

## INTERNAL MIGRATION

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### MAJOR FINDINGS

- In the first half of the 1990s, internal migration continued to decrease following the former trend, reaching its minimal value in 1994 with 360,000 movements. From the second half of the 1990s internal migration stagnated around 400,000 moves until 2005, then it suddenly rose higher in 2006 and 2007 but the increase did not prove to be durable. Due to the financial crisis beginning in 2008, the number of migrations fell back to the level of the mid-1990s.
- The number of permanent migrations has been steadily decreasing since 2007. Today, their number is just above 200,000, which is hardly more than the lowest level of 1991 with 181,000 moves.
- Residential mobility within the same settlement similarly decreased after 2007. The cases of moving to new residence within the same settlement were fewer in 2009 and 2010 than the lowest level of the early 1990s.
- The crude migration rate by sex shows just a slight difference in favour of women from the mid-1990s but this difference between the sexes was insignificant.
- The intensity of migration greatly differed by age groups. Irrespective of the type of migration, its probability is the highest among persons aged 20–29. Those under 19 are more mobile as regards temporary migration, while in the case of permanent migration this applies to those aged 30–39. The intensity of migration tends to decrease considerably among those above 40, while the mobility of older age groups is rather similar.
- Examining the balance of migration between the various types of settlements, we can find that the renewed attraction of the capital goes back to its migratory surplus over both villages and towns. Recent data show a population loss of rural regions both to Budapest and to other urban environments.
- It is primarily the capital and the sub-regions belonging to its agglomeration zone that profited most from migration. The majority of highly urbanized regions (cities with county status) are similarly characterized by a positive migration balance. Some small regions around Lake Balaton serving primarily recreation and some along the western borders followed suit. As a contrast, there is a high population loss in regions with unfavourable economic conditions, low employment rates and high unemployment, mainly in the northeastern, eastern, and southwestern parts of the country.
- Data on net migration show that Budapest extremely centralizes the movement of the population. The economic crises directed migration towards this central

region enjoying more favourable conditions in the labour market. At the same time, the role of regional centres seems to be more moderate, just like migration from east to west.

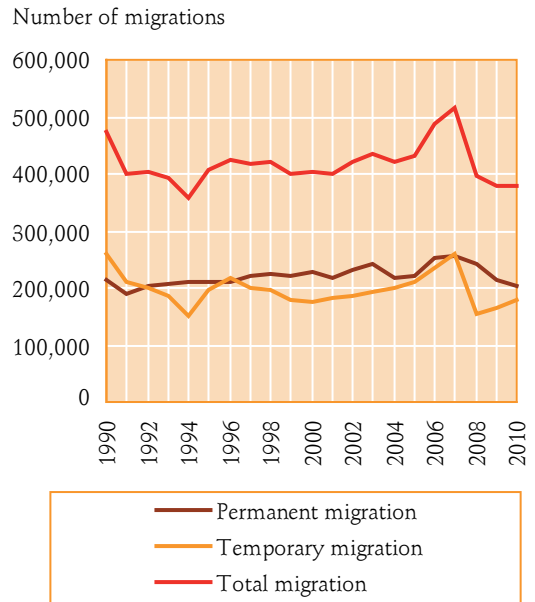
## THE VOLUME OF MIGRATION

### *Migration from settlement to settlement*

The willingness of the population to migrate was painfully affected by the economic difficulties of the early 1990s. The number of moves continued to decrease steeply, following the trend of the previous years. In 1990, 475,000 moves were registered, which number fell to 360,000 in 1994. The lowest value in migration flow in 1994 was followed by stabilization and in the period 1995–2005 about 400,000 moves took place each year. This continuous trend was broken in 2006 and 2007 when the number of migrations first grew to 490,000, then to 514,000. However, the rise did not prove durable. The economic crisis of 2008 greatly decreased the number of moves. The yearly average of 380,000 corresponds to the amount of the mid-1990s.

Migration can be subdivided into permanent and temporary ones (Fig. 1). The experiences of the past twenty years indicate that the number of permanent migrations is generally higher than that of temporary ones and is less uneven.<sup>1</sup> The drop in 1990–1994 is almost exclusively due to a considerable change in temporary movements, just like part of the rise in 2006–2007.

**Fig. 1. Number of internal migrations, 1990–2010**



Source: Demográfiai táblázó (HCSO vital statistics).

In the first half of the 1990s, the number of temporary migrations fell from 261,000 in 1990 to 150,000 in 1994. The following year witnessed a rise to about 200,000, which proved lasting also after the turn of the millennium. In 2006 and 2007 there was a sudden growth similarly followed by a quick decrease.<sup>2</sup> In 2008, the number of temporary migrations dropped to 155,000, which is basically identical with the lowest number registered in the 1990s. The moderate rise in the past two years indicates a return to the previous trend.

The number of permanent migrations changes in a somewhat more predictable

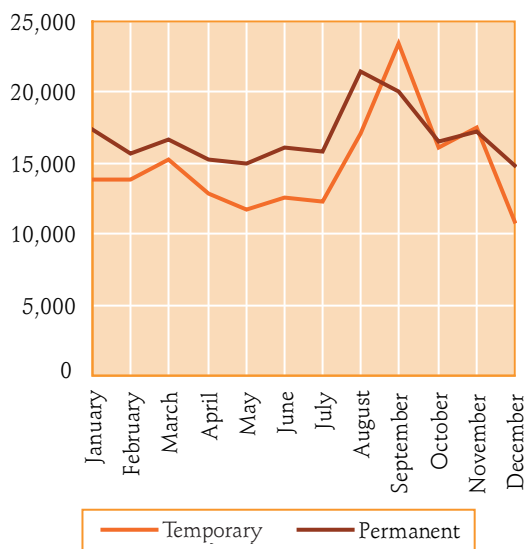
<sup>1</sup> Establishing the exact number of temporary migrations and remigrations is more difficult than that of permanent migrations. There are no reliable data on the failure to register temporary residence. The actual number of temporary movements is presumably higher than what is registered.

<sup>2</sup> From 2006, the period after which the residence not prolonged regularly was automatically struck off the register was extended from two to five years. The effect of this regulation appeared first in 2008 when new residences registered in 2006 and not prolonged were struck off for the first time.

manner. It was the lowest in 1991 with 181,000 moves. With the exception of that year, the annual number of permanent migrations was always above 200,000 throughout the discussed period and, apart from a few smaller relapses, showed an overall moderately rising tendency till 2007. The highest value was registered in 2007 with 255,000 moves. Then the volume of permanent migration clearly started to decrease, reaching a level hardly over 200,000 in 2010.

Both types of migration is characterized by strong seasonality (Fig. 2). In the first seven months of 2010, the frequency of migration was relatively stable in both types. In the case of permanent migration, a considerable rise could be observed in August and September, while in the case of temporary ones September was definitely the peak. The high volume of migration in August and September is mostly due to changing residence with view to education.

**Fig. 2. Monthly changes in permanent and temporary migration, 2010**



Source: KSH Demográfiai évkönyv 2010 (HCSO Demographic Yearbook, 2010).

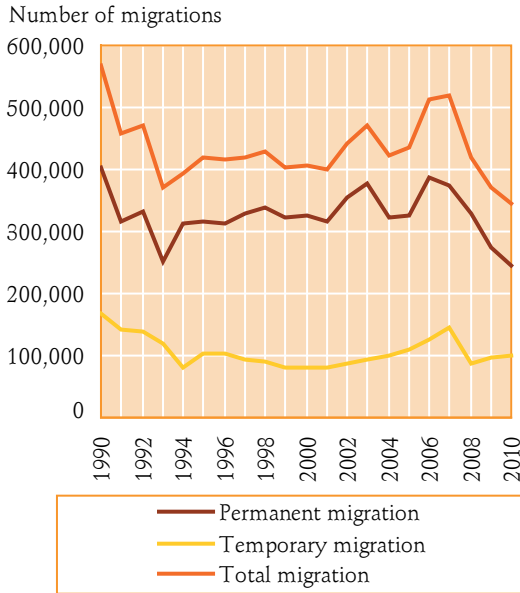
### Residential mobility

Residential mobility within settlements does, by definition, not belong to migration and its motivations are different, too. As it takes place within the same settlement, the person who moves to another place does not get detached from his/her earlier environment. Institutional and personal connections do not necessarily get severed, the employed remain in the same local labour market. Residential mobility (reflecting the changes of housing conditions) still offers an important insight into the short-distance spatial mobility of the population.

In the early 1990s, the number of residential movements within settlements was nearly 570,000 but this figure dropped to about 400,000 in a few years and remained on this level till the turn of the millennium. In 2006 and 2007 its rising trend was similar to that of internal migrations crossing settlement borders. The economic crisis of 2008 led to a smaller demand for new homes and, consequently, to the slackening of residential mobility. The number of movements within the same settlement fell under a quarter of a million in 2010 (to 244,000), which is the lowest figure in the whole period in question.

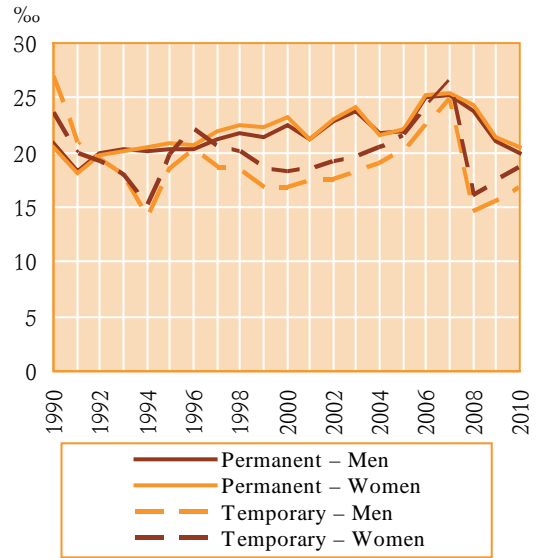
The overwhelming majority of residential movements within settlements is made up of permanent ones (Fig. 3). They are three or four times as many as temporary movements.

**Fig. 3. Number of residential moves within the same settlement, 1990–2010**



Source: KSH Demográfiai táblázó (HCSO vital statistics).

**Fig. 4. Number of temporary and permanent migrations per 1000 inhabitants by sex, 1990–2010**



Source: KSH Demográfiai táblázó (HCSO vital statistics).

## DISTRIBUTION OF MIGRANTS

### Differences by sex

The various demographic groups of society take part in internal migration to a different degree. This chapter aims to point out differences by sex and age group. The crude migration rate by sex shows a slightly higher mobility in the case of women since the mid-1990s. The difference is merely one or two per thousand, so there is no significant difference between the two sexes in this respect. This minimal divergence is due to the different degree of temporary migration while the crude rates of permanent ones are practically identical (Fig. 4).

### The age structure of migrants

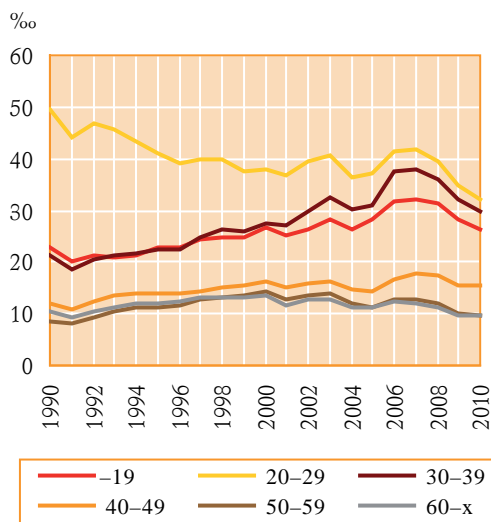
In general it can be established that mostly persons under 40 are involved in both types of migration. Over four fifths of permanent migrations and nearly three quarters of the temporary ones have been performed by these younger generations since the mid-1990s.

Let us now analyze the characteristics of permanent migration by age group first. In the discussed period it was the generation 20–29 that took part in migration to the greatest degree despite the fact that the frequency of the movements of young adults was steadily decreasing. In this phase of the life course temporary migrations are more frequent. This generation is followed in frequency by those aged 30–39, and those under 19. Apart from

the almost general decrease in the period of the crisis, the migration both of the age group 30–39 and of those under 19 was increasing in the discussed period. The similar tendency of these two age groups is not surprising as they are mostly parents and children moving together.

The migratory pattern of the age group 40+ is sharply different from that of the younger generations. As time goes by, the willingness to move decreases further but the rates for those aged 50–59 and 60+ do not differ from each other.

**Fig. 5. Permanent migration per 1000 persons by age group, 1990–2010**

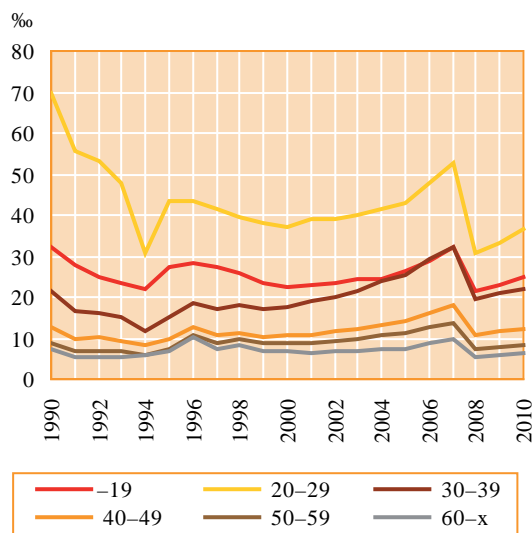


Source: KSH Demográfiai táblázó (HCSO vital statistics).

Similarly to permanent migration, a higher intensity can be observed in the case of the younger generations under 40 in temporary migration, too. It is the highest among the age group 20–29, followed by those under 19, and by those aged 30–39. From the middle of

the past decade, the differences in the rates of the latter two groups was diminishing and disappeared completely between 2004 and 2008. The age 40 seems to be the dividing line in the case of temporary migration, also. The willingness to migrate is relatively moderate above that age limit.

**Fig. 6. Temporary migrations per 1000 persons by age group, 1990–2010**



Source: KSH Demográfiai táblázó (HCSO vital statistics).

## TERRITORIAL CHARACTERISTICS OF INTERNAL MIGRATION

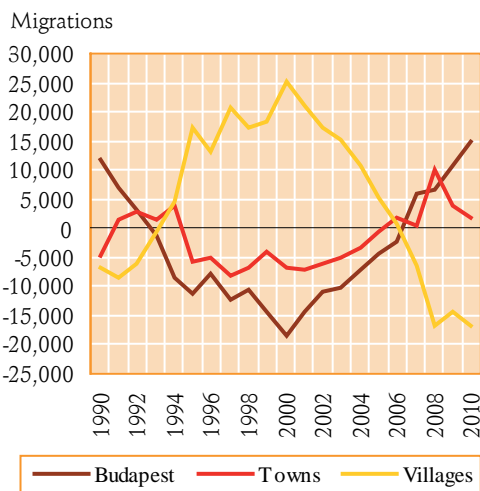
The volume and balance of migration influences not only the size of the population but several other demographic factors as well. As a consequence of migration, the age structure and dependency ratios of a given territory are modified. As mentioned earlier, it is the younger, active generations that are mostly involved in migration, increasing by this the unfavourable tendencies in the age structure of places of origin. The selective

characteristics of migration can, however, be observed not only in the demographic profile but also in the characteristics of the migrants as regards the labour market. The loss of qualified labour force is detrimental to the human resources of a region.

**Internal migration by type of settlement**

On the basis of the migration balance of the three major types of settlements distinct patterns of migration can be established.<sup>3</sup> The time series of the migration balance for Budapest in the past two decades can be described by an U-shaped curve. In the early 1990s, Budapest still had a positive migration balance. It was after 1993 that the number of out-migrations first exceeded that of in-migrations. This negative migration balance lasted till 2006. However, in the past four years data on migration showed the increasing attraction of Budapest.

**Fig. 7. Migration balance by settlement types, 1990–2010**



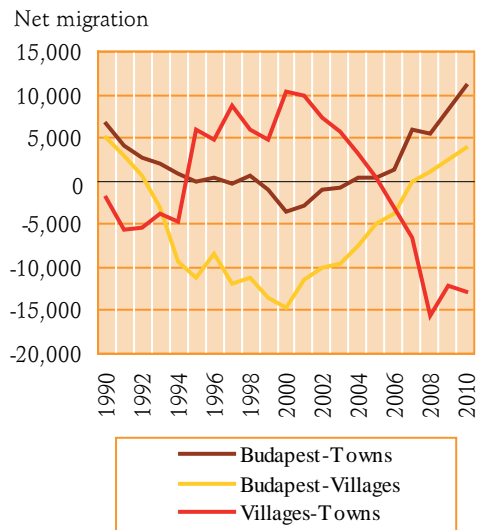
Source: KSH Demográfiai táblázó (HCSO vital statistics).

<sup>3</sup> Migration by settlement types was analyzed on the basis of the legal status of settlements determined in 2010.

The aggregate migration of settlements can be demonstrated by a reversed U-shaped curve. There the balance of migration was positive for the first time in 1994.

The almost steadily improving balance reached its peak in the year of the turn of the millennium, then it started to decrease sharply once again. The present migration balance of villages is around 17,000, a lower value could be observed only in 2000, in the case of Budapest. The trend in the towns and cities, those of county rank included, seems to be less even. In the first half of the 1990s, their migration balance was basically positive, to be followed by a migration loss for a decade that turned into gain once again from 2006 onwards.

**Fig. 8. Migration balance among the various types of settlement, 1990–2010**



Source: KSH Demográfiai táblázó (HCSO vital statistics).

Comparing the various types of settlement helps us to understand the causes of the redistribution of the population. The gain of Budapest in the early 1990s and following the

turn of the millennium goes back primarily to its favourable balance of migration towards the county seats and other towns, whereas the considerable loss in the meantime is due mostly to out-migration to villages. The processes of the past years indicate that the attraction of Budapest is getting stronger again both with respect to towns and villages. Currently, there is a population loss in the rural regions in several directions.

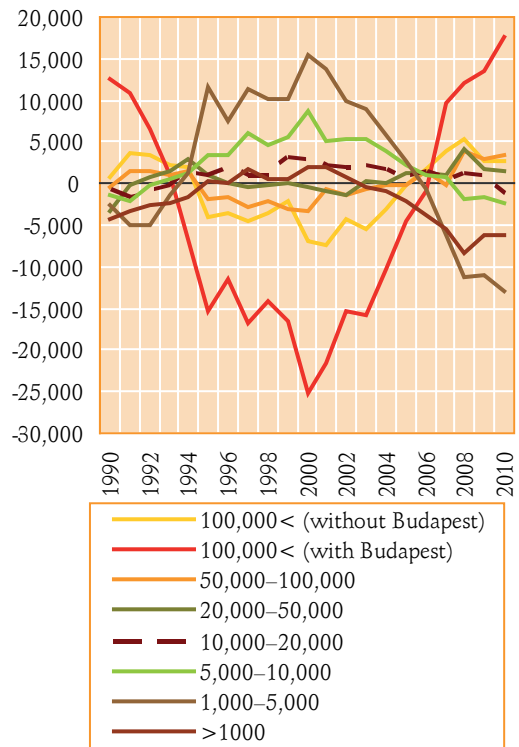
### Internal migration

Internal migration by the size of settlements shows regularities similar to those connected with administrative status (Fig. 9). This is not surprising since the hierarchy of settlements is closely related to the number of inhabitants. However, the increase in the number of categories offers a more detailed picture of the migration process.

In the early 1990s, settlements with a larger population were on the winning side as regards internal migration. With the exception of a few years, the aggregate migration balance even of settlements with more than 20,000 inhabitants was positive in 1990–94. From the mid-1990s on, the focal points of migration were changing. Settlements with more than 50,000 inhabitants suffered population loss, while the smaller ones had a positive balance of migration. This was the period of suburbanization when the senders were the bigger towns and the winners were the neighbouring villages. Around the turn of the millennium, the gain of smaller settlements (those with 5,000 to 10,000 inhabitants and those with 1,000 to 5,000) and the loss of those above 100,000 started to diminish. From the middle of the decade, the trends unfavourable for the big cities of the country have changed for the better and the balance turned positive. It is now the smallest settlements, i.e., those with less than 5,000 inhabitants that suffer considerable migration loss.

Current processes indicate the weakening of the power of villages with few inhabitants in rural regions to keep their population. The greatest gain can be observed in Budapest, while in the intermediate categories there is no considerable redistribution of population.

**Fig. 9. Net migration balance by the size of settlements, 1990–2010**



Source: KSH Demográfiai táblázó (HCSO vital statistics).

## SPATIAL CHARACTERISTICS OF MIGRATION

Among all demographic phenomena it is migration that can the least be separated from the spatial context. Distance, direction, the interaction between the places of origin and



destination are all key factors in the migration processes. Internal migration is one of the most important factors of changing the size of the population in a given geographical unit that can result in a population growth even if natural demographic processes would not lead to this effect. The most important feature of migration is that its spatial distribution is uneven. A territory can gain population only at the expense of others, which inevitably leads to the redistribution of the population. Beyond that, it directly influences the age structure of the population, also.

The processes introduced by national macro data and settlement categories are useful in establishing the volume of internal migration but do not point out processes going on in the individual locations.

To illustrate the spatial characteristics of migration, we used regional data referring to sub-regions for the years between 2008 and 2010 ( $n=174$ )<sup>4</sup> that make a much more detailed introduction of the spatial structure of migration possible as compared to the earlier arrangement by regions or counties.

In the period 2008–2010 there were 1,160,000 permanent or temporary migrations among settlements. Less than a quarter of the internal migrants (23.5 per cent) crossed the borders of the sub-regions, too, i.e., a considerable portion of migrations was of short distance.

We used four indicators to illustrate the territorial balance of migration that are slightly different in content but are statistically strongly correlated. Our calculations did not include moves within the same sub-region.

As a result of current migration processes, a quarter of the Hungarian sub-regions had a migration gain in the given period. The areas of destination consist of well definable locations, in some cases even of wider regions. The winner is the central region, i.e., Buda-

pest and the majority of the adjacent sub-regions of the commuter belt. As it has been mentioned above, the migration balance of Budapest became positive once again in the past years. The spatial data indicate, however, that this gain does not come from the loss of the adjoining sub-regions. Budapest continues to be a place of origin with regard to the nearby green belt where suburbanization is still going on, though to a smaller degree than before. All in all, in 2008–2010 77,000 persons moved from Budapest to Pest county but only 54,000 persons moved into the capital from there.

The other group of recent winners is made up of the regions around cities of county status. In some cases, also neighbouring sub-regions have relatively favourable migration balance (e.g., sub-regions around Szeged, Székesfehérvár, and Tatabánya). There were the sub-regions of only half a dozen big cities where there was a negative balance of migration. The power to keep their population failed in the sub-regions of Békéscsaba, Dunaujváros, Miskolc, Szolnok, Salgótarján, and Szekszárd compared to towns of similar rank. Besides the above mentioned central and other urbanized regions, a favourable migration balance can be observed in the regions of resorts along Lake Balaton (the Balatonalmádi, Füred, Keszthely, and Hévíz sub-regions) and along the western borders of the country.

The regions that suffered the largest migration loss are mostly in the eastern, northeastern, and southwestern regions but instances of negative balance occur also in less urbanized parts of more developed regions as well. Since a great number of migrations, mostly the permanent ones, are short-distance migrations, the sharp contrast between the places of origin and destination is not surprising. The crude

<sup>4</sup> In 2010, the number of sub-regions changed to 175.

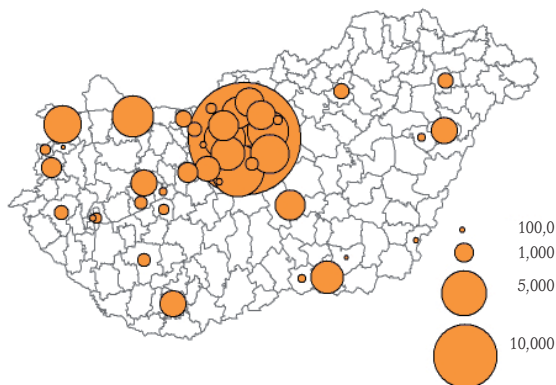


migration rate (migrations per thousand inhabitants), migration ratio (number of in-migrants per that of out-migrants) and migration efficiency (net migration per all migrations) reflect different aspects of the same phenomenon, indicating that there are considerable differences among sub-regions suffering population loss. Those with the largest loss are in the eastern part of the country, are generally backward economically and have unfavourable conditions as regards the labour market. In these sub-regions it is

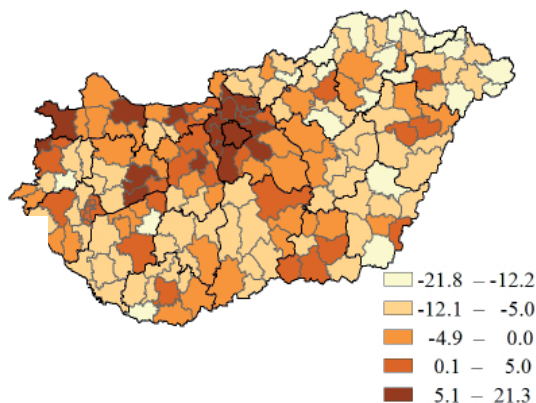
not exceptional if merely 5 to 6 in-migrants fall to 10 out-migrants, consequently their migration rate is very low. The ratio of net migration and the total number of migrations are the indicators of migration efficiency. The high absolute figure of the index refers to the remarkable redistribution of the population. In certain sub-regions in Northeastern Hungary, the total migration loss amounts to one third of the migration turnover, while some sub-regions, mostly around Budapest, managed to keep 20 to 25 per cent of the same.

**Fig. 10. Variables of internal migration by sub-regions, 2008–2010**

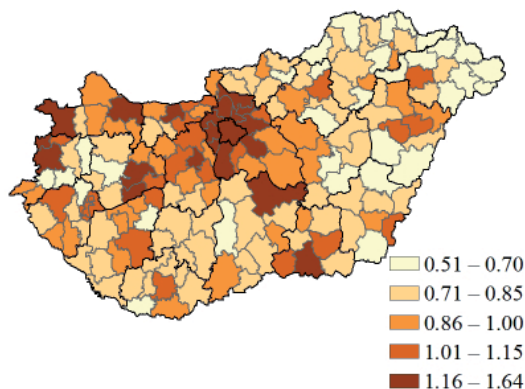
*Positive net migrations by sub-regions*



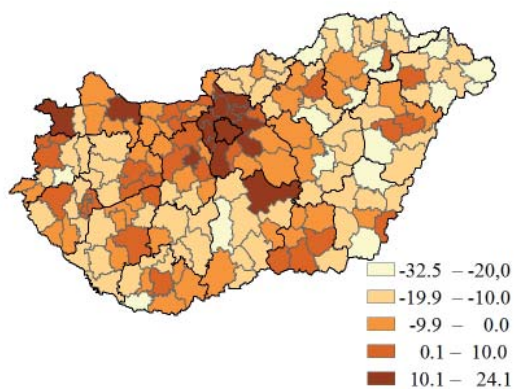
*Net migration rate per 1000 inhabitants*



*Migration ratio*



*Migration efficiency*



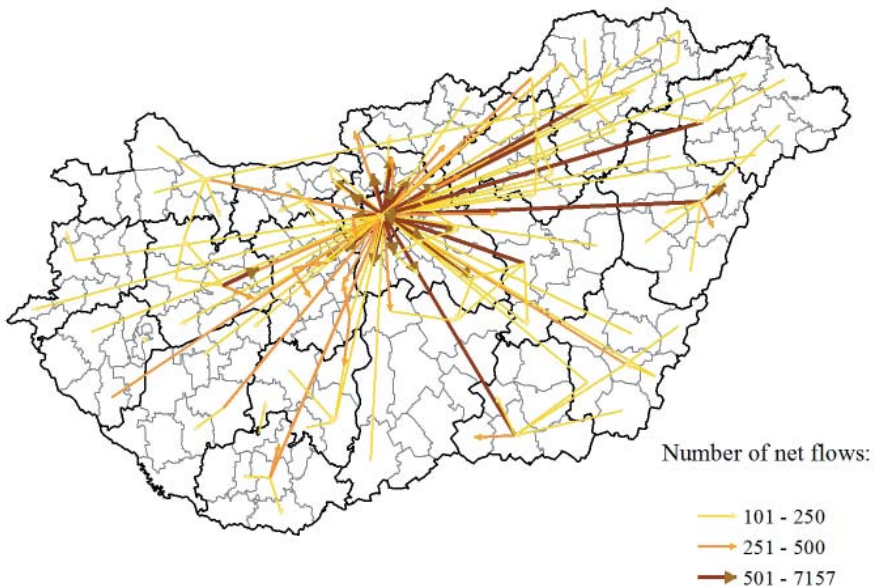
## THE SPATIAL ASPECTS OF MIGRATION

Every migration can be determined by the place of origin and destination. The direction, length and volume of the moves help to understand the patterns of migratory flows and, in a wider sense, also the possible causes of the spatial redistribution of the population. Using a spatial scale by sub-regions one can establish that the number of possible spatial interactions is above 30,000. The visual representation of such a great matrix of migration comes up against difficulties.<sup>5</sup> Migratory interactions are characterized by the net migration of the given period indicating the absolute value

of the migration balance of two locations. The direction of the vector points to the sub-region with migration surplus. Asymmetrical connections are stressed as a consequence of the nature of net migratory flows. In order to make the chart clear-cut, we included only movements involving at least 100 persons. In the discussion of migratory movements we took both permanent and temporary migrations between areas into account.

Today, Budapest gains the most from migration. Its central position is clear not only with view to the eastern regions but also with view to the western sub-regions of the country. The density and intensity of connections is the greatest between Budapest and the northern Great Plains and Northern

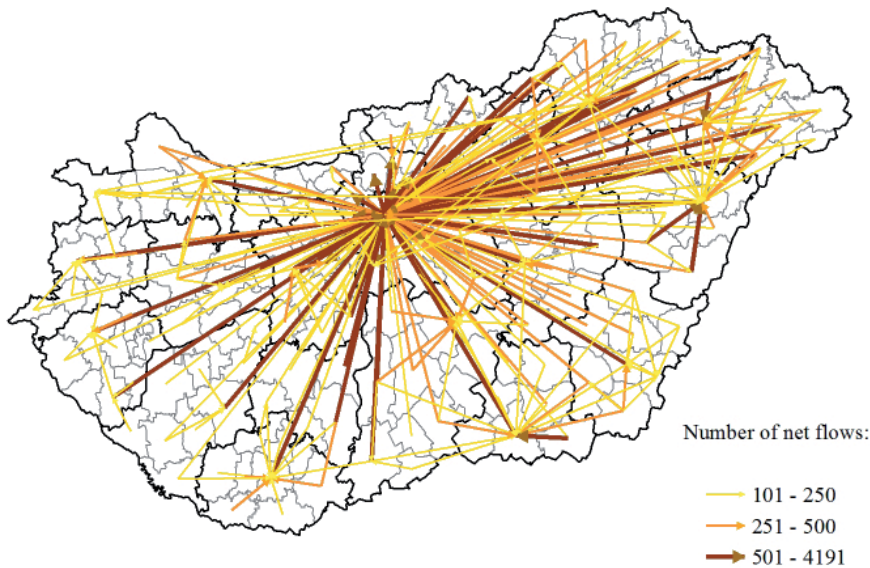
**Fig. 11. Number of net migrations between sub-regions, 1998–2000**



Note: We created the vectors showing net migratory movements with the help of Flowpy python script (Glennon, 2009).

<sup>5</sup> Leaving movements within the same sub-region out of consideration, the size of the migration matrix is  $n(n-1)$ , i.e., the number of possible spatial interactions is 30,102. The actual number of interactions was smaller by 7,000 between 2008 and 2010.

Fig. 12. Number of net migrations between sub-regions, 2008–2010



Note: We created the vectors showing net migratory movements with the help of Flowpy python script (Glennon, 2009).

Hungary. Direct movements between east and west can be considered insignificant, given the moderate threshold we used. The current migration pattern shows that there are very few places of destination that would mean a real alternative to Budapest. Internal migration focuses on spatial mobility between Budapest and the countryside.

Another type of spatial interactions was much more local. They take place within sub-regions or between neighbouring sub-regions around a larger city of regional importance. It is, therefore, important to note that the attraction of a locality can be observed primarily within a county or within the

same a region at best. Comparing the present migration pattern with the one valid a decade ago, one can find remarkable differences, whereas the number of migrations does not differ considerably. Around the turn of the millennium, mainly short-distance out-migrations from Budapest and interactions between the capital and the commuter belt dominated. Interactions between the capital and more distant rural sub-regions proved to be less frequent. The Hungarian countryside seemed considerably less mobile, and it can be presumed that to and fro movements between smaller territorial entities were more balanced, too.

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