

# CIRCULAR MIGRATION SYSTEMS around a NEW IMMIGRATION COUNTRY

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## Abstract

*The presentation provides insight into the spatial systems induced by the heterogenous mass of long-term international circular migrants admitted into Hungary in the period of 2009-2016. The general aim is to distinguish territorial subsystems embedded into the inflows of international migrants. The specific aim is to quantify the effects of latest great economic recession on the spatial patterns of circulatory subsystems in comparison with the before and after crisis periods. Firstly, we discuss the concept of international circular migration from inward perspective. Secondly, we study changes in the territorial series of first-time international migrants and circulators with descriptive statistics. Thirdly, based on the geographic data of country of citizenship we map the external territorial dimension of circulation and visualise the effects of economic upheaval on spatial circulatory subsystems around a non-traditional receiving country with relatively short immigration history. At the end we argue that the subsystems are generated by the intentions of international migrants in combination with migration policies of governmental actors.*

**Keywords:** *international migration, international circular migration, economic crisis, Hungary, geographical system*

## Introduction

Before 1988, the volume of international migration related to Hungary was very limited. Annual emigration flows of Hungarian citizens fluctuated between 3-4 thousand people after the 1956 revolution. In parallel, the yearly immigration flow ranged between 1-2 thousand dominated by return migration. The immigration of foreign citizens was sporadic, coming mainly from the socialist countries due to labour and mixed-marriage reasons, except for approximately 1000 refugees from Chile in 1973. In the sense of net international migration Hungary was the country of emigration (Szoke, 1992).

Quantitative and qualitative changes began in 1988 after four decades of a controlled and restrictive migration regime in Hungary. Due to the opening of the borders and the political transformation process in Central and Eastern Europe, the international migration flows took a radical turn. Hungary started to integrate itself into the regional and global international migration systems. This initial phase correlated with regional historic events, the collapse of the People's Democratic Republic of Germany (GDR), the last phase of Ceausescu's rule in Romania, the civil war in the former Yugoslavia. In 1990-1991 the number of foreign immigrants to Hungary reached a local peak with ten thousand people. After the fall of the Berlin Wall the emigration of Hungarian citizens rose sharply to global western countries and reached one hundred thousand stock estimated till 2000. The annual inflows of foreign citizens oscillated around 15 000 and 20 000 people in 1990s. Under the effects of immigration, emigration and the status change of the so called 'aliens', more than 150 000 long-term immigrants lived in Hungary at the millennium. Their share within the total population increased above 1.5%. All in all Hungary was labelled as a receiving as well as a transit country after a long period of being a sending area. From quantitative aspects, the inflows and outflows

continued in a similar manner in the first half of the 2000s. The Hungarian accession to the European Union in 2004 generated a significant but short interval effect on the foreign immigrants till 2008. The share of immigrants rose to 2% within the total Hungarian population. We may state with high probability that Hungary became one of the new immigration destinations on a regional scope (attraction force due to ethnic motivations) and on a global scale (as a part of the European magnet). However, the history of immigration has only been lasting for twenty years (Winders, 2014).

## Concept

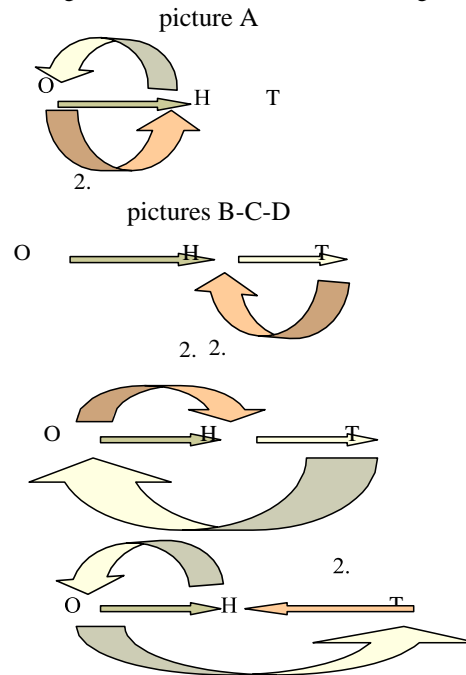
From the spatial, statistical and demographic point of view, circulation consists of repeatable events, and the analysis of its parity (the number of times that a given individual migrates, or in other words the serial numbers) is a problem that can be solved. Multiple moves of individuals show systematic features. Even the simplest migration system consists of at least two elements. Return migration, typical of this pattern, inevitably includes the preceding migration (Nadler et al. 2016). The multiple moves of individuals interconnect two or more geographical entities. If the migrant explores more than one new territory, we have a case of onward or serial migration (Ciobanu, 2015). Circulation involves a system of more than two repeating spatial movements of individuals.

The gross volume of international circular migration has undoubtedly increased, and many new types of circulation have begun to develop (Cassarino, 2013; Engbersen et al. 2013; Czaika and de Haas 2014; Hugo 2014). However, scholars have not yet reached a consensus on how to conceptualise the newly emerging multiple and recurring circulatory movements (Skeldon, 1997; Anthias 2012; UNECE 2016). The mobile people did not completely abandon their relationship with their country of origin. They developed partial affiliations to their destination country through their work, housing arrangements and other activities now included in their lifestyle (King, 2002; Williams et al. 2011). The individuals could adopt a strategy of dual or multiple residences. In real life, this settlement strategy involves back and forth movements (Skeldon 2012). From a transnational perspective, celebrated mainly by anthropologists, this sort of strategy results in 'in-between' situation of individuals (Glick Schiller and Salazar, 2013; Khadria 2013). The scholars of transnational-translocal nexus, echoed mainly by geographers, stresses the presence of double or multiple attachments rooted in locality (Deshingkar and Farrington 2009; Brickell and Datta, 2011; Cresswell and Merriman, 2011).

*Figure 1* illustrates multiple moves of individuals with three and four events of international migration. The interlinked movements show systematic features in individual level. Even the simplest migration system consists of at least two elements. Return migration, typical of this pattern, inevitably includes the preceding migration. If the migrant explores more than one new country, we have a case of onward or serial migration. For a sophisticated concept of circulatory spatial movements, we develop the necessary elements of the system of circulation from the point of view of the receiving country. The migration system is more than the sum of the migration processes, i.e., a set of moves associated. The simplest example is the two-centre system (see picture A within *Figure 1*). In this system, the flows occur between the two centres. In this two-residence case, the first movement is immigration to country of destination with parity number 1. The return movement to the country of origin is no more than a simple return migration. However, the next immigration of the same individual to the same receiving country has parity number 2. (in other words second immigration). These three steps are enough to the occurrence of circulation between two poles. This is the best simple case. Further possible configurations of circular system with maximum two immigrations are drawn in pictures B-C-D (*Figure 1*).

Figure 1. Concept of international circular migration from inward perspective

Four possible spatial configurations of international circular migration



*Note:* O: Origin country; H: Hungary; T: Third country; 2: Second immigration to Hungary.

*Source:* Authors.

In his seminal work, Akin Magobunje (1970) has contributed to the migration theory with the creation of the term ‘migration systems’. He dealt with rural-urban migration and his scope was restricted to one continent, Africa. The systems approach has been broadened to international migrations under the aegis of the United Nations (Kritz et al. 1992). The parts of the systems were countries that were linked by international migration flows. The creation of migration systems was fruitful both from structuralist and constructivist point of view and as such, became popular among geographers and members of other disciplines (Castles and Miller, 1993; Skeldon, 1997; Massey et al. 1998; Beauchemin, 2014; Hugo, 2014). The availability of country specific international immigration data opens the possibility to create systems on regional, national and subnational level. This article investigates a new magnet county system where we try to avoid the disadvantage of the so-called ‘methodological nationalism’ with the combination of territorial series and mapping visualisation (Wimmer and Glick Schiller, 2002). The variety of real spaces in combination with actors and practices (Glouftsiou, 2018) creates a territorial migration systems in the concluding section.

Unfortunately, few circular movements are documented quantitatively worldwide, so data gathering is essential (Parusel 2017; Weber and Saarela 2017). The present case study aims to enrich our knowledge of human circulation within a long-term international migration context. We focus on Hungary as a receiving country and concentrate on inward type of international circular migration of EU citizens and third country nationals as well. Naturally, Hungary is an individual case and may represent an exception amongst countries worldwide. Nevertheless, its statistical system allows us to create a unique macro-level database on international circular migrants and to analyse them (Illés and Kincses, 2018).

## Data and methods

The flow data analysed below originates from the continuous registration system of Immigration and Nationality Office. In the absence of personal identifier number (PIN) we utilized a special computer programme in order to distinguish circulators as the subject of this paper year by year from 2006 through 2012. This contribution provides empirical evidence from the crisis period of 2009-2012. (We utilize one-year postponement in the interval due to the side effects of reaction time between potentially and really mobile people.) The economic recession may cause decrease in mobility flows in many receiving countries (Tilly, 2011). We quantify the effects of economic crisis on the international circular migration in comparison with the before crisis period of 2006-2008.

We suppose that the effects of economic crisis were embedded on the differences in indicators between time periods. We are aware of that structural change and the consequences of other forces playing roles in the development of differences. However, according to literature, the effect of economic crisis had the biggest macro-force (Sacchetto and Vianello 2016). In one hand the upheaval shook the whole Hungarian society, on the other hand this happened amongst internationally mobile people. Moreover, the changes in structures year by year were partly eliminated by the addition of before crisis and downturn years. In the light of these methodological shortcomings, we interpret the spatial differences with high caution when separating the spatial systems of international circular migration around Hungary.

The population geography has the longest tradition about the analysis of bipolar spatial phenomena just as migration and mobilities (Pott, 2013). In this paper we connect the investigation of time series as statistical method with the preparation of maps in order to investigate the spatial patterns of international circular migration related to Hungary and the uneven distributions of circulators (Dodge, 2017). Utilizing cartography is intrinsically geographical and the effective way of visualization of flow data (Sander et al., 2014). In so doing, we discover the geographical subsystems and the differences in quantities which reflect the effect of economic crisis.

## **Analysis**

### *Potential effects of economic crisis on migration*

Based on the migratory side effects related to economic crises in the twentieth century, we may guess that less new immigrants arrived in Hungary (Beets and Willekens 2009; Çağlar, 2013; Domínguez-Mujica, 2014; Roos and Zaun, 2016) and the outmigration flows of immigrants increased to home countries (Galgóczi et al. 2012). These general consequences of global economic decline worked in an uneven way from regional perspective (Mohapatra and Ratha 2009; Lévai 2011; Tilly 2011). The economic recession caused a larger decline in post-socialist Europe than any other region in the world (Connolly, 2012). Hungary was a small country in regards to population and territory with an open economy, suffered a deep and long falling period in 2008-2011. Its macro-economic nature of the crisis was similar to the other East and Central European countries: decline in GDP per capita income, and growth in unemployment rate. It started as a financial crisis that enlarged into a severe economic and social one mainly in micro-level due to the predatory lending to private actors (people), just as any part of the world (Aalbers, 2009). With the growth reversal, the credit-fuelled expansion erected from foreign savings ended in inner consumption and investment (Connolly, 2012). Moreover, as results of the crisis the stock of private and public debts increased sharply in the edge of crisis in Hungary in 2011 parallel to the decline of export-oriented industrial production (Kiss, 2012). So, the financial crisis escalated into other sectors of the economy, decreased the household real incomes and increased the vulnerability of the whole society (Kocziszky et al. 2018). The migrant attraction force of the country lagged behind the wealthy European countries competing for immigrants. Moreover, the relative regional developmental position of the country worsened in East and Central Europe.

Devaluation of Hungarian currency, forint (HUF) happened as one of the consequences of the crisis (Darvas, 2011). However, this phenomenon caused a rise in one element of territorial in-mobility spectrum. Namely, the number of daily international visitors (tourists) arriving to Hungary with shopping motivation from neighbouring eurozone member states increased dynamically during the period of the economic decline (Michalkó et al. 2014; Zsótér, 2014). From a speculative viewpoint, the immediate economic consequences hit mainly economically active male immigrants in construction and manufacturing as individuals. Non-economic actors with immigration background just as guest-workers' family members, students and retired people suffered smaller extent of the crisis effect.

We can also distinguish first time immigrants from circulators in the next sections. There are many differences between the two groups. For instance, circulators possess more migration-specific capital about the Hungarian circumstances. Whether this fact functioned as an advantage in the crisis period due to the multiple self-selection processes presented in literature (Wahba, 2015; Weber and Saarela, 2017)? If yes, circulators would be positively selected, but for how many times and to what extent? Whether the growing share of circulators could be one of the indicators of this positive self-selection phenomenon? There were few attempts to differentiate long-term circulators from first entry immigrants in migration studies. In this case study we investigate any circulators' specific consequences of decline interval and we would like to continue filling this research gap (Illés and Kincses, 2018).

#### *Differences in time series*

169 871 foreign immigrants arrived to Hungary between 2006 and 2012. Out of these immigrants, 25 268 have already stayed in Hungary in an immigrant status. These facts indicate that 14.9 percent of immigrants were long-term circulators (multiple returnees) with previous personal experience about the country. International migration as a process is very sensible to economic, social, political and natural changes, too. If we distinguish values between before crisis period (14.7%) and crisis period (15.1%) we may conclude that under the effect of decline the frequency of circular immigration remained relatively stable. In other words, the share of circulators increased slightly which was unexpected in many ways.

The volumes of international migrants grew significantly before the crises period in parallel with the increase of the absolute numbers of circular immigrants. However, the intensity of growth of circulators was smaller so the share of circulators declined between 2006-2008. It seems to be that the prosperous time was advantageous for first immigrants in the disadvantage of circulators. According to the predictions the number of immigrants decreased continuously during the crisis period, but the volumes of circulators remained stable between 2009-2010 in Hungary. Due to the opposite change in numbers of first immigrants and circulators the share of circulators rose sharply between 2008-2010. In the second stage of the crisis period (2011-2012) both the volumes of first time immigrants and circular immigrants decreased continuously hand in hand. We may suppose that the yearly shares of circulators would not have been decreasing since 2011 if the new citizenship provisions had not been introduced (Çağlar, 2013). The growing shares of circulators in 2009-2010 echoed the increasing frequencies of circulators in the context of economic crisis. We may suppose that this growth is in strong correlation with their migration specific capital and knowledge gathered through their previous immigrations (Illés and Kincses, 2018).

The average yearly number of first entry immigrants was 22 205 people before the crisis period and 19 490 people in said period. The average yearly number of circulators was 3636 people before crisis period and 3590 people in the crisis period. The average decrease was smaller amongst circulators, so we must emphasise that the intensity of circulation grew from 14.7% to 15.1% in the context of immigration.

### *Spatial differences*

The classification by citizenship and parity (numbers of entering) shows that circular migration is more typical for the citizens of neighbouring countries such as Romania, Ukraine and Serbia. Because these migrants originated primarily from the Hungarian minorities living in these countries, the language did not create real barriers. According to *Table 2* more than one-half of the international circular migrants originated from Romania (43.6 percent), Ukraine (9.3 percent) and Serbia (5.1 percent) in 2006-2012. Citizens of Western European countries or other more distant countries rarely returned to Hungary as circular migrants. The exceptions to this pattern are Germans (4.1 percent) and Chinese people (5.2 percent). The inclusion of German citizens can be explained by the observation that former Hungarian emigrants and German pensioners moved back and forth between their first and second homes (Illés and Michalkó 2011). The role of Chinese international circular migrants was explained by the emerging Chinese diaspora and is associated primarily with the attraction of capital, Budapest (Irimiás, 2012). The creative economy mainly located in the Budapest Metropolitan Region. By 2015 48.3 percent of the creative and knowledge intensive firms were situated in the capital and its surroundings (Egedy et al. 2018) with potentially high share of international circulators. The proportion of US citizens among circulators was 2.9%. They were mainly amenity seekers, work and healthcare related circulators just as multiple Russian and Israeli immigrants (1.8 percent, 1.1 percent). Both Turkish (1.3%) and Japanese (1.0%) circulators were in strong connection with economically active lives in Hungary (Hárs, 2016). But circulators from Turkey were mainly self-employed people in catering and commerce. Japanese were employed in multinational companies.

It is extremely probable that ethnic Hungarians fluent in their mother tongue returned as multiple immigrants from neighbouring countries. Circulation functioned as an original solution to the dilemma of remaining in the homeland (motherland) or going to the home country (mother country) to obtain work or an education. Note that the initiatives of assimilation or full integration originating from above (from national bodies) failed due to several reasons linked to contemporary history. Circulation, as a repetitive spatial process functioned as an effective solution of the situation of Hungarian minorities in neighbouring countries since the beginning of the era of the free movement of people related to Hungary (Geller-Lukács et al. 2016). International circular migration mediates the migrants' multiple engagement with their home countries and their countries of destination (Waldinger, 2017).

**Table 2.** *Distribution of international non-circular (1) and circular (2–X) immigrants by the country of citizenship within each parity of entrance category in Hungary between 2006 and 2012 (%)*

Citizenship	Numbers of entering					Total
	1	2	3	4	Together (2–X)	
Romania	25.0	58.8	29.5	4.7	43.6	27.8
Serbia	8.3	4.0	6.0	7.9	5.1	7.8
Ukraine	8.8	7.5	12.5	11.6	9.3	8.8
Germany	9.5	2.7	3.6	10.2	4.1	8.7
China	5.6	3.8	6.4	9.0	5.2	5.5
Slovakia	4.7	1.5	2.2	4.8	2.2	4.4
USA	3.9	2.0	3.0	6.0	2.9	3.8
Austria	2.4	0.9	0.8	2.4	1.1	2.2
Turkey	2.1	0.8	1.5	3.2	1.3	2.0
Israel	1.3	0.9	1.2	1.9	1.1	1.3
Japan	1.4	0.7	1.1	2.2	1.0	1.3
Russia	1.6	1.5	2.0	2.7	1.8	1.6
Italy	1.2	0.4	0.4	1.3	0.6	1.1
United Kingdom	1.2	0.4	0.6	1.5	0.6	1.2
Croatia	0.7	0.3	0.4	1.0	0.4	0.7
France	1.1	0.3	0.4	1.5	0.5	1.0
The Netherlands	1.1	0.2	0.4	1.4	0.4	1.0
Switzerland	0.5	0.2	0.2	0.5	0.2	0.4
Sweden	0.5	0.1	0.2	0.7	0.2	0.5
Norway	0.5	0.6	0.2	0.6	0.5	0.5
Syria	0.2	0.1	0.2	0.4	0.2	0.2
Other	18.3	12.2	27.3	24.7	17.5	18.2
Total	100.0	100.0	100.0	100.0	100.0	100.0

*Source:* authors' own calculation.

*Table 3* depicts another, another aspect of the circular immigrants from the point of view of the sending country. Circular migration is most typical for single persons at productive ages from Romania (23.3%), Ukraine (15.6%), and Serbia (9.6%). These individuals circulate primarily within well-established ethnic Hungarian networks. Besides the principal countries of origin, Norway, Russia, China, Israel, Syria, Japan, USA and Turkey contribute relatively significant percentages of circular immigrants on their own sources. Two of the high proportion of circulars within the immigrants from Norway (16.5%) and Syria (12.0%) are consistent with the mass international flows of third level students to Hungary (M. Császár and Wusching

2016). However, this scope is out of short-term Erasmus mobilities (Dabasi-Halász et al. 2018). The relatively significant percentages of Russian (16.5%), Israeli (12.6%) and USA (11.4%) circulators may be in connection with the occurrence of the phenomenon of international retirement migration to Hungary (Illés and Kincses 2008). However, economic activity would be the predominant source of international circulators from China (14.1%), Japan (11.5%) and Turkey (10.0%).

**Table 3.** *Distribution of the international non-circular (1) and circular (2–X) immigrants by parity of entrance within each country of citizenship in Hungary between 2006 and 2012 (%)*

Citizenship	Numbers of entering					Total
	1	2	3	4	Together (2–X)	
Romania	76.7	19.5	3.4	0.4	23.3	100.0
Serbia	90.4	4.7	2.5	2.4	9.6	100.0
Ukraine	84.4	7.8	4.6	3.2	15.6	100.0
Germany	93.0	2.8	1.3	2.8	7.0	100.0
China	85.9	6.4	3.7	3.9	14.1	100.0
Slovakia	92.6	3.2	1.6	2.6	7.4	100.0
USA	88.6	5.0	2.6	3.8	11.4	100.0
Austria	92.5	3.8	1.1	2.6	7.5	100.0
Turkey	90.0	3.6	2.5	3.9	10.0	100.0
Israel	87.4	6.1	3.0	3.4	12.6	100.0
Japan	88.5	5.0	2.6	3.9	11.5	100.0
Russia	83.5	8.4	4.0	4.0	16.5	100.0
Italy	92.2	3.8	1.1	2.8	7.8	100.0
United Kingdom	91.9	3.4	1.6	3.1	8.1	100.0
Croatia	90.2	4.2	2.0	3.6	9.8	100.0
France	92.6	2.7	1.2	3.5	7.4	100.0
The Netherlands	93.3	2.1	1.2	3.4	6.7	100.0
Switzerland	92.0	3.8	1.3	3.0	8.0	100.0
Sweden	92.7	2.8	1.2	3.3	7.3	100.0
Norway	83.5	11.6	1.5	3.3	16.5	100.0
Syria	88.0	5.0	2.5	4.5	12.0	100.0
Other	85.7	6.2	4.8	3.3	14.3	100.0
Total	85.1	9.2	3.2	2.4	14.9	100.0

Source: authors' own calculation.



We mentioned above that the share of circulators was 14.9 percent among all immigrants in Hungary at the period of 2006-2012. We distinguished the values between before the crisis period (14.7%) and during the crisis period (15.1%) and concluded that under the effect of economic slowdown, the proportion of circulators increased slightly. Following the simple method described above, the quantitative effect of crisis would be nothing else than the differences between the before-crisis period and the deterioration period in appropriate pairs of shares. In *Map 1a.b.* the third columns show the effect of times of trouble in each country. Through cartographic visualisation we can find huge negative numbers in Romania, Ukraine and Serbia. These values must be explained by not only the effect of economic crisis but also the introduction of the new citizenship law in 2011 as an enormous political effect. After this point of time lots of ethnic Hungarians living abroad and/or immigrants in Hungary became Hungarian nationals and the citizens of the European Union /nationals of Ukraine and Serbia/ (Çağlar, 2013). So, the probability of being immigrants diminished from these two countries. The citizens of Romania gained the EU citizenship at 2007, so the immigrant and/or citizen's status was not so attractive in Hungary. Both under the effect of economic downturn and structural change some proportions of circulators increased. The German, American, Turkish, Chinese and Japanese values became higher in times of recession. The countries of the European Economic Area (except for Germany), the Russian and the Israeli proportions remained the same.

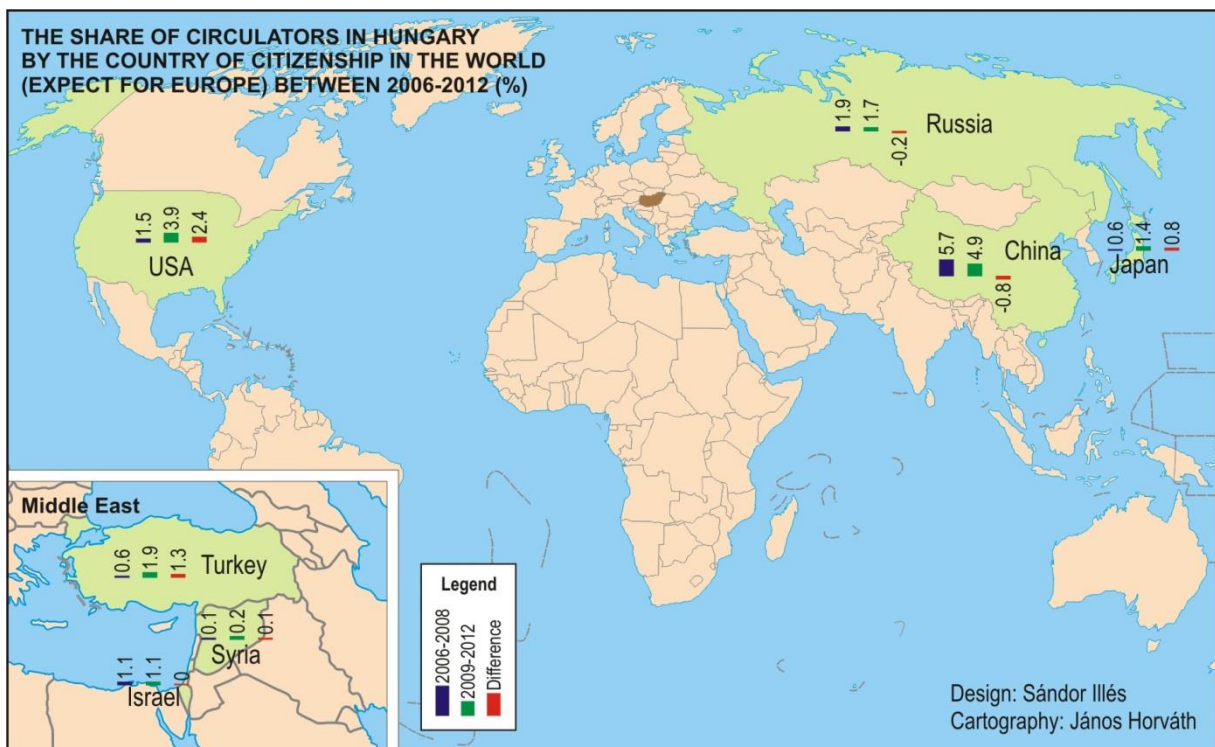
For the explanation of the characteristics of individual countries under examination we will utilise another relative perspective. From the angle of each country all immigrants were taken 100%. In so doing we received another aspect of analysis (*see Map 2a.b.*). In other words, the meaning of this indicator is as follows: what the circulator citizen's shares are in the context of the same immigrant nationals. We visualise the difference between two periods in each country. Based on the directions of change (increase, stagnation, decrease) some specific country groups do emerge. The following country groups contributed to the frequency growth of circulators:

- a) all of the countries investigated in the European Economic Area (EEA) in 2006: Germany, Slovakia, Austria, Italy, United Kingdom, France, The Netherlands, Switzerland and Sweden (except for Norway);
- b) globally expansive economies with immigration tradition: USA, Israel;
- c) globally expansive economies with emigration tradition: China, Japan;
- d) regionally expansive economies with emigration tradition: Turkey, Syria;
- e) potential joining countries to EEA2006 with Hungarian minorities: Serbia, Croatia.

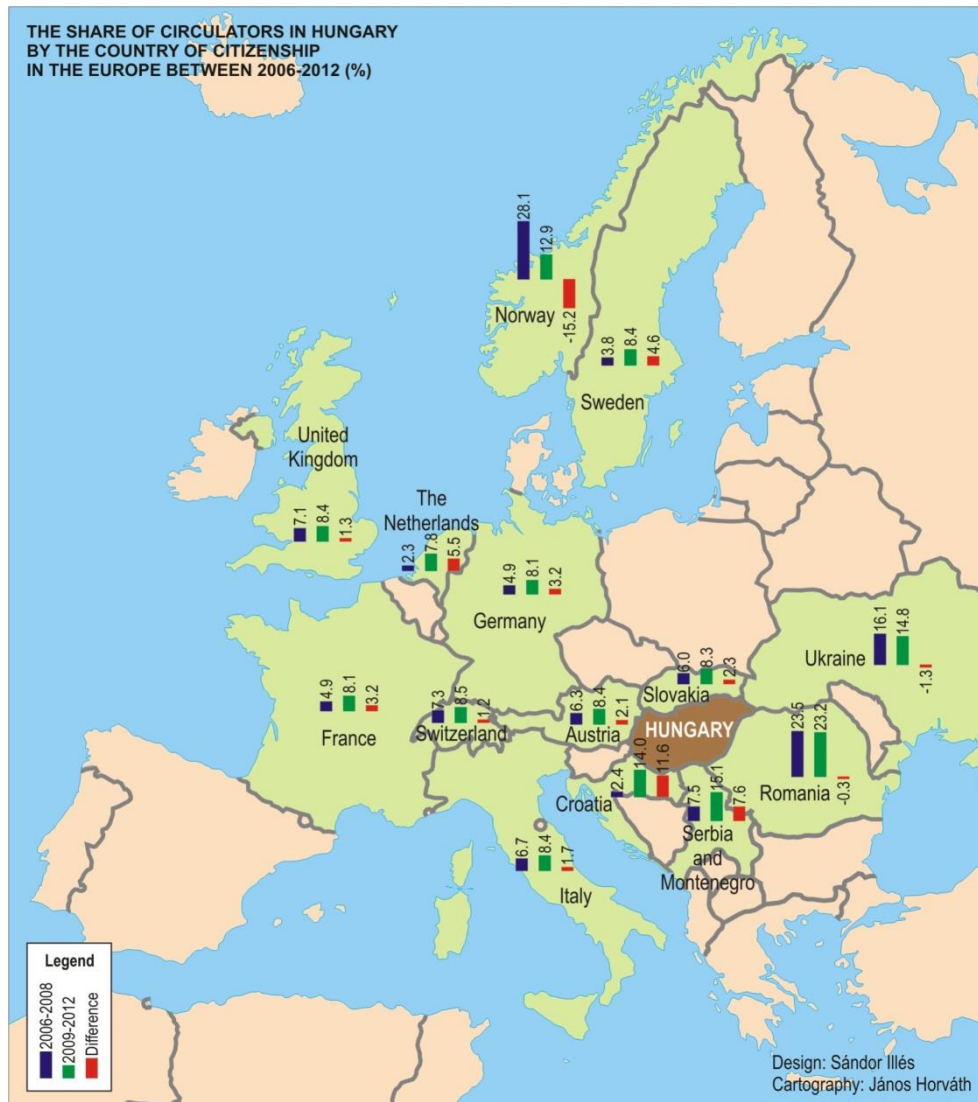
Finally, the frequency of circulators diminished in the following citizens of country:

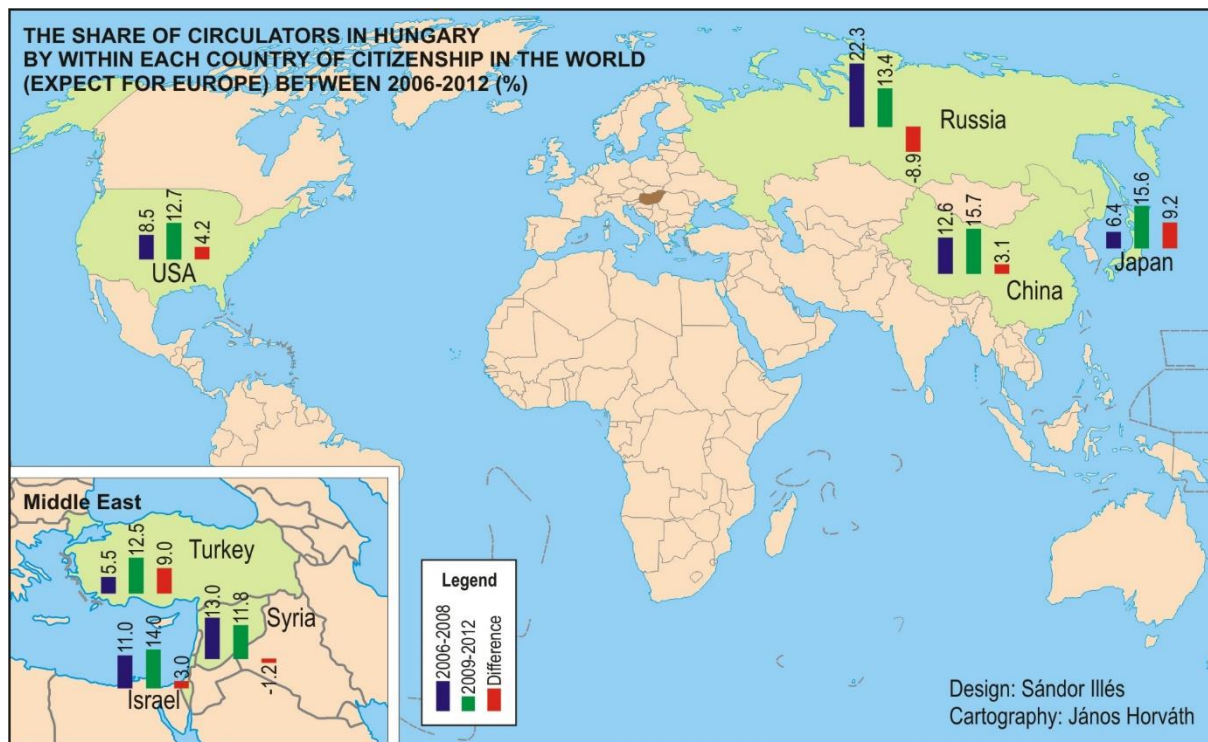
- a) Romania with falling immigrants to Hungary (either ethnic Hungarians or other Romanian citizens) due to the membership of EEA2006 (for both subgroup) and the new Hungarian citizenship law (ethnic Hungarians), however, the diminishment of circulators was higher than the diminishment rate of first entry immigrants;
- b) Ukraine as third country with the angle of EU with falling ethnic Hungarian immigrants to Hungary due to the new Hungarian citizenship law (foreigners' interest is to maintain the legal immigrant status) but the rate of decrease of first entry immigrants was lower than the rate of decrease of circulators;
- c) Russia, Norway and Syria with increasing immigrants to Hungary but the growth rate of first entry immigrants was significantly higher than the growth rate of circulators.

**Map 1a.b.** Spatial distribution of international circular immigrants by the country of citizenship in Hungary between 2006 and 2012



**Map 2a.b.** Spatial distribution of the international non-circular (1) and circular (2–X) immigrants by parity of entrance within each country of citizenship in Hungary between 2006 and 2012 (%)





## Conclusion and discussion

Multiple displacements from one home to another have become increasingly frequent during the epoch of globalisation. The authors argue that human circular migration is conceptualised as a specific geographic system of international migrations. Moreover, international circular migration should be viewed as interlinked processes rather than a single event on its own nature. In general, circulation is a system of spatial moves of individuals with multiple return characters. In this article international circular migrants are return foreign immigrants to Hungary. First time immigrants are not circular immigrants. However, they serve as a useful reference group for the in-depth analysis besides all immigrants. People who receive immigrant status twice, three-times and more are only circulators.

In this paper we quantified the spatial effects of economic crisis on the international circular migration related to Hungary as a receiving country. The method of the analysis was simple. We compared the economically prosperous times of 2006-2008 with the crisis period of 2009-2012. We suppose that the effects of economic crisis were embedded on the differences in indicators between two time periods. Some territorial statistical series were mapped through cartographic visualisation in order to distinguish between international circular migration systems around Hungary.

In accordance with the literature's signals, immigration decreased in the crisis period most countries. In Hungary there were slowdowns in first time immigration and circular immigration in absolute term, too. However, the decrease of first immigrants was even more intense than circulators. As frequency matters, slight increase of circulators was measured (from 14.7% to 15.1%). So circular immigration remained relatively stable that was unexpected in many angles. We supposed this growth was in accordance with strong migration and destination specific capital and knowledge gathered by previous and recent immigrations of circulators (Górny, 2017).

We elaborated particular spaces as subsystems developed through long-term circulatory flows to Hungary, a country with short immigration history and weak immigrants' attraction

force. The visualization provided before crisis and crisis time. *Map 1a.b.* and *2a.b.* reflected three stable spatial circulatory subsystems around Hungary with different geographical scopes:

1. The first, so called 'neighbour subsystem' came from the historical events after the First World War and strong geographical distance dependencies. This system contained some neighbouring countries with numerous ethnic Hungarians: Romania, Ukraine, Serbia, Austria, Slovakia and Croatia.
2. The second, so called 'regional subsystem' erected from the interval between the change of regime after 1988 and the Hungarian accession to the European Union in 2004. Some countries of the European Economic Area of 2006 were part of this subsystem with or without geographical distance dependency such as Germany, Italy United Kingdom, France, The Netherlands, Switzerland, Sweden, Norway. (Austria, Romania, Slovakia and Croatia became the parcels of this subsystem, too).
3. The common feature of the third, so called 'global' subsystem was the expansive character from economic or other point of view. Within this heterogeneous group we may distinguish three types from the angle of their nature of international migration: a) traditional immigrant country (USA, Israel); new immigrant country (Japan, Russia); traditional emigrant country (China, Turkey, Syria).

The force of multiple selection creates similar circulatory patterns amongst very different countries (*see Map2a.b.*). Opposite of the previous expectation of authors, the Swedish, Dutch, French, German, American, Turkish, Israeli, Chinese and Japanese intensity of international circular migration became significantly higher within the same national immigrants in times of recession. Moderate increase could be found in the following countries: United Kingdom, Switzerland, Italy, Austria, Slovakia, Croatia and Serbia. Decrease in differences happened in Norway, Russia and Syria. We state with high probability that the resistance against crisis as a new phenomenon functioned in most countries.

Two exemptions existed amongst the 'neighbour subsystem' with Hungarian minorities where we did not measure so called crisis resistance – maybe the spatial resilience against economic upheaval: Romania and Ukraine. We hypothesised that a new legal rule in Hungary relatively eliminated and/or replaced the crisis resistance. The new citizenship law was introduced in 2011 in which gaining Hungarian citizenship was simpler for ethnic Hungarians living near the borders mainly in Romania, Ukraine, Serbia and Croatia. Due to this new legal rule many real and potential immigrants and circulators became Hungarian citizen from countries mentioned. The status improvement from alien to citizen was the rational individual choice (Khadria, 2013) among ethnic Hungarians, but the status change diminished the probability of becoming immigrants and circulators in Hungary. These facts fuelled further the validity of a guess about crisis resistance/resilience (Simon, and Randalls 2016) among multiple international migrants (Skeldon, 2012; Illés and Kincses 2018). More specifically, international circulators erected from heterogenous countries were partially resistant to some negative effects of economic crisis based on this research.

This study examined international circular migration with the help of a receiving country's database. Utilising the migration systems approach and cartographic visualisation we conceptualised Hungary as part of the systems and we avoided the approach to the simple national container. The label 'new immigration country' has paled in comparison with massive emigration flows of Hungarian citizens since 2006. Paradoxically, the immigration of foreigners has been playing a replacement role, but smaller extent. We provided a sort of information on sending countries investigating on their own international circular migrants in this article. Further insight into the processes of long-term international circular migration might also be gained from the sending countries' lens (Moreh, 2014). However, it is difficult to measure international circular migration from outward perspectives and performing cross-country comparison (Strockmeijer, 2019) is even more complicated due to the inherently multiple nature of circulation. A possible solution remains for international organizations to collect

country specific data on international circular migration and create so called 'mirror statistics' developing the innovative practice of United Nations on the simple bipolar flows of international migration.

## References

- Aalbers, M. (2009). Geographies of the financial crisis, *Area*, 41(1), 34-42.
- Anthias, F. (2012). Transnational mobilities, migration research and intersectionality – towards translocational frame, *Nordic Journal of Migration Research*, 2(2), 102-110.
- Beauchemin, C. (2014). A manifest for quantitative multi-sited approaches to international migration. *International Migration Review*, 48(4), 921-938.
- Beets, G. and Willekens, F. (2009). The global economic crisis and international migration: an uncertain outlook. In: *Vienna Yearbook of Population Research*, Vienna, pp. 19-38.
- Brickell, K. and Datta, A. (2011). Introduction: translocal geographies. In: Brickell, K. and Datta, A. (eds.) *Translocal geographies: spaces, places, connections*. Ashgate, Aldershot, 3-20.
- Çağlar, A. (2013). Circular Migration between Hungary and Ukraine: Historical Legacies, the Economic Crisis, and the Multidirectionality of 'Circular' Migration. In: Triandafyllidou A. (ed.) *Circular migration between Europe and its neighbourhood., Choice or necessity?* Oxford University Press, Oxford, 1411–165,
- Cassarino, J. (2013). The drive for securitized temporariness. In: Triandafyllidou A. (ed.) *Circular migration between Europe and its neighbourhood, Choice or necessity?* Oxford University Press, Oxford, 22-41.
- Castles, S. and Miller, M.J. (1993). *The age of migration. International population movements in the modern world*. Basingstoke: Palgrave-Macmillan.
- Ciobanu, R.O. (2015). Multiple migration flows of Romanians, *Mobilities*, 10(3), 466-485.
- Connolly, R. (2012). The determinants of the economic crisis in post-socialist Europe, *Europe-Asia Studies* 64(1), 35-67.
- Cresswell, T. and Merriman P. (2011). Introduction: geographies of mobilities – practices, spaces, subjects. In: Cresswell, T. and Merriman P. (eds.) *Geographies of mobilities – practices, spaces, subjects*. Farnham: Ashgate, 1-15.
- Czaika M. and de Haas, H. (2014). The globalization of migration: Has the World become more migratory? *International Migration Review* 48(2), 283-323.
- Dabasi-Halász, Zs., Lipták, K., Kiss, J., Manafi, I., Marinescu, D.E., Roman, M. and Lorenzo-Rodriguez, J. (2019). International youth mobility in Eastern and Western Europe – the case of the Erasmus+ programme *Migration Letters*, 16(1), 61-72. DOI: <https://doi.org/10.33182/ml.v16i1.626>
- Darvas, Zs. (2011). Exchange rate policy and economic growth after the financial crisis in Central and Eastern Europe. *Eurasian Geography and Economics*, 52(3), 390-408.
- Deshingkar, P. and Farrington, J. (2009). *Circular migration and multi locational livelihoods strategies in rural India*. New Delhi: Oxford University Press.
- Dodge, M. (2017). Cartography I: Mapping deeply, mapping the past. *Progress in Human Geography* 41(1), 89-98. DOI: 10.1177/0309132516656431
- Domínguez-Mujica, J., Guerra-Talavera, R., and Parreño-Castellano, J. M. (2014). Migration at a time of global economic crisis: the situation in Spain. *International Migration* 52(6), 113-127.
- Egedy, T., Kovács, Z. and Szabó, B. (2018). Changing geography of the creative economy in Hungary at the beginning of the 21<sup>st</sup> century. *Hungarian Geographical Bulletin* 67(3), 275-291. DOI: 10.15201/hungeobull. 67.3. 5
- Engbersen, G., Leerkes, A., Grabowska-Lusinska, I., Snel, E. and Burgers, J. (2013). On the differential attachments of migrants from Central and Eastern Europe: a typology of labour migration. *Journal of Ethnic and Migration Studies* 39(6), 959-981.
- Galgóczi, B., J. Leschke, and Watt. A. (2012) EU labour migration and labour markets in troubled times. In Galgóczi, B., Leschke, J. and Watt, A. (eds.) *EU labour migration in troubled times*, Aldershot: Ashgate, 1-44.
- Gellér-Lukács, É., Tóttós, Á. and Illés, S. (2016). Free movement of people and the Brexit. *Hungarian Geographical Bulletin* 65(4). 421-432. DOI: 10.15201/hungeobull.65.4.8

- Glouftsiou, G. (2018). Governing circulation through technology within EU border security practice-networks. *Mobilities* 13(2), 185-199. DOI: 10.1080/17450101.2017.1403774
- Górny, A. (2017). All circular but different: Variation in patterns of Ukraine-to-Poland migration. *Population, Space and Place* DOI 10.1002/psp.2074.
- Hárs, Á. (2016). Emigration and immigration in Hungary after the regime change – by international comparison In: Blaskó, Zs. and Fazekas, K. (eds.) *The Hungarian labour market 2016*. Budapest: Institute of Economics CERS HAS, 39-54.
- Hugo, G. (2014) A multi sited approach to analysis of destination immigration data: an Asian example. *International Migration Review* 48(4), 998-1027.
- Illés, S. and Kincses, Á. (2008). Foreign retired migrants in Hungary, *Hungarian Statistical Review* 86(Special number 12), 88-111.
- Illés, S. and Kincses, Á. (2018). Effects of economic crisis on international circulators to Hungary, *Sociology and Anthropology* 6(5), 465-477. DOI: 10.13189/sa.2018.060503
- Illés, S. and Michalkó, G. (2011). Real estate purchasing by foreigners in Hungarian settlement system as seen from the angle of niche concept. In: Csapó, T. and Balogh, A. (eds.) *Development of the Settlement Network in the Central European Countries*. Berlin-Heidelberg: Springer-Verlag, 175-189.
- Irimiás, A. (2012). The Chinese diaspora in Budapest: a new potential for tourism. *Tourism Review*, 67(1), 23-33.
- Khadria, B. (2013). Transnationalism: an overview. In: Ness, I. (ed.), *The encyclopedia of global human migration*. Chichester: Wiley-Blackwell, DOI: 10.1002/9781444351071.wbeghm543
- King, R. (2002). Towards a new map of European migration. *International Journal of Population Geography* 8(2), 89-106.
- Kiss, É. (2012). The impacts of the economic crisis on the spatial organization of Hungarian industry, *European Urban and Regional Studies* 61(2), 155-173.
- Kocziszky, Gy., Benedek, J. and Szendi, D. (2018). The impact of the 2008 financial crisis on household income and wealth in Visegrad countries, *Regional Statistics* 8(1), 141-167; DOI: 10.15196/RS080102
- Kritz, M.M., Lim, L.I. and Zlotnik, H. (eds.) (1992). *International Migration Systems. A global approach*. Oxford: Clarendon Press.
- Lévai, I. (2011). Sustainable globalisation and limits to sustainability. In: Urbain, O. and Temple, D. (eds.): *Ethical transformations for a sustainable future*. New Brunswick and London: Peace & Policy, Vol. 14., Transaction Publishers, 115-128.
- Mabogunje, A.L. (1970). Systems approach to a theory of rural-urban migration. *Geographical Analysis*, 2(1), 1-18.
- M. Császár Zs. and Wusching, T. (2016). A felsőoktatás nemzetköziesedésének hatása az egyetemvárosok fejlődésére egy pécsi esettanulmány tükrében. (Effects of the internationalisation of higher education on the development of university towns – a case study from Pécs.) *Földrajzi Közlemények* 140(3), 245-257.
- Michalkó, G., T. Rátz, M. Hinek, and Tömöri, M. (2014). Shopping tourism in Hungary during the period of the economic crisis. *Tourism Economics* 20(6), 1319-1336.
- Mohapatra, S. and Ratha, D. (2009). *The impact of the global financial crisis on migration and remittances*. Washington: World Bank.
- Moreh, C. (2014). A decade of membership: Hungarian post-accession mobility to the United Kingdom. *Central and Eastern European Migration Review* 3(2), 79-104.
- Nadler, R., Kovács, Z., Glorius, B. and Lang, T. (eds.) (2016). *Return migration and regional development in Europe: mobility against the stream*. London: Palgrave Macmillan.
- Parusel, B. (2017). Circular migration and the need to define and measure it. *Migration Policy Practice* 7(2), 38-43.
- Pott, A. (2013). Geography of migration. In: Ness, I. (ed.) *The encyclopedia of global human migration*. Chichester: Wiley-Blackwell, DOI: 10.1002/9781444351071.wbeghm24
- Roos, C. and Zaun, N. (2016). The global economic crisis as a critical juncture? The crisis's impacts on migration movements and policies in Europe and the U.S." *Journal of Ethnic and Migration Studies* 42(10), 1579–1589. DOI: 10.1080/1369183X.2016.1162351

- Sander, N., Abel, G.J., Bauer, R. and Schmidt, J. (2014). *Visualising migration flow data with circular plots*. Vienna: Vienna Institute of Demography of Austrian Academy of Sciences
- Simon, S. and Randalls, S. (2016). Geography, ontological politics and the resilient future. *Dialogues in Human Geography* 6(1), 3-18. DOI: 10.1177/2043820615624047
- Skeldon, R. (2012). Going round in circles: circular migration, poverty alleviation and marginality. *International Migration* 50(3), 43-60.
- Skeldon, R. (1997). *Migration and development. Global perspective*. Harlow: Logman.
- Strockmeijer, A., de Beer, P. and Dagevos, J. (2019). Should I stay or should I go? What we can learn from working patterns of Central and Eastern European labour migrants about the nature of present-day migration, *Journal of Ethnic and Migration Studies* DOI: 10.1080/1369183X.2018.1562326
- Sacchetto, D. and Vianello, F.A. (2016). Unemployed migrants coping with the economic crisis. Romanians and Moroccans in Italy. *Journal of International Migration and Integration* 17(3). 839-852. doi.org/10.1007/s12134-015-0440-2
- Szoke, L. (1992). Hungarian perspectives on emigration and immigration in the new European architecture. *International Migration Review* 26(2): 305-323.
- Tilly, C. (2011). The impact of the economic crisis on international migration: a review. *Work, Employment and Society* 25(4), 675–692.
- UNECE, (2016). *Defining and measuring circular migration*. Prepared by the Task Force on Measuring Circular Migration, New York and Geneva: United Nations.
- Wahba, J. (2015). Selection, selection, selection: the impact of return migration. *Journal of Population Economics* 28(3), 535-563.
- Waldinger, R. (2017). A cross-border perspective on migration: beyond the assimilation/transnationalism debate. *Journal of Ethnic and Migration Studies*, 43(1), 3-17, DOI: 10.1080/1369183X.2016.1238863
- White, A. (2013). Double return migration: failed returns to Poland leading to settlement abroad and new transnational strategies. *International Migration* 52(6), 72-84.
- Williams, A.M., Chaban, N. and Holland, M. (2011). The circular international migration of New Zealanders: enfolded mobilities and relational places. *Mobilities* 6(1), DOI 10.1080/17450101.2011.532659
- Winders, J. (2014). New immigrants destinations in global context. *International Migration Review* 48(3), 149-179.
- Weber, R. and Saarela, J. (2017). *Self-selection into circular migration. Evidence from linked Finnish and Swedish register data*. Stockholm Research Reports in Demography, no. 2017:28. Stockholm: Stockholm University, Demography Unit.
- Wimmer, A. and Glick Schiller, N. (2002). Methodological nationalism and beyond. Nation state building, migration and the social sciences. *Global Networks* 2(4), 301-334.
- Zsótér, B. and Kaliczka, R. (2014). Examinations carried out in relation to the shopping habits and satisfaction of costumers in the shops of Coop Szeged Ltd. *Review of Faculty of Engineering Analecta Technica Szegediensia* 8(1), 38-41.