023; Krasniqi et al., 2023).

In our current research, our aim is to examine how the cross-border suburbanisation process around Pozsony has changed as a result of COVID-19 regulations.

From 7 a.m. on 13 March 2020, Slovakia reinstated border control at road border crossings – except from the direction of Poland. Only Slovak citizens and those who had a residence permit were allowed to enter Slovakia. All those arriving from abroad had to go into quarantine for 14 days. Free commuting was limited to a thirty-kilometre radius from the crossing and could be carried out only with an employer's certificate or a registered address. In December 2020, commuters were obliged to undergo PCR or antigen testing not more than seven days prior to departure, causing chaos at the border.

From 15 February 2021, all passengers who arrived in Slovakia from any country in the world had to go into mandatory quarantine for 14 days (Hardi & Nárai, 2021).

Based on the latest information, from 6 April 2022, all restrictions on entry to Slovakia have been removed. Thus, incoming persons are not required to provide a confirmation of vaccination, a negative test or a confirmation that they recovered from the COVID-19 disease. Furthermore, persons coming to Slovakia do not need to register in any system (visitbratislava.com, 2023).

Many of the authors mentioned above focused on the demographic processes in the Bratislava suburb area and pointed out a rapid change in population and housing stock in Rajka. In the following, we will review these essential statistical data (Fig. 3.).

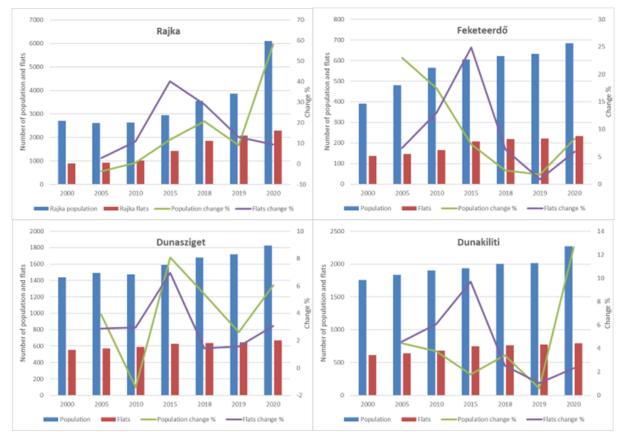


Figure 3 Permanent population and housing stock in the examined settlements

Source: Hungarian Statistical Office, processed by authors.

As the figure above illustrates, the permanent population of Rajka has been increasing significantly since 2000. Over the past two decades, the number of local inhabitants and the size of housing stock have shown an over two-fold rise. Other municipalities are also growing, but not as visibly as Rajka. Significant growth is anticipated between 2019 and 2020. This phenomenon can be explained by the fact that, during the COVID period, the closed border could be crossed only by those people who had permanent residence in one country and a place of work in another. For this reason, Slovakian settlers who moved to

Hungary in previous years and did not register their place of residence were required to do so in 2020. This produced rapid population growth statistically.

To explore the impact of the COVID-19 epidemic on cross-border suburbanisation processes, a questionnaire survey was conducted in August and September 2021 in four Hungarian settlements in the cross-border suburban area of Bratislava, where a high number and proportion of the inhabitants have moved from Slovakia.

The aim of the research was, on the one hand, to detect the motivational factors of people moving from Slovakia to Hungarian settlements: i.e. to identify the criteria for choosing a place of residence in Hungary, and the dominant criteria for choosing a particular building plot/house/flat in a given settlement. On the other hand, the assessment intended to explore how commuters organised their daily lives prior to the COVID-19 epidemic and after the general lockdowns that occurred during the first wave of the epidemic. For example, respondents were asked about where they typically worked, used various public and other services (e.g. education, health care, cultural and leisure, commercial services, etc.) and pursued various activities (e.g. sports, other recreational activities) before the outbreak of the pandemic and how the outbreak and the subsequent lockdown changed this. The questionnaire examined how the introduction of new border crossing rules, and difficulties in daily commuting affected the organisation of their everyday life, and their feelings about being a "transnational borderlander", who lives simultaneously on both sides of the state border, and whether it raised the idea of moving back to Slovakia.

The survey was carried out in four Hungarian settlements (Rajka, Dunakiliti, Dunasziget, Feketeerdő) with the help of interviewers who spoke both Hungarian and Slovak languages. The questionnaire was completed by a total of 298 households (Table 1) who had moved to Hungary from Slovakia and were living here. The sample is not representative, and the questionnaires were filled out using a snowball sampling method. SPSS statistical software was used to process the data.

**Table 1** Number of questionnaires by municipality

Name of settlement	Number of questionnaires	Share (%)
Dunakiliti	25	8.4
Dunasziget	28	9.4
Feketeerdő	44	14.8
Rajka	201	67.4
Total	298	100.0

Source: Questionnaire survey 2021.

#### Sample characteristics – socio-demographic indicators

The questionnaires included both individual and household-related questions. Moreover, socio-demographic indicators (gender, age, education, labour market status, mother tongue) were assessed for the whole family/household. For the present analysis, these are provided primarily for the respondents, with some exceptions.

57.6% of respondents were female and 42.4% male. In terms of age distribution, all adult age groups are represented in the sample, with the highest proportions of respondents being in their 30s (29.1%) and 40s (26.9%). The youngest respondent was 18, and the oldest was 91, with a mean age of 46 years in the sample. In terms of educational background, the sample has a high proportion of graduates (48.5%), with a further 38.5% having a school leaving certificate and 5.1% having completed higher vocational education. The majority of respondents have at least a secondary education. The labour market situation is therefore favourable in itself, with three-quarters of respondents in employment, while those who are not are either retired or on disability pension (12.5%) or in receipt of any type of child allowance (7.1%). The proportion of those who are in unemployment status is minimal (2%). 45% of those with a job at the time of completing the questionnaire worked as a subordinate, the rest in a managerial position: 14.5% as top managers, 22.7% as mid-level managers and 17.7% as team leaders. Both in terms of education and labour market situation, the spouses/partners of respondents have similar characteristics, with a very high proportion of highly qualified people (53.7% with a degree, 35.2% with at least a high school diploma), and 53.7% in management positions. These indicators also show that cross-border suburbanisation processes have primarily involved the more educated and better socially advantaged strata.

At the household level, nearly half of the respondents (47%) have at least one child and a quarter (25.8%) have two children living with them. However, very few respondents have more than four members living in the same household, with nearly a tenth having five and 2.3% having six.

The financial situation of the families is favourable, with more than half (55%) managing to live well on their income without problems and 35.9% managing to live well on their income regularly. None of the households in the sample has frequent financial problems. The vast majority of respondents reported their household income per capita in euros. For a relative majority (37.5%), per capita income in 2021 varied between  $\in$ 600.1 and  $\in$ 1,000, but for nearly one-third, it exceeded  $\in$ 1,000. For those respondents who expressed their income in HUF (Hungarian Forint), one-third had a per capita income between  $\in$ 200,001 and  $\in$ 350,000,

while nearly one-third (30%) had a per capita income above €350,000, which allowed for a fairly high standard of living.

As the research is investigating cross-border suburbanisation, it is also worthwhile to look at the mother tongue and nationality of the new settlers. The questionnaire included questions on their mother tongue. The data confirm the over-representation of ethnic Slovak residents among those moving from Slovakia to Hungary. 83% of the respondents moved to Hungary as native Slovak speakers, and 84.7% of their spouses/partners are also native Slovak speakers. Respondents with a Hungarian mother tongue make up only nearly one-seventh of the sample, but two-fifths of them have a Slovak mother tongue partner. Almost all (93.3%) of our Slovak mother tongue respondents have a Slovak mother tongue partner. There is a significant relationship between the variables of medium strength (Cramer's V 0.543).

#### **RESULTS**

# **Moving to Hungary**

The vast majority of the research respondents moved to Hungary between 2013 and 2018. The process began in the early 2000s, but Figure 4 shows an increase from 2008 to 2010, and then again from 2013; the peak years are 2014 and 2016 (Figure 5). In the sample, those who moved to Rajka (the municipality where most people moved from Slovakia) mostly arrived since 2013, with Feketeerdő rising from 2009 to 2010, Dunasziget being more likely to have moved between 2008 and 2011, and Dunakiliti rising in 2015. These outflows are not unrelated to real estate developments and investments in the municipalities (e.g. plot developments, new residential area developments). 88.3% of our respondents moved from the Slovak capital city, Bratislava to Hungary. In the period of our survey (August-September 2021), their vast majority (87%) had a permanent place of residence in Hungary. This is the case in almost all of the surveyed settlements. 99% of the respondents from Rajka named Rajka as their permanent place of residence. The same trend is observed in Dunakiliti and Feketeerdő. For respondents from Dunasziget, on the other hand, the municipality is primarily a temporary residence, a second home for people whose permanent residence remains Bratislava. Of the 28 respondents from Dunasziget, only two have a permanent residence in this municipality.

45
40
35
30
25
20
15
10
5
0
2000 2003 2005 2006 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021

Figure 4 Year of moving from Slovakia to Hungary (number of persons)

Source: Questionnaire survey 2021.

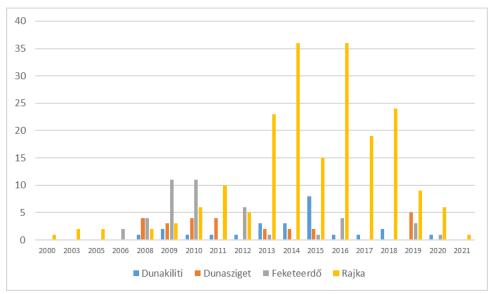


Figure 5 Year of migration from Slovakia to Hungary by municipality (number of persons)

Source: Questionnaire survey 2021.

## Motivations for the choice of settlement

The main motivation for respondents to change their place of residence was to have a home with a private garden, green space or a larger plot/area than before. Much less motivating factors were the better accessibility to transport or even the possibility of living in a larger or better-quality apartment/house, but rather the influence of green space and environmental factors (Figure 6).

Mean 3,72 Own green area, vard 3,70 Own garden 3,56 Larger own plot/area Environment 3,56 3,42 3,39 Lower housing costs 3,25 A bigger apartment 3,20 Better quality house/apartment 2,75 Good transport options 0 20 40 60 80 100 ■ not at all ■ slightly ■ to a large extent ■ completely

**Figure 6** Motivation to move – To what extent did the following factors play a role in your decision to move\* (% and mean)

Source: Questionnaire survey 2021.

Decisions about where to live – where to move – are influenced by many factors, not just one. This is also evident from the answers to our question on why respondents chose to move to a given municipality. However, it is also clear that there are aspects that stand out. One of the main motivations for moving to a settlement in Hungary is the favourable property prices. However, the most important factor in the choice of settlements is their location, especially their proximity to Bratislava. Both factors were mentioned by the vast majority of our respondents. In addition to favourable property prices, the availability of suitable property, not only in terms of price but also, for example, size and other characteristics, and the affordable cost of housing and living were also mentioned. A beautiful natural environment is also an important attraction. Among the motivating factors, the transport situation of the settlement is not a major factor, nor is the condition of the infrastructure or the overall image of the village. The prestige of the living environment, and overall, family or friendship ties do not play a decisive role (Figure 7).

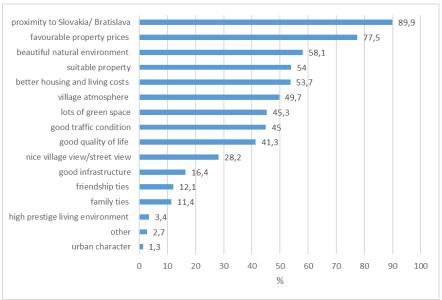
However, the largest variation was found in this aspect between the municipalities surveyed. Not only were respondents asked to indicate which factors were decisive for them when choosing a settlement, but they were also asked to highlight the most important factor. In this regard, we have found interesting differences between the municipalities surveyed. In Rajka, the 'strength' of proximity to Slovakia/Bratislava is prominent, while in Feketeerdő this was also the most important factor. In Dunasziget, the most important factor was the availability of property prices, while for Dunakiliti it was quite different, where the most

<sup>\*</sup> The question was measured on a four-point Likert scale, where 1: not at all; 2: slightly; 3: to a large extent; 4: completely.

important factor for settling was family ties, followed by proximity to Bratislava and property prices (Figure 8).

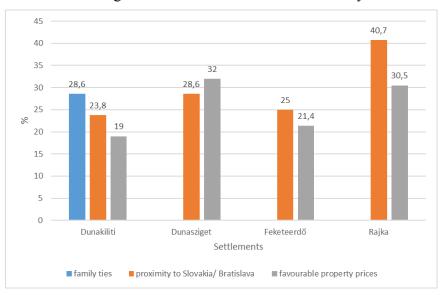
The overall proportion of those who moved to another street, house or flat within the administrative territory of the settlement after moving to the settlement is 15.8%. Intramunicipal displacement occurred in all the municipalities surveyed but was most common in Rajka.

**Figure 7** Distribution of answers to the question "Why did you/do you choose this municipality?" (% of respondents)



Source: Questionnaire survey 2021.

Figure 8 Key factors influencing the choice of settlement in the surveyed settlements (%)



Source: Questionnaire survey 2021.

# The impact of COVID-19 on work and the use of services and leisure activities

The outbreak of the coronavirus has had a significant impact on almost all aspects of life, making it difficult to organise everyday life, and particularly hard on people living in a cross-border way. We first described its impact on the location of work and commuting, then how it affected the use of various public and other services (e.g. education, healthcare, cultural and leisure services, commercial services, etc.) and the pursuit of various activities (e.g. sports, other recreational activities). Our aim was to explore whether and how the COVID-19 epidemic had influenced respondents' choices to pursue these activities in Hungary or Slovakia.

In terms of the location and form of work, respondents had the possibility to answer the questionnaire in a structured way. Figure 9 shows the possible formats. From the responses received, it is clear that before the outbreak of the coronavirus epidemic in 2020, the majority of respondents (59.7%) commuted to Slovakia daily, and almost a quarter (21.8%) commuted several times a week. Few of them had a job in Hungary and working from home (home office) was not very common. Less than a tenth of the respondents worked in a home office. The epidemic and the related border restrictions have changed this picture. There has been a significant decrease (below 40%) in the number and proportion of daily commuters to Slovakia. In parallel, the prevalence of home office work has increased. In autumn 2021, one-third (31.5%) of our survey participants worked from home (Figure 9).

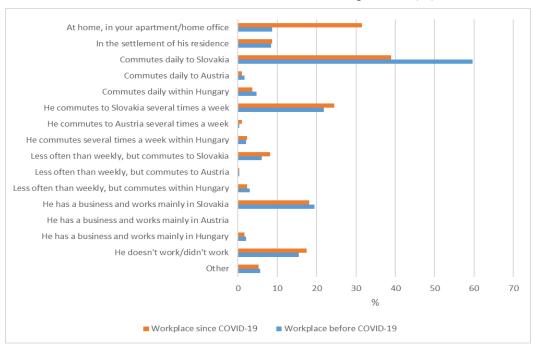


Figure 9 Location of work before and after the coronavirus epidemic (%)

Source: Questionnaire survey 2021.

Regarding the use of different services and the location of several leisure activities, before the COVID-19 epidemic, respondents were mostly using both commercial services and public services in Slovakia, including education, health care, and cultural services (Reisinger, 2010). Their major shopping and other shopping activities were mostly done in Slovakia, as well as their daily shopping. The majority did their shopping in Slovakia. Furthermore, online shopping was not dominant in Slovakia either (Table 2).

The impact of the coronavirus epidemic is evident. In some cases, Slovakia-centricity has decreased the utilisation of shops and services in Hungary. It is only true for commercial services and some leisure activities (e.g. fitness, gym). Our respondents' daily shopping was already mainly done in Hungary, but there was also a visible increase in the proportion of people who did major shopping and other shopping in Hungary. Although there has been an overall decline in the use of restaurant services, the decline has affected consumption in Slovakia to a much greater degree. Education, healthcare, and cultural services show very different trends. In education, the proportion of people using online platforms has increased, while in healthcare services the strong dominance of Slovakian take-up has been maintained. Consumption of cultural services has fallen dramatically (Table 2). In terms of other leisure activities, there was also a significant decline in wellness, fitness services and on-site sports and activities (e.g. gyms). These activities were already present in the lives of the majority of respondents (67%; and 59% respectively) before the coronavirus epidemic and were used in both Slovakia and Hungary, but were dominant in Slovakia. After the pandemic, the vast majority of respondents (73.9%; and 68.8% respectively) did not pursue these activities anywhere, and those who did, tended to do so in Hungary.

# The impact of the COVID-19 pandemic on attitudes, and satisfaction towards residential move

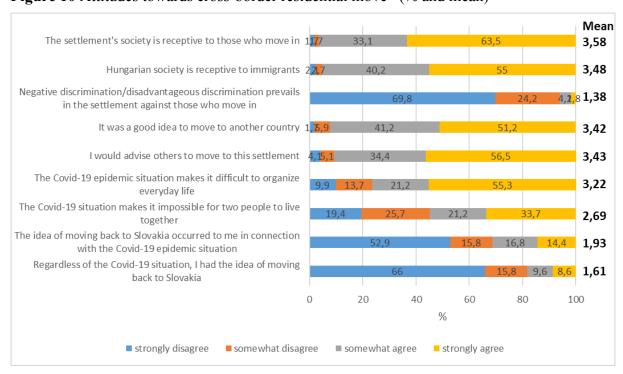
Respondents who moved to the surveyed settlements in Hungary from Slovakia were slightly divided in their opinions but were generally positive about the openness of their chosen place of residence and its receptiveness to newcomers. The majority of them have affirmed that both the local society of their settlement and Hungary are welcoming to immigrants. This openness and inclusiveness help them to feel at home in their place of residence. The difficulties caused by the COVID-19 epidemic did not deter the majority from living in a border area, on the territory of the neighbouring state. Despite the difficulties, they did not consider moving back to Slovakia, either independently of the COVID-19 epidemic situation or in connection with it (Figure 10).

**Table 2** Place of use of different services and activities before and after the coronavirus outbreak (%)

Activities, servicies	Before COVID-19				After COVID-19					
	In Hungary		In Slovakia		nowhere	In Hungary		In Slovakia		nowhere
	in person	online	in person	online		in person	online	in person	online	
Daily shopping	46.3	1.0	65.1	6.4	6.0	61.1	3.0	38.6	8.1	13.2
Major shopping	29.5	2.0	79.2	4.4	3.0	50.0	4.7	57.4	8.1	3.0
Other shopping	28.5	7.0	55.4	25.8	5.0	34.2	13.4	36.2	23.2	8.1
Nursery school	10.1	0.3	16.8	0.7	48.5	8.4	0.3	13.8	0.7	55.5
Education(pl. Elementary, secondary, high school, higher education)	1.3	0.0	22.8	1.3	53.5	2.7	2.0	11.7	11.7	53.9
Healthcare services	5.4	0.3	87.6	1.0	3.2	7.0	1.7	74.2	3.7	6.4
Cultural services	20.5	1.0	55.4	3.0	20.8	8.4	1.0	17.8	2.3	65.4
On-site sports activities (e.g. gym, sports field)	26.5	_	32.6	_	41.0	19.1	_	9.7	_	68.8
Wellness, fitness servicies	30.5	_	39.6	_	33.2	15.8	_	9.7	_	73.9
Restaurants, pubs	69.1	_	62.1	_	9.9	43.3	_	18.1	_	44.5

Source: Questionnaire survey 2021.

Figure 10 Attitudes towards cross-border residential move\* (% and mean)



<sup>\*</sup> The level of agreement with each statement was measured using a four-point Likert scale, where 1: strongly disagree; 2: somewhat disagree; 3: somewhat agree; 4: strongly agree. Source: Questionnaire survey 2021.

#### **DISCUSSION**

The border crossing rules put in place in response to the COVID-19 epidemic have made the daily lives of cross-border migrants much more difficult. For a few weeks or months, the role of the state border as a separation barrier has returned. The aim of the state authorities was health protection. The rapid spread of the virus and the specificity of the situation demanded a rapid implementation of the measures by the states. The group of people living across the border was relatively small, therefore the measures targeting the general population of the respective countries did not take into account their particular way of life. Thus, after the shock of the first days and weeks, and as the epidemic situation began to improve, freedom of movement has gradually returned.

The epidemic and the closure of borders impacted the life of the transnational borderlander group in many ways. Most of all, we expected that the shock would discourage people living in the territory of another country from continuing this lifestytle and that they would regret having moved to Hungary. This was not the case. The motivation to move was stronger than the difficulties caused by the closure. The main reason why Slovak citizens moved here was to find a property that met their needs close to Bratislava at a relatively low price. From this point of view, the impact of COVID-19 has not been long-standing, it has therefore not corroborated the fact that the opening of borders as a result of EU accession is precarious and easily reversible.

However, the life of the cross-border area has been fundamentally affected by the virus situation. One of the most important effects was an increase in the number of Slovak citizens registering a permanent address. Since the beginning of suburbanisation, the settled Slovak residents have kept their address in Bratislava and have not statistically increased the population of the host municipalities, while in reality, they have lived there. However, under COVID, daily border crossings were allowed for those who had a residence on one side and a workplace in the other country (within a 30-kilometre zone). This encouraged Slovak citizens moving to Hungary to register as Hungarian residents. Thus, especially in the case of Rajka, we were faced with a rapid statistical increase in the population. However, it also contributes to the strengthening of the "transnational" character of the municipality: today, officially, the majority of its inhabitants are Slovak citizens. As residents and property owners of the municipality, they have a right to access services from the municipality. This transition has also impacted local politics: members of the Slovak population are now also voters and can be

elected as representatives or mayors. This situation can already create conflicts between the local population and the immigrants.

It is interesting to note that there is an increase in the use of services in Hungary. Whereas previously only the place of residence was in Hungary, nowadays more and more services are being used in Hungary by Slovak residents. This may be naturally due to changes in exchange rates and price differences, but evidence suggests a notable increase in consumption in Hungary.

All in all, contrary to expectations, the COVID-19 situation has contributed to a stronger transnational borderland character. Rather than decreasing, the population has increased and this tendency is likely to persist. The Slovak-centricity of the Hungarian population is loosening: they are increasingly using the services of the Hungarian side and considering the settlement as their home. It is the Hungarian side that appears to adapt to increasing demand of Slovaks: service providers employ Slovak-speaking staff and more and more signs are displayed in Slovak. There is no reason to anticipate a significant spatial spread of the above phenomena due to the continuing importance of the proximity of the Slovak capital. There is however a notable exception: in the case of the municipalities along the Danube (Dunasziget, Dunakiliti), the purchase of a second home is common and could spread to other municipalities.

#### **SUMMARY**

Our research was part of a long-term project on the cross-border suburbanisation of Bratislava. We managed to capture a moment when the trend of opening borders was briefly interrupted, anticipating a situation where we could witness a rapid closing of borders. The emerging cross-border border area could be a European example, as it covers three countries (Slovakia, Hungary, Austria). We have demonstrated that development is essentially Bratislava-centric and most interactions are based there. Further research is required on the evolution of horizontal relations, i.e. to examine whether extensive bilateral connections will lead to the development of a trilateral border region.

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#### **REFERENCES**

- Ambrosini, M. (2008). *Un'altra globalizzazione. La sfida delle migrazioni transnazionali.* Bologna: Il Mulino.
- Bailey, D., Crescenzi, R., Roller, E., Anguelovski, I., Datta, A., & Harrison, J. (2021). Regions in COVID-19 recovery. *Regional Studies*, 12, 1955-1965. https://doi.org/j7t2
- Balizs, D., & Bajmócy, P. (2018). Szuburbanizáció a határon át: társadalmi, etnikai és arculati változások Rajkán. *Tér és Társadalom*, 32(3), 54-75. doi: 10.17649/TET.32.3.3046.
- Balizs, D., & Bajmócy, P. (2019). Cross-border suburbanisation around Bratislava changing social, ethnic and architectural character of the "Hungarian suburb" of the Slovak capital. *Geografick časopis / Geographical Journal*, 71(1), 73-98.
- Baranyai N., & Ferencz, Z. (2023). A COVID-19 járvány és a helyi válságkezelés jellemzői Magyarországon (COVID-19 pandemic and the characteristics of local crisis management in Hungary). *Tér és Társadalom* 37(2), 111-133. https://doi.org/10.17649/TET.37.2.3472
- Bogár, M. (2019). *Bratislava v zelenom objatí?* In Šveda, M. & Šuška, P. (Eds.), *Suburbanizácia. Ako sa mení zázemie Bratislavy?* (pp. 82-100). Bratislava: Geografický ústav SAV.
- Bouckaert, G., Galli, D., Kuhlmann, S., Reiter, R., & Van Hencke, S. (2020). European coronationalism? A hot spot governing a pandemic crisis. *Public Administration Review*, 5., 765-773. https://doi.org/ghvw5f
- Čaušević, A., & Osmanović, M. (2023). Perception of Tourist Travel During the Covid-19 Pandemic. *Deturope*, 15(1), 125-140.
- Czirfusz, M. (2021). A COVID-19-válság és a térbeli munkamegosztás változásai Magyarországon. *Területi Statisztika*, 61(3), 320-336. https://doi.org/jts8
- Domonkos-Bott, L., & Pawera, R. (2022). Socio-economic disparities caused by pandemic in cross-border areas of Slovakia. *Ad Alta: Journal of Interdisciplinary Research*, 12(2), 15-18.
- Farkas, R., & Klobučnik, M. (2021). Residential suburbanisation in the hinterland of Bratislava a case study of municipalities in the Austrian border area. *Hungarian Geographical Bulletin*, 70(4), 311-323.
- Florida, R., Rodríguez-Pose, A., & Storper, M. (2021). Cities in a post-COVID world. *Urban Studies*, 1-23. https://doi.org/gnxsxf
- Gielis, R. (2009). Borders Make the Difference: Migrant Transnationalism as a Border Experience. *Tijdschrift voor Economische en Sociale Geografie*, 100(5), 598-609.
- Haggett, P. (1979[2006]). Geography: A Modern Synthesis. London: Harper & Row.
- Hajdú, Z., & Rácz, Sz. (2020). Államhatár-politikák az Európai Unióban és Magyarországon a globális koronavírus-válság kezdeti időszakában. *Tér és Társadalom*, 34(2), 202-210. doi:10.17649/TET.34.2.3260
- Hardi, T. (2010). *Cities, regions and transborder mobility along and across the border*. Pécs: Centre for Regional Studies, Hungarian Academy of Sciences. (Discussion Papers, 82). http://discussionpapers.rkk.hu/index.php/DP/article/view/2358
- Hardi, T., Lados, M., & Tóth, K. (2010). *Magyar-szlovák agglomeráció Pozsony környékén*. Győr-Somorja: MTA Regionális Kutatások Központja Nyugat-magyarországi Tudományos Intézet, Fórum Kisebbségkutató Intézet.
- Hardi, T., & Lampl, Z. (2008). Határon átnyúló ingázás a szlovák-magyar határtérségben, *Tér és Társadalom*. 22(3), 109-126. doi:10.17649/TET.22.3.1188

- Hardi, T., & Nárai, M. (2021). A Covid lezárások hatása a határon átnyúló szuburbanizációra Pozsony magyarországi előterében. A Magyar Regionális Tudományi Társaság XIX. Vándorgyűlése. A területi egyenlőtlenségek új formái és az átalakuló területpolitika. Budapesti Corvinus Egyetem, 2021.11.04.
- van Houtum, H., & Gielis, R. (2006). Elastic migration: the case of Dutch short-distance transmigrants in Belgian and German borderlands. *Economische en Sociale Geografie*, 97(2), 195-202.
- Huemer, J. (2018). Achtung Staatsgrenze! Die Suburban-isierung von Bratislava kennt keine Grenzen! In Heintel, M., Musil, R., & Weixlbaumer, N. (Ed.), *Grenzen: Theoretische, konzeptionelle und praxisbezogene Fragestellungen zu Grenzen und deren Überschreitungen*. Wiesbaden: Springer.
- Jagodič, D. (2010). Határon átívelő lakóhelyi mobilitás az Európai Unió belső határai mentén–Cezhraničná rezidenčná mobilita v blízkosti vnútorných hraníc Európskej. (Cross-border residential mobility in the EU "internal" border areas) In Hardi, T., Lados, M., & Tóth, K. (Eds.), *Magyar-szlovák agglomeráció Pozsony környékén* (Hungarian-Slovakian agglomeration around Bratislava) (pp. 27–42). Győr-Somorja: MTA Regionális Kutatások Központja Nyugat-magyarországi Tudományos Intézet, Fórum Kisebbségkutató Intézet.
- Kézai, P. K., Dömötör, M., & Fekete, D. (2022). Economic Development Opportunities in the Hungarian-Slovakian Cross-Border Area Szigetköz and Csallóköz (Žitný ostrov) According to Development Documents and Local Stakeholders Perceptions. *Deturope*, 14(1), 87-110.
- Kleemann, J., Struve, B., & Spyra, M. (2023). Conflicts in urban peripheries in Europe. *Land Use Policy*, 133:106849, 2-16.
- Krasniqi, S., Dreshaj, K., & Dreshaj, F. S. (2023). Determinants of tourism demand in selected countries of META: Empirical Panel Analysis. *Deturope*, 15(1), 23-46.
- Krejčí, O. (2005). *Geopolitics of the Central European Region*. The View from Prague and Bratislava. Bratislava: VEDA, Publishing House of the Slovak Academy of Sciences.
- Kubíčková, H., & Holešinská, A. (2021). Strategies of Tourism Service Providers to Cope with the COVID-19 Pandemic. *Deturope*, 13(3), 118-129.
- Lampl, Zs. (2010). Túl a város peremén (Esettanulmány a Pozsonyból kiköltözött felsőcsallóközi és Rajka környéki lakosságról). [Beyond the outskirts of the city (Case study on the migrant population in the "Felső-Csallóköz" region and around Rajka village)] In Hardi, T., Lados, M., & Tóth, K. (Eds.), *Magyar-szlovák agglomeráció Pozsony környékén* (Hungarian–Slovakian agglomeration around Bratislava) (pp. 77-131). MTA Regionális Kutatások Központja Nyugat-magyarországi Tudományos Intézet, Fórum Kisebbségkutató Intézet.
- Martinez, O. J. (1994). The dynamics of border interaction: New approaches to border analysis. In Schofield, C. H. (Ed.), World boundaries Vol. 1: Global boundaries (pp. 1-15). London and New York: Routledge.
- Michniak, D. (2016). Main trends in commuting in Slovakia. *European Journal of Geography*, 2., 6-20.
- Ocskay, Gy., Jaschitz, M., & Scott, J. (2022). Borderland formation processes: Cross-border urban functional cooperation along the Slovak-Hungarian border. In Medeiros, E. (Ed.), *Border Cities and Territorial Development* (pp. 171-189), London: Routledge.
- Palomino, J. C., Rodríguez, J. G., & Sebastian, R. (2022). The COVID-19 shock on the labour market: Poverty and inequality e'ects across Spanish regions. *Regional Studies*, 1-15. https://doi.org/j7vr
- Pálné Kovács, I. (2023). Az önkormányzati válságkezelés és/vagy reziliencia. Szakirodalmi szemle. *Tér és Társadalom*, 37(1), 3-22. https://doi.org/j7vp

- Pijpers, R., & van der Velde, M. (2007). Mobility across Borders: Contextualizing Local Strategies to Circumvent Visa and Work Permit Requirements. *International Journal of Urban and Regional Research*. 31.4, December, 819-35.
- Rechnitzer, J. (1997). Eurorégió-vázlatok a magyar–osztrák–szlovák határmenti térségben. *Tér és Társadalom*, 11(2), 29-54. doi: 10.17649/TET.11.2.419
- Reisinger, A. (2010). Oktatás és egészségügy Vzdelávanie a zdravotníctvo. (Education and public health) In Hardi., T, Lados, M., & Tóth, K. (Eds.), Magyar-szlovák agglomeráció Pozsony környékén (Hungarian–Slovakian agglomeration around Bratislava) (pp. 210-223). Győr-Somorja: MTA Regionális Kutatások Központja, Nyugat-magyarországi Tudományos Intézet, Fórum Kisebbségkutató Intézet.
- Sikos, T. T., Kozák, T., Papp, V., Kovács, C. J., & Kovács, A. (2022). Crisis challenges for customers and retailers in Hungary. *Deturope*, 14(3), 84-102.
- Slavik, V., Kozuch, M., & Bacik, V. (2005). Big cities in Slovakia development, planning, contemporary transformation. *European Spatial Research and Policy*, 12(2), 47-69.
- Sontheimer, M. (2008). Polish Commuters Revive A Sleepy German Town. *Spiegel Online*. 02/27/2008 05:13 PM.
- Šveda, M., Sládeková Madajová, M., & Podolák, P. (2019). Senec nie je Stupava? Regionálna typizácia suburbánneho rozvoja v zázemí Bratislavy. In Šveda, M., & Šuška, M. P. (Eds.), *Suburbanizácia. Ako sa mení zázemie Bratislavy?* (pp. 276-296). Bratislava: Geografický ústav SAV.
- Strüver, A. (2005). Spheres of Transnationalism within the European Union: On Open Doors, Thresholds and Drawbridges along the Dutch-German Border. *Journal of Ethnic and Migration Studies*, 31, 323-344.
- Székely, V. (2013). Urban-rural relations as a source of transfer of knowledge: some examples from rural surrounding of Bratislava. *Rural Areas and Development*, 10, 1-21.
- Szirmai, V. (2021). Nagyvárosok a COVID-19 vírusjárvány idején (Cities during the COVID-19 pandemic). *Földrajzi Közlemények*. 1, 1-16. https://doi.org/jttn
- Tóth-Bodó, V. K. (2023). Rajka, mint Pozsony szuburbán települése. (Diplomamunka) Mosonmagyaróvár: Széchenyi István Egyetem Albert Kázmér Mosonmagyaróvári Kar.
- Tóth, G., Kincses, Á. (2009). "A hazánkba bevándorlók területi elhelyezkedésének vizsgálata", *Tér és Társadalom*, 23(4), 61-81. doi: 10.17649/TET.23.4.1276.
- visitbratislava.com (2023). Coronavirus: current information and measures. https://www.visitbratislava.com/covid19-news/ [29.09.2023].
- Williams, A. M. (2009). International migration, uneven regional development and polarization. In: *European Urban and Regional Studies*, 3, 309-322.
- Zubriczký, G. (2010). Pozsony szuburbanizációja–Suburbanizácia Bratislavy (Suburbanization of Bratislava). In Hardi, T., Lados, M., & Tóth, K. (Eds.) *Magyarszlovák agglomeráció Pozsony környékén* (Hungarian-Slovakian agglomeration around Bratislava) (pp. 50-76). Győr-Somorja: MTA Regionális Kutatások Központja, Nyugatmagyarországi Tudományos Intézet, Fórum Kisebbségkutató Intézet.