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Eugeniusz Z. Zdrojewski^{*}, Małgorzata Guzińska^{**}

DIRECTIONS AND SIZE OF DEFINITIVE MIGRATION **IN POLAND SINCE 1999**

Summary. The main aim of the study is to show the influence of migration on the dynamics of the real growth of population in all the 16 present-day voivodeships, with a division into urban and rural areas. Only definitive (permanent) internal and international (foreign) migrations were taken into consideration here. Since migration is a twodirectional movement - inflow (immigration) to a given territory and outflow (emigration) from the former place of residence – we dealt here both with newcomers (incoming population, immigrants) to the territory of all 16 voivodeships and with the population leaving given voivodeships permanently. A particularly detailed analysis was applied to net migrations or migration balances.

Key words: migration movement, definitive migration

1. Introduction

Besides natural movement, migrations are the second factor causing major changes in the level of population density, spatial arrangement and diverse population structures. One of their distinctive features is the fact that they influence directly and quickly the dynamics of changes in the size of, its density and structure of population in a given area. Under some specific social and economic as well as political circumstances, they can influence the increase (or decrease) in population size and certain change processes to a much greater extent than natural movement does.

Research into migration processes has been and will be conducted by many authors who represent different branches of science, which is due to the diverse causes and results of these processes, the function they have in the process of demographic transformations and of changes in social and spatial structures, their great variety of forms, classification criteria, their territorial scope as well as changes in their size and intensity over time. Those researchers include

^{*} Professor, Technical University of Koszalin, Institute of Economy and Management.
** MSc, The State School of Higher Professional Education in Koszalin.

demographers, sociologists, economists, statisticians, geographers and historians. Research conducted so far, both at home and abroad, has concerned different time periods, diverse aspects of migration movement, but also diverse spatial units. In studies based on that research, relatively little notice has been given to migration processes as they are in the current administrative division.

Meanwhile, Poland underwent a political transformation and a fundamental administrative reform, economic restructuring is being deepened, our country joined the European Union etc. Large urban centres and conurbations are becoming more and more important. There are more opportunities for metropolitan associations to develop, a slight slowdown in development processes can be seen around former seats of voivodeship authorities and their sub-regions. All these factors have a significant impact on migration processes, their size, intensity, main directions and the range of territorial movements of the population. Under these circumstances, many questions arise over the spatial mobility of population, its different aspects, the current role of internal and international migration in shaping population processes in the country and on the scale of current voivodeships. Obviously, one study of a limited size is not enough to provide indepth answers to these and other questions. Therefore, the authors had to select certain issues and make an attempt at explaining them.

The main aim of the study is to show the influence of migration on the dynamics of the real growth of population in all the 16 present-day voivodeships, with a division into urban and rural areas. Only definitive (permanent) internal and international (foreign) migrations were taken into consideration here. Since migration is a two-directional movement – inflow (immigration) to a given territory and outflow (emigration) from the former place of residence – we dealt here both with newcomers (incoming population, immigrants) to the territory of all 16 voivodeships and with the population leaving given voivodeships permanently. A particularly detailed analysis was applied to net migrations or migration balances. The final balance of population movements in different directions, its size and character (positive or negative) directly influence the dynamics of increase (or decrease) in the number of population within a given territory.

The role of definitive migration in the real growth (decline) of population has been analysed with reference to all voivodeships which have existed in our country since the beginning of 1999. The dividing lines adopted in this study are the years 1999 and 2007. The year 1999 is the year of establishing of the current division into voivodeships, and the end year determines the availability of exact and verified statistical data in the process of preparing the study for printing. In principle, it is a sufficient period to grasp certain tendencies and detect some regularities.

Publications of Polish Central Statistical Office (Główny Urząd Statystyczny, GUS), and in particular individual editions of the Demographic Yearbook of

Poland (Rocznik Statystyczny) served as a basic source of statistical data. Using a consistent source enabled us to perform quite a deep analysis and compare certain phenomena and processes in time, with regional and social division (urban and rural areas). The most significant statistical data as well as necessary ratios and rates have been placed in tables, and in order not to extend them excessively not all of them include individual years of the period under analysis. In several tables only the following years have been presented: initial (1999) and final (2007). However, in the text part of the paper all years have been discussed and the year in which maximum values were recorded has been indicated.

The study has been conducted primarily on the basis of statistical data. Therefore, the abundant literature on the subject has been used to a lesser extent. Since, however, potential readers may be interested in the interpretation of source materials, comments and conclusions concerning migration processes, a selection of books has been chosen and included in the references at the end of the article. Among many studies, particularly useful were some works by K. Dziewoński, P. Edbert, A. Gałązka, A. Gawryszewski, B. Sakson and E.Z. Zdrojewski. Also the basic sources have been enumerated there, i.e. individual editions of the Demographic Yearbook of Poland (Rocznik Statystyczny) and Concise Statistical Yearbook of Poland 2007 (Mały Rocznik Statystyczny 2007).

Such selection of sources and literature enabled the authors to apply a statistical and descriptive as well as comparative method. Moreover, a number of simple ratios and rates have been used which allowed for great accuracy, thorough analysis and assessment of migration processes as well as for formulating many detailed comments and generalisations.

2. Changes in Migration Intensity and Directions over Time

In the 1990s and at the beginning of the following century, there occurred significant changes in migration processes. Above all, the general spatial mobility of population decreased noticeably. As far as internal migration is concerned, we can see a considerable inflow decrease (equal to the outflow). In 1990 it was still nearly 530 thousand, and in 1998 it already decreased to 417 thousand, followed by 369 thousand in 2001, i.e. the lowest figure in the post-war period.¹

In that time, the flow to urban areas declined sharply: from 346 thousand in 1990 to 210 thousand in 2001. It is worth mentioning that in 1982 it still amounted to 503 thousand, and in 1988 to 405 thousand.

Also in rural areas fewer and fewer people registered for permanent residence. Suffice it to say that in 1982 the inflow still amounted to over 301 thou-

¹ Rocznik Demograficzny, 2007, GUS, Warsaw, pp. 29-35

sand, in 1989 to 213 thousand, and in 2001 that figure was only 159 thousand (see Tab. 1).

Since 2002 we have been seeing some increase in spatial mobility of the residents of urban and rural areas. Here it needs to be emphasised that the last two years considered in the study are distinctive due to a particular growth of migration, which will be discussed later in a further part of the paper.

Tab. 1. Internal and international migration in Poland (in thousands)

| | Int | ernal migra | ition | Intern | ational migrat | tion | Total net |
|-------|-------|-------------|--------------------|-------------|----------------|--------------------|-----------|
| Years | In | Out | Net migra- tion | Immigration | Emigration | Net migra- tion | migration |
| | | | | Total | | | |
| 1999 | 432.4 | 432.4 | X | 7.5 | 21.5 | -14.0 | -14.0 |
| 2000 | 394.1 | 394.1 | X | 7.3 | 27.0 | -19.7 | -19.7 |
| 2001 | 369.3 | 369.3 | X | 6.6 | 23.3 | -16.7 | -16.7 |
| 2002 | 403.6 | 403.6 | X | 6.6 | 24.5 | -17.9 | -17.9 |
| 2003 | 430.5 | 430.5 | X | 7.0 | 20.8 | -13.8 | -13.8 |
| 2004 | 432.6 | 432.6 | X | 9.5 | 18.9 | -9.4 | -9.4 |
| 2005 | 422.8 | 422.8 | X | 9.3 | 22.2 | -12.9 | -12.9 |
| 2006 | 473.5 | 473.5 | X | 11.0 | 47.0 | -36.0 | -36.0 |
| 2007 | 511.2 | 511.2 | X | 15.0 | 35.5 | -20.9 | -20.5 |
| | | | U1 | rban areas | | | |
| 1999 | 241.4 | 238.6 | 2.8 | 5.5 | 18.2 | -12.7 | -9.9 |
| 2000 | 221.3 | 225.5 | -4.2 | 5.1 | 21.5 | -16.4 | -20.6 |
| 2001 | 210.2 | 216.7 | -6.5 | 4.7 | 18.1 | -13.4 | -19.9 |
| 2002 | 225.7 | 243.3 | -17.6 | 4.6 | 19.0 | -14.4 | -32.0 |
| 2003 | 235.7 | 266.1 | -30.4 | 4.9 | 15.7 | -10.8 | -41.2 |
| 2004 | 229.5 | 271.1 | -41.6 | 6.7 | 13.8 | -7.1 | -48.7 |
| 2005 | 230.4 | 263.0 | -32.6 | 6.6 | 17.1 | -10.5 | -43.1 |
| 2006 | 256.0 | 291.1 | -35.1 | 7.9 | 34.1 | -26.2 | -61.3 |
| 2007 | 263.3 | 311.2 | -47.9 | 10.6 | 24.8 | -14.2 | -62.1 |
| | | | R | ural areas | | | |
| 1999 | 191.0 | 193.8 | -2.8 | 2.0 | 3.3 | -1.3 | -4.1 |
| 2000 | 172.8 | 168.6 | 4.2 | 2.2 | 5.5 | -3.3 | 0.9 |
| 2001 | 159.1 | 152.6 | 6.5 | 1.9 | 5.2 | -3.3 | 3.2 |
| 2002 | 177.9 | 160.3 | 17.6 | 2.0 | 5.5 | -3.5 | 14.1 |
| 2003 | 194.8 | 164.4 | 30.4 | 2.1 | 5.1 | -3.0 | 27.4 |
| 2004 | 203.1 | 161.5 | 41.6 | 2.8 | 5.0 | -2.2 | 39.4 |
| 2005 | 192.4 | 159.8 | 32.6 | 2.7 | 5.1 | -2.4 | 30.2 |
| 2006 | 217.5 | 182.4 | 35.1 | 2.9 | 12.8 | -9.9 | 25.2 |
| 2007 | 247.9 | 200.0 | 47.9 | 4.2 | 10.7 | -6.3 | 41.6 |

Source: Rocznik Demograficzny. 2008. GUS, Warsaw, pp. 30-35.

Particularly significant changes occurred in the basic directions of movement. They were so deep that as a result of internal migration urban areas started to lose their population and rural areas experienced an increase in movement

(Tab. 1 and 2). The previously dominating flow of rural-urban movements was reversed. This can also be seen on the example of intravoivodeship migration (Tab. 5). Urban-urban movements did show some growth indeed, but at the same time urban-rural movements increased greatly, with a simultaneous decrease in rural-rural movements (outside the limits of individual gminas). Only in 1991 the negative net migration in rural areas amounted to -106.4 thousand and in the next year to -85.7 thousand, whereas in 2000 it was +4.2 thousand and in subsequent years the migration of population increased by several dozen thousand people.

| | | In | | | Out | | N | et migratio | on |
|-------|-------|-------------------|-------------------|-------|------------------------|------------------------|-------|----------------|----------------|
| Years | total | to urban areas | to rural areas | total | from urban areas | from rural areas | total | urban areas | rural areas |
| 1999 | 11.2 | 10.2 | 12.8 | 11.2 | 10.1 | 13.0 | X | 0.1 | -0.2 |
| 2000 | 10.2 | 9.3 | 11.6 | 10.2 | 9.5 | 11.3 | X | -0.2 | 0.3 |
| 2001 | 9.6 | 8.8 | 10.7 | 9.6 | 9.1 | 10.3 | X | -0.3 | 0.4 |
| 2002 | 10.5 | 9.6 | 12.1 | 10.5 | 10.4 | 10.9 | X | -0.8 | 1.2 |
| 2003 | 11.3 | 10.1 | 13.2 | 11.3 | 11.3 | 11.1 | X | -1.2 | 2.1 |
| 2004 | 11.3 | 9.8 | 13.7 | 11.3 | 11.6 | 10.9 | X | -1.8 | 2.8 |
| 2005 | 11.1 | 9.9 | 13.0 | 11.1 | 11.3 | 10.8 | X | -1.4 | 2.2 |
| 2006 | 12.4 | 11.0 | 14.7 | 12.4 | 12.5 | 12.3 | X | -1.5 | 2.4 |
| 2007 | 13.4 | 11.3 | 16.7 | 13.4 | 13.4 | 13.5 | X | -2.1 | 3.2 |

Tab. 2. Internal migration by direction per 1000 people

Source: Rocznik Demograficzny. 2000. GUS, Warsaw, p.341; ibidem, 2001..., p. 342; ibidem, 2002..., p. 316; ibidem, 2003..., p. 354; ibidem, 2004..., p. 418; ibidem, 2005..., p.422; ibidem, 2006..., p. 428; ibidem, 2007..., p. 420, 2008..., p. 434

This regularity can also be observed in longer periods. For instance, between 1996 and 2000 the net internal migration in urban areas was positive, and in the next 5-year period it changed into negative².

3. Internal Migration

The size of internal migration has been decreasing for many years but it was suddenly held back three times: during the economic and residential housing crisis which started at the end of the 1970s, in the second half of the 1980s, and at the turn of the 20th century. The decrease in the size of migration was not stopped until 2002. Almost at the same time the main direction of movements

² Mały Rocznik Statystyczny Polski, 2007. GUS, Warsaw, p. 131

changed. More detailed spatial analyses show that these movements are related to the fact that more well-off families move from big-city blocks of flats to their own houses built in attractive rural areas near to cities or in areas favourable to the development of tourism.

A detailed analysis of inflow, outflow and intervoivodeship net population movement reveals that only a few regions achieve positive results (see Tab. 3). In 1999 these were: Mazowieckie, Pomorskie, Małopolskie and Wielkopolskie Voivodeships in sequence. In 2007 Dolnośląskie Voivodeship joined that group of regions with a small positive net migration. The remaining voivodeships have shown and still show a decline in migration of population. The increase in the intensity of territorial movements is reflected to some extent in the level of migration exchange. However, both the inflow and the outflow recorded less than 500 thousand of those who registered for permanent residence or deregistered and moved to other urban areas or rural gminas.

Analysing the statistical data included in Table 3 we notice that most people move for permanent stay to Mazowieckie, Wielkopolskie and Śląskie Voivodeships, which belong to the most densely populated regions in the country. Comparatively smallest number of newcomers was registered in Opolskie, Świętokrzyskie, Podlaskie, Lubuskie and Warmińsko-Mazurskie Voivodeships. A similar distribution of numbers can be found among the population leaving these voivodeships. However, there is an essential difference between them: in some of them the inflow exceeds the outflow and therefore they have a positive net migration (Mazowieckie, Małopolskie Voivodeships) and in others (e.g. in Lubelskie and Śląskie Voivodeships) there is a reverse situation, hence, they show negative net migration. Nearly evenly balanced net movements (of incoming and outcoming population) can be observed in Lubuskie and Opolskie Voivodeships.

As a result of a change in the abovementioned directions of movement, the number of voivodeships in which urban areas achieved positive net migration values has drastically decreased. In 1999, 7 voivodeships had urban areas with positive net migration, in 2007 only one voivodeship did (Mazowieckie, Tab. 3). In the remaining regions, they lost their population to rural areas.

The situation was different in rural areas. Changes in the directions of movement led to an increase in the number of voivodeships in which net migration in the rural areas showed an increase in the same period, from 7 to 13 voivodeships. Only in three voivodeships, i.e. Warmińsko-Mazurskie, Podlaskie and Lubuskie was there a negative net migration.

Tab. 3. Internal migration by voivodeship

| | Iı | n | 0 | ut | Net mis | rration |
|---------------------|--------|--------|--------|--------|--------------|----------------|
| Voivodeships | 1999 | 2007 | 1999 | 2007 | 1999 | 2007 |
| Poland | 432434 | 511254 | 432434 | 511254 | X | X |
| Dolnoślaskie | 33464 | 39567 | 33747 | 39220 | -283 | 347 |
| Kujawsko-Pomorskie | 25107 | 28492 | 25351 | 29956 | -244 | -1464 |
| Lubelskie | 36742 | 27615 | 29776 | 32758 | +6966 | -5143 |
| Lubuskie | 12929 | 15429 | 13188 | 15908 | -259 | -479 |
| Łódzkie | 24538 | 28443 | 25752 | 30096 | -1214 | -1653 |
| Małopolskie | 32084 | 36542 | 30140 | 33219 | +1944 | 3323 |
| Mazowieckie | 61496 | 84444 | 54769 | 69498 | +6727 | 14946 |
| Opolskie | 12010 | 11824 | 12032 | 12569 | -22 | -745 |
| Podkarpackie | 21160 | 25306 | 22688 | 27475 | -1528 | -2169 |
| Podlaskie | 15336 | 14006 | 16418 | 16188 | -1082 | -2182 |
| Pomorskie | 27806 | 36844 | 25686 | 34258 | +2120 | 2586 |
| Ślaskie | 47174 | 49957 | 47567 | 53535 | -393 | -3578 |
| Świętokrzyskie | 13896 | 13936 | 16191 | 16565 | -2295 | -2629 |
| Warmińsko-Mazurskie | 18058 | 20417 | 20056 | 23158 | -1998 | -2741 |
| Wielkopolskie | 39029 | 53461 | 37237 | 50335 | +1792 | 3126 |
| Zachodniopomorskie | 21405 | 24971 | 21838 | 26516 | -433 | -1545 |
| Urban areas | 241454 | 263326 | 238662 | 311230 | 2792 | -47904 |
| Dolnoślaskie | 19957 | 21316 | 21662 | 26636 | -1705 | -5320 |
| Kujawsko-Pomorskie | 13686 | 12687 | 12310 | 16904 | +1376 | -4217 |
| Lubelskie | 12192 | 10788 | 11902 | 15926 | +290 | -5138 |
| Lubuskie | 7346 | 7927 | 7548 | 9592 | -202 | -1665 |
| Łódzkie | 13031 | 13634 | 13293 | 18295 | -262 -262 | -4661 |
| Małopolskie | 14136 | 15840 | 15279 | 18352 | -1143 | -2512 |
| Mazowieckie | 37065 | 50252 | 30410 | 43761 | +6655 | 6491 |
| Opolskie | 5600 | 5079 | 6223 | 7113 | -623 | -2034 |
| Podkarpackie | 8280 | 9930 | 9328 | 12278 | -1048 | -2034 -2348 |
| Podlaskie | 9190 | 7274 | 7480 | 8907 | +1710 | -1633 |
| Pomorskie | 17782 | 20283 | 16692 | 23201 | +1090 | -1033 -2918 |
| Śląskie | 34075 | 33995 | 37827 | 43352 | -3752 | -9357 |
| Świętokrzyskie | 5639 | 5120 | 6817 | 8231 | -1178 | -3111 |
| Warmińsko-Mazurskie | 10152 | 10691 | 9927 | 12585 | +225 | -1894 |
| Wielkopolskie | 20306 | 24625 | 18953 | 29724 | +1353 | -5099 |
| Zachodniopomorskie | 13017 | 13885 | 13013 | 16373 | +4 | -2488 |
| Rural areas | 190980 | 247928 | 193772 | 200024 | -2792 | 47904 |
| Dolnoślaskie | 13507 | 18251 | 12085 | 12584 | +1422 | 5667 |
| Kujawsko-Pomorskie | 11421 | 15805 | 13041 | 13052 | -1620 | 2753 |
| Lubelskie | 14550 | 16827 | 17874 | 16832 | -3324 | _5 |
| Lubuskie | 5583 | 7502 | 5640 | 6316 | -57 | 1186 |
| Łódzkie | 11507 | 14809 | 12459 | 11801 | -952 | 3008 |
| Małopolskie | 17948 | 20702 | 14861 | 14867 | +3087 | 5835 |
| Mazowieckie | 24431 | 34192 | 24359 | 25737 | +72 | 8455 |
| Opolskie | 6410 | 6745 | 5809 | 5456 | +601 | 1289 |
| Podkarpackie | 12880 | 15376 | 13360 | 15197 | -480 | 179 |
| Podlaskie | 6346 | 6732 | 8938 | 7281 | -2592 | -549 |
| Pomorskie | 10024 | 16561 | 8994 | 11057 | +1030 | 5504 |
| Ślaskie | 13099 | 15962 | 9740 | 10183 | +3359 | 5779 |
| Świętokrzyskie | 8257 | 8816 | 9374 | 8334 | -1117 | 482 |
| Warmińsko-Mazurskie | 7906 | 9726 | 10129 | 10573 | -2223 | -847 |
| Wielkopolskie | 18723 | 28836 | 18284 | 20611 | +439 | 8225 |
| Zachodniopomorskie | 8388 | 11086 | 8825 | 10143 | -437 | 943 |

Source: Rocznik Demograficzny. 2000. GUS, Warsaw, pp. XLX–XLIII; ibidem, 2008...,p. 434.

Analysing intravoivodeship migration by four basic directions we can see the regularity noticed before (Tab. 4). In both years taken into consideration in the Table on the national scale, there was comparatively greatest number of urban-rural movements, in 2007 the second place was occupied by rural-urban movements. The third place has been taken lately by urban-urban movements, whereas definitive rural-rural migration to a different gmina has been the least popular.

This order of directions is not universal, it is only typical of a few voivode-ships (Lubuskie, Łódzkie, Podlaskie, Zachodniopomorskie), while in Śląskie Voivodeship the urban-urban direction is predominant. In several voivodeships the least popular are not rural-rural movements but urban-urban ones, e.g. in Kujawsko-Pomorskie, Lubelskie, Małopolskie, Opolskie, Podkarpackie, Świętokrzyskie, Warmińsko-Mazurskie and Wielkopolskie. Yet another arrangement of territorial movements can be noticed in Zachodniopomorskie Voivodeship, where the second place is occupied by rural-urban migration; similarly, in Kujawsko-Pomorskie, Lubuskie, Łódzkie, Opolskie, Podlaskie, Warmińsko-Mazurskie and Wielkopolskie Voivodeships.

As a result of these varied configurations, net migration has diversified slightly. In most voivodeships, net migration changes only in one direction, namely from positive to negative, e.g. in Kujawsko-Pomorskie, Lubelskie, Lubuskie, Łódzkie, Mazowieckie, Podlaskie, Świętokrzyskie, Warmińsko-Mazurskie and Zachodniopomorskie Voivodeships (Tab. 5), and where the net intravoivodeship migration had been negative previously (i.e. in 1999), in the period up to 2007 it increased, as for instance in: Dolnośląskie, Małopolskie, Opolskie, Podkarpackie, Pomorskie, Śląskie and Wielkopolskie Voivodeships. Interestingly, neither of the voivodeships recorded a reverse phenomenon, i.e. change from negative into positive net migration.

Full assessment of the migration phenomenon is very difficult to carry out since official figures cannot register all internal and international population movements. In this case, it is worth using averaged data for a longer period, which provide more reliable picture of spatial differentiation. Such calculations for the 5-year period of 2002 to 2006, presented briefly below, were performed by Mr A. Gałązka.³

To sum up this chapter, let us enumerate the voivodeships with the greatest and the smallest flows from and to them per 1000 people. Values of this ratio show that the level of migration is very diversified on the voivodeship scale.

In the period from 2002 to 2006 the smallest annual average inflow of population (under 10 persons) was recorded in Świętokrzyskie (9.92) and Podkar-

³ Gałązka A. 2007. Przestrzenne zróżnicowanie procesów migracyjnych...; *Sytuacja demograficzna Polski*. RRL, Warsaw, pp. 166–169.

packie (9.93) Voivodeships. Only slightly higher values of that ratio were registered in Śląskie (10.01), Małopolskie (10.46) and Opolskie (10.69) Voivodeships. The most intensive inflow in that period was recorded in Mazowieckie Voivodeship (19.75 persons), while the country's average was 13.63. A result higher than the country's average was also achieved by Wielkopolskie (15.90), Dolnośląskie (15.66), Pomorskie (15.48), Łódzkie (14.46), Lubuskie (14.37) and Zachodniopomorskie (13.66) Voivodeships.

Tab. 4. Intravoivodeship migration by direction and voivodeship

| | | | Migration | directions | | Net intra- |
|--------------------------|--------|------------|-----------|------------|-------------|-------------|
| Voivodeships | | rural- | urban- | urban- | | voivode- |
| and years | Total | urban | rural | urban- | rural-rural | ship migra- |
| and years | | migration | migration | migration | migration | tion within |
| | | inigration | migration | migration | | urban areas |
| Poland 1999 | 320037 | 85983 | 87672 | 79120 | 67262 | -1689 |
| 2007 | 393532 | 92363 | 141679 | 90112 | 69378 | -49316 |
| Dolnośląskie 1999 | 25053 | 6403 | 7637 | 7489 | 3524 | -1234 |
| 2007 | 30701 | 7068 | 12344 | 7922 | 3367 | -5276 |
| Kujawsko-Pomorskie 1999 | 18839 | 6180 | 5231 | 3148 | 4280 | +949 |
| 2007 | 22998 | 6079 | 9415 | 3097 | 4407 | -3336 |
| Lubelskie 1999 | 21992 | 6910 | 5208 | 2772 | 7102 | +1702 |
| 2007 | 23204 | 6029 | 8001 | 2505 | 6669 | -1972 |
| Lubuskie 1999 | 8705 | 2850 | 2792 | 1740 | 1323 | +58 |
| 2007 | 11402 | 3448 | 4628 | 1850 | 1476 | -1180 |
| Łódzkie 1999 | 18299 | 5284 | 5107 | 3756 | 4152 | +177 |
| 2007 | 22425 | 5264 | 8693 | 4543 | 3925 | -3429 |
| Małopolskie 1999 | 23091 | 5114 | 7798 | 3350 | 6729 | -2584 |
| 2007 | 26508 | 5464 | 10354 | 3860 | 6830 | -4890 |
| Mazowieckie 1999 | 43738 | 11531 | 11284 | 12386 | 8537 | +247 |
| 2007 | 58350 | 12934 | 19469 | 16664 | 9283 | -6535 |
| Opolskie 1999 | 8323 | 2386 | 2676 | 1178 | 2083 | -290 |
| 2007 | 8697 | 2229 | 3396 | 1161 | 1911 | -1167 |
| Podkarpackie 1999 | 16912 | 4567 | 4704 | 1599 | 6042 | -137 |
| 2007 | 21194 | 6195 | 6889 | 1767 | 6343 | -694 |
| Podlaskie 1999 | 12401 | 5162 | 3105 | 2099 | 2035 | +2057 |
| 2007 | 11495 | 3870 | 3936 | 1953 | 1736 | -66 |
| Pomorskie 1999 | 19795 | 4222 | 5014 | 7410 | 3149 | -792 |
| 2007 | 28029 | 5302 | 10358 | 8277 | 4092 | -5056 |
| Ślaskie 1999 | 34525 | 4975 | 8106 | 18418 | 3026 | -3131 |
| 2007 | 40195 | 5032 | 10869 | 20999 | 3295 | -5837 |
| Świętokrzyskie 1999 | 10025 | 2894 | 2877 | 1006 | 3248 | +17 |
| 2007 | 10530 | 2663 | 3865 | 925 | 3077 | -1202 |
| Warmińsko-Mazurskie 1999 | 13046 | 4641 | 3415 | 2385 | 2605 | +1226 |
| 2007 | 15484 | 5182 | 5287 | 2453 | 2562 | -105 |
| Wielkopolskie 1999 | 30067 | 8219 | 8381 | 6284 | 7183 | -162 |
| 2007 | 42849 | 9920 | 17252 | 7797 | 7880 | -7332 |
| Zachodniopomorskie 1999 | 15226 | 4545 | 4337 | 4100 | 2244 | +208 |
| 2007 | 19471 | 5684 | 6923 | 4339 | 2525 | -1239 |

Source: Rocznik Demograficzny. 2000. GUS, Warsaw, p. 350; ibidem, 2007..., p. 431.

By contrast, the voivodeships with comparatively lowest level of outflow per 1000 people included: Małopolskie (9.45), Śląskie (10.79), Podkarpackie (10.84) and Opolskie (11.49) Voivodeships, while the country's average amounted to 13.63 persons. Relatively most intensive outflow within internal migration was recorded in Mazowieckie (16.60), Dolnośląskie (15.52), Warmińsko-Mazurskie (15.35), Wielkopolskie (15.18), Łódzkie (15.15) Lubuskie (14.89) and Zachodniopomorskie (14.45) Voivodeships.

In the remaining regions, the value of that measure fluctuated between 12.11 in Świętokrzyskie to 14.42 in Pomorskie Voivodeship.

Comparing the intensity of inflow and outflow of population on the regional scale, one may notice that the voivodeships characterised by relatively quicker economic growth usually record the greatest movement of people. On the other hand, voivodeships with relatively weaker growth in most cases take part in spatial mobility of population to a smaller extent.

Comparing an increase in the inflow and outflow registered in the past years (2006, 2007) with the average for the 5-year period from 2002 to 2006, one may notice a progressive intensification of this phenomenon. It can be explained by the fact that the newly created social and economic as well as spatial structures became permanent. This means that a significant number of informal migrants achieve stability in life and gradually in a definitive way change their place of residence adapting it to the place of work.

4. International Migration

The final net spatial mobility as well as the changes in the arrangement and structures of population are heavily influenced by international migration. For many years now, Poland has shown negative net migration, which means that the size of emigration exceeds that of immigration.

The analysis of international migration registered in Poland has little learning value. The above remark needs to be related especially to the past four years (2004-2007) when Polish citizens gained access to the labour markets within many European Union countries. From the observation of cross-border movement, it appears that many departures of Poles to work abroad, sometimes for longer periods, are not even registered migrations for temporary residence. These reservations confirm the results of the last national census and later estimates. During the national census of 2002, it was established that in May of that year 786.1 thousand Polish citizens stayed abroad for over 2 months⁴.Currently,

⁴ Zdrojewski E.Z., 2004, Przemiany ludnościowe w województwach nadmorskich Polski, *Roczniki Socjologii Morskiej*, vol. XVI, Gdańsk, p. 66.

according to different estimates, about 2 million Poles work in the European Union countries⁵.

Available statistical data concerning international migration have been shown in Tables 5 and 6. The observation of international migration provides, inter alia, information about the appeal of some regions in Poland as target sites for migrants. Furthermore, it is a source of knowledge about areas within the country, the residents of which have special ties with foreign countries enabling them to emigrate, that is to leave for a registered permanent residence abroad.

For decades (from 1963 to 1990), international immigration for permanent residence has been relatively stable and low – from 0.9 thousand to 2.6 thousand people annually. It was not until 1991 that a significant, nearly twofold (up to 5.0 thousand), increase was recorded. Since then it has been fluctuating at the level between 5.9 and 9.5 thousand, and in 2007 it reached nearly 15 thousand people.

Last time Poland achieved positive net result (+6.2 thousand people) in international movements in 1959, when the number of immigrants exceeded the number of emigrants. Since that time a reverse situation has existed. And in that whole period, the lowest emigration level (9.6 thousand) was recorded in 1975, while the highest one (47.0 thousand) in 2006. Such a structure of international movements brings obviously a decline in migration of the population of Poland.

The same regularity can be found in all voivodeships. In 1999 only one voivodeship (Mazowieckie) had a slight positive net migration, and in 2007 all of them had negative net migration (Tab. 6). Migration of largest size (of over 1000 people) can be seen lately in the following voivodeships: Mazowieckie, Śląskie, Dolnośląskie, Małopolskie and Opolskie, and migration of the smallest size in Świętokrzyskie (346 people) and Podlaskie (415).

Permanent departures to other countries are characterised by much higher figures, and a general number of emigrants in 2007 amounted to nearly 35.5 thousand people. Extreme numbers can be found in Świętokrzyskie (633 people) and Śląskie Voivodeships (as much as 8358 people). The net migration in the remaining voivodeships, which constitutes a difference between immigration and emigration, fluctuates between 112 people (Mazowieckie) and 6312 people (Śląskie). These values signify the abovementioned appeal and special family ties.

⁵ Gawryszewski A. 2007. Zmiany w rozmieszczeniu, ruchu naturalnym, migracjach i strukturze ludności Polski, 1918 – 2005, *Przegląd Geograficzny. z. 3-4*, p. 481

Tab. 5. International migration by voivodeship

| 37 ' 1 1' | Immig | ration | Emig | ration | Net mi | gration |
|---------------------|-------|--------|-------|--------|--------|---------|
| Voivodeships | 1999 | 2007 | 1999 | 2007 | 1999 | 2007 |
| Poland | 7525 | 14995 | 21536 | 35480 | -14011 | -20485 |
| Dolnośląskie | 756 | 1785 | 1946 | 3702 | -1190 | -1917 |
| Kujawsko-Pomorskie | 244 | 652 | 821 | 1560 | -577 | -908 |
| Lubelskie | 155 | 537 | 240 | 1145 | -85 | -608 |
| Lubuskie | 277 | 490 | 424 | 1226 | -147 | -736 |
| Łódzkie | 283 | 509 | 393 | 984 | -110 | -475 |
| Małopolskie | 831 | 1646 | 1115 | 2254 | -284 | -608 |
| Mazowieckie | 1069 | 1334 | 756 | 1446 | +313 | -112 |
| Opolskie | 581 | 1068 | 2742 | 4385 | -2161 | -3317 |
| Podkarpackie | 476 | 909 | 527 | 1893 | -51 | -984 |
| Podlaskie | 212 | 415 | 304 | 761 | -92 | -346 |
| Pomorskie | 743 | 1287 | 1735 | 2630 | -992 | -1343 |
| Śląskie | 932 | 2046 | 8702 | 8358 | -7770 | -6312 |
| Świętokrzyskie | 139 | 346 | 222 | 633 | -83 | -287 |
| Warmińsko-Mazurskie | 292 | 621 | 644 | 1672 | -352 | -1051 |
| Wielkopolskie | 250 | 599 | 314 | 1853 | -64 | -1254 |
| Zachodniopomorskie | 285 | 751 | 651 | 978 | -366 | -227 |
| Urban areas | 5511 | 10601 | 18174 | 24779 | -12663 | -14178 |
| Dolnoślaskie | 598 | 1402 | 1799 | 2801 | -1201 | -1399 |
| Kujawsko-Pomorskie | 174 | 518 | 729 | 1266 | -555 | -748 |
| Lubelskie | 83 | 331 | 210 | 694 | -127 | -363 |
| Lubuskie | 199 | 359 | 360 | 832 | -161 | -473 |
| Łódzkie | 246 | 371 | 385 | 839 | -139 | -468 |
| Małopolskie | 550 | 941 | 872 | 1309 | -322 | -368 |
| Mazowieckie | 944 | 1078 | 715 | 1220 | +229 | -142 |
| Opolskie | 225 | 499 | 1406 | 1837 | -1181 | -1338 |
| Podkarpackie | 275 | 557 | 375 | 1132 | -100 | -575 |
| Podlaskie | 153 | 283 | 268 | 631 | -115 | -348 |
| Pomorskie | 598 | 1023 | 1566 | 2038 | -968 | -1015 |
| Śląskie | 734 | 1570 | 8007 | 6460 | -7273 | -4890 |
| Świętokrzyskie | 97 | 203 | 178 | 414 | -81 | -211 |
| Warmińsko-Mazurskie | 210 | 438 | 495 | 1114 | -285 | -676 |
| Wielkopolskie | 198 | 415 | 235 | 1374 | -37 | -959 |
| Zachodniopomorskie | 227 | 613 | 574 | 818 | -347 | -205 |
| Rural areas | 2014 | 4394 | 3362 | 10701 | -1348 | -6307 |
| Dolnośląskie | 158 | 383 | 147 | 901 | +11 | -518 |
| Kujawsko-Pomorskie | 70 | 134 | 92 | 294 | -22 | -160 |
| Lubelskie | 72 | 206 | 30 | 451 | +42 | -245 |
| Lubuskie | 78 | 131 | 64 | 394 | +14 | -263 |
| Łódzkie | 37 | 138 | 8 | 145 | +29 | -7 |
| Małopolskie | 281 | 705 | 243 | 945 | +38 | -240 |
| Mazowieckie | 125 | 256 | 41 | 226 | +84 | 30 |
| Opolskie | 356 | 569 | 1336 | 2548 | -980 | -1979 |
| Podkarpackie | 201 | 352 | 152 | 761 | +49 | -409 |
| Podlaskie | 59 | 132 | 36 | 130 | +23 | 2 |
| Pomorskie | 145 | 264 | 169 | 592 | -24 | -328 |
| Śląskie | 198 | 476 | 695 | 1898 | -497 | -1422 |
| Świętokrzyskie | 42 | 143 | 44 | 219 | -2 | -76 |
| Warmińsko-Mazurskie | 82 | 183 | 149 | 558 | -67 | -375 |
| Wielkopolskie | 52 | 184 | 79 | 479 | -27 | -295 |
| Zachodniopomorskie | 58 | 138 | 77 | 160 | -19 | -22 |

Source: Rocznik Demograficzny. 2000. GUS, Warsaw, p. XLII; Rocznik Demograficzny ibidem, 2008..., pp. 38–39.

Table 6 presents also elements of international migration and its final results. We restrict ourselves to showing the extreme numbers in relation to the year 2007. In urban areas immigration fluctuates between 203 people in Świętokrzyskie to over 1570 people in Śląskie Voivodeship, and emigration between 414 in Świętokrzyskie to 6460 people in Śląskie Voivodeship. As a result of the above structure of immigration and emigration, net migration shows regional diversity – from 142 people in Mazowieckie to 4890 people in Śląskie Voivodeship.

In rural areas the scale of differentiation is much smaller. The size of immigration fluctuates between 132 people in Podlaskie to 705 people in Małopolskie Voivodeship. In 2007 emigration was smallest (130 people) in Podlaskie, while it was largest in Opolskie Voivodeship (2548 people). In 1999, 8 voivodeships still had a positive net migration, but in 2007 only rural areas of Mazowieckie and Podlaskie Voivodeships showed such migration, while all the others achieved negative results, from –7 in Łódzkie to –1979 in Opolskie Voivodeship.

More reliable and easier to compare are average figures concerning the level of international migration intensity in longer periods, which for all voivodeships in total were calculated by Mr A. Gałązka quoted above. One should emphasise the fact that between 2002 and 2006 the level of inflow and outflow was several dozen times smaller than in the case of internal migration.

In that period, relatively largest immigration per 1000 people could be found in the following voivodeships: Opolskie (0.75), Lubuskie (0.34), Małopolskie (0.33) and Podkarpackie (0.30), while the country's average amounted to 0.23 persons. Minimum values can be found in Łódzkie and Wielkopolskie Voivodeships (0.10 each) as well as Lubelskie and Świętokrzyskie Voivodeships (0.11 each). Two voivodeships (Śląskie and Warmińsko-Mazurskie) achieved 0.23 each, which is equal to the country's average, and Zachodniopomorskie Voivodeship achieved a result close to that (0.22‰). Immigration had the largest size in border voivodeships. In all regions (but for Opolskie Voivodeship, which was an exception) newcomers from abroad constituted a scanty proportion of the total population numbers.

A higher level was characteristic of emigration. The highest values of that measure were found in western and northern voivodeships, i.e. Pomorskie (0.93), Warmińsko-Mazurskie (0.91) and Dolnośląskie (0.82), but the exceptions in this group are Opolskie (4.01) and Śląskie (1.67) Voivodeships. The country's average in 2006 was 0.7‰. The lowest level of emigration was recorded in the so-called central voivodeships in the country, i.e. in: Mazowieckie (0.15), Łódzkie (0.23) and Świętokrzyskie (0.23) and also in Lubelskie (0.24). Only slightly higher value of that rate is shown in Wielkopolskie Voivodeship (0.43‰). Zachodniopomorskie Voivodeship, which we are interested in, achieved 0.46‰.

Similarly to internal migration, one can see an intensification of this process, particularly on the emigration side, also in the level of the intensity of registered international migration. In 2007 not only border areas but also voivodeships situated in the centre of the country became regions with clearly visible emigration character. In all probability, this fact proves a progressing stability of some emigrants abroad, which is bound to lead to a change of the old address of residence.

Tab. 6. International migration of population in Poland for permanent residence by continent

| Detailed list | 2000 | 2002 | 2004 | 2006 | 2007 |
|--|------------|-------|-------|-------|-------|
| Iı | nmigratio | n | | | |
| Total | 7331 | 6587 | 9495 | 10802 | 14995 |
| Europe | 4737 | 4413 | 6536 | 8270 | 12040 |
| Including the European Union (15 coun- | 3845 | 3575 | 4261 | 6415 | 10463 |
| tries) | | | | | |
| Including: | | | | | |
| Germany | 2494 | 2335 | 2697 | 3227 | 3913 |
| UK | 256 | 208 | 313 | 1592 | 3913 |
| Including the European Union (25 coun- | X | X | 4451 | 6531 | 10594 |
| tries) | | | | | |
| Asia | 732 | 548 | 893 | 388 | 379 |
| Africa | 120 | 44 | 164 | 125 | 121 |
| North and Central America | 1530 | 1372 | 1703 | 1829 | 2245 |
| South America | 46 | 31 | 56 | 38 | 28 |
| Oceania | 162 | 105 | 140 | 149 | 173 |
| Country not specified | 4 | 74 | 3 | 3 | 9 |
| I | Emigration | 1 | | | |
| Total | 26999 | 24532 | 18877 | 46936 | 35480 |
| Europe | 22914 | 20485 | 15547 | 41221 | 31163 |
| Including the European Union (15 coun- | 22636 | 20196 | 15292 | 40446 | 30229 |
| tries) | | | | | |
| Including: | | | | | |
| Germany | 20472 | 17806 | 12646 | 14950 | 13771 |
| UK | 189 | 254 | 543 | 17996 | 9165 |
| Including the European Union (25 coun- | X | X | 15354 | 40622 | 30465 |
| tries) | | | | | |
| Asia | 43 | 40 | 39 | 115 | 76 |
| Africa | 38 | 39 | 21 | 94 | 41 |
| North and Central America | 3798 | 3699 | 3074 | 5067 | 3912 |
| South America | 12 | 9 | 7 | 20 | 16 |
| Oceania | 193 | 204 | 184 | 413 | 264 |
| Country not specified | 1 | 56 | 5 | 6 | 8 |

Source: Rocznik Demograficzny. 2008. GUS, Warsaw, p. 461.

The main directions of international migration have also been analysed (Tab. 6). Immigrants are primarily previous residents of the European countries, mainly Germany and the United Kingdom. Further places belong to Ukraine, Italy and France.

The main stream of emigration leads also to European countries (in particular to Germany and the United Kingdom) as well as to North and Central America, and primarily to the United States and Canada. The choice of Germany and the United States was dictated mainly by family ties. The United Kingdom lured immigrants from Poland by opening its labour market, which followed the accession of Poland into the European Union. One should notice that in 2006, Germany, which had been so far the main target country of Polish emigrants, lost (for a year) its dominant position to the United Kingdom. However, it is worth mentioning (and emphasised by some authors) that the year 2006 was definitely different from many previous years⁶.

5. Total Net Migration

General changes in population number and density of a given territory and in differentiation of population structures are influenced by internal and international migration considered together. The main importance is put here on net migration, or migration balance (in total).

To get a fuller picture, which would include also individual voivodeships, urban and rural areas, Table 7 has been additionally prepared. It contains total net internal and international migration expressed in absolute numbers and calculated per 1000 people. The Table constitutes a specific summary of final results of population movements in Poland for permanent residence in the whole period under analysis.

The significance of figures in Table 7 is explicit. Due to international migration in the years 1999 – 2007, Poland lost in total over 161 thousand people. International movements were profitable only for the following voivodeships: Mazowieckie (112.1 thousand), Małopolskie (23.3 thousand), Wielkopolskie (16.7 thousand) and Pomorskie (7.4 thousand). All remaining voivodeships showed negative net migration. Relatively lowest decline in migration was recorded in Lubuskie (–7.5 thousand) and Zachodniopomorskie (–12.1 thousand) Voivodeships. While relatively heaviest losses of population can be found in: Śląskie (–89.1 thousand), Lubelskie (–40.1 thousand) and Opolskie (–34.0 thousand people) Voivodeships.

⁶ Sakson B., Migracje zagraniczne. *Sytuacja demograficzna Polski, Raport 2006 – 2007.* RRL, Warsaw, p. 130

Tab. 7. Total net migration by voivodeship

| Voirebonies | | | Total net | t migrati | Total net migration in absolute numbers | lute n | umbers | | | | Total | net m | igratic | Total net migration per 1000 people ^a | 10001 | seople | est | |
|---------------------|--------|--------|-----------|-----------|---|--------|--------|--------|--------|------|-----------|-------|---------|--|-------------|-------------|------------|----------|
| vorvouesnips | 1999 | 2000 | 2001 | 2002 | 2003 2 | 2004 | 2005 | 2006 | 2007 | 1999 | 2000 2001 | 2001 | 002 2 | 2002 2003 2004 | | 2005 2006 | 06 2007 | 07 |
| Poland | -14011 | -19668 | -16743 | -17945 | -13765 | -9427 | -12878 | -36134 | -20485 | -0.4 | -0.5 | -0.4 | -0.5 | -0.4 | -0.2 | -0.3 -0.9 | | -0.5 |
| Dolnośląskie | -1463 | -1971 | -1015 | -2102 | -2257 | -1406 | -1849 | -3626 | -1570 | -0.5 | -1.0 | -0.3 | -0.7 | -0.8 | -0.5 | -0.6 -1.3 | .3 | 5.0 |
| Kujawsko-pomorskie | -821 | -1068 | -1426 | -1521 | -1363 | -1351 | -2080 | -3587 | -2372 | -0.4 | -0.5 | -0.7 | -0.7 | -0.7 | -0.7 | -1.0 -1.7 | .7 | <u> </u> |
| Lubelskie | -3119 | -3082 | -3742 | -3916 | -4570 | -4460 | -4901 | -6593 | -5751 | -1.4 | 4. | -1.7 | -1.8 | -2.1 | -2.0 | -2.2 -3.0 | | -2.6 |
| Lubuskie | -406 | -579 | -1055 | 966- | -619 | -393 | -646 | -1594 | -1215 | -0.4 | 9.0- | -1.0 | -1.0 | -0.6 | <u>+.0-</u> | -0.6 -1.6 | .6 | 2. |
| Łódzkie | -1324 | -1295 | -1499 | -1606 | -1088 | -1508 | -1765 | -2909 | -2128 | -0.5 | -0.5 | -0.6 | -0.6 | -0.4 | -0.6 | -0.7 -1.1 | .1 -0.8 | 8.(|
| Małopolskie | 1660 | 2044 | 2587 | 3099 | 3552 | 3204 | 3183 | 1292 | 2715 | 0.5 | 9.0 | 8.0 | 1.0 | 1:1 | 1.0 | 1.0 | 0.4 0 | 8.0 |
| Mazowieckie | 7040 | 9122 | 10170 | 12441 | 13785 1 | 14159 | 15085 | 15445 | 14834 | 1.4 | 1.8 | 2.0 | 2.4 | 2.7 | 2.8 | 2.9 | 3.0 | 5.9 |
| Opolskie | -2183 | -3732 | -3765 | -4618 | -4235 -3397 | 3397 | -3245 | -4798 | -4062 | -2.0 | -3.4 | -3.5 | 4.3 | <u>4.0</u> | -3.2 | 3.0 -4.6 | .6 | 6.8 |
| Podkarpackie | -1579 | -1980 | -2284 | -3007 | -2478 -2158 | 2158 | -2385 | -3990 | -3153 | -0.7 | -0.9 | -1:1 | -1.4 | -1.2 | -1.0 | -1.1 -1.9 | .9 | 5. |
| Podlaskie | -974 | -1592 | -1464 | -1803 | -1894 | -1655 | -1943 | -2838 | -2528 | 8.0- | -1.3 | -1.2 | -1.5 | -1.6 | -1.4 | -1.6 -2.4 | <u>4</u> . | 2.1 |
| Pomorskie | 1128 | 418 | 851 | 682 | 1012 | 1916 | 1073 | -881 | 1243 | 0.5 | 0.2 | 0.4 | 0.3 | 0.5 | 0.9 | 0.5 -0.4 | 4. | 9.(|
| Śląskie | -8164 | -12209 | -10147 | 6086- | -9419 | -8592 | 8698- | -12189 | 0686- | -1.7 | -2.5 | -2.1 | -2.1 | -2.0 | -1.8 | -1.9 -2.6 | .6 –2.1 | 7.7 |
| Świętokrzyskie | -2378 | -2116 | -2402 | -2459 | -2536 - 2283 | 2283 | -2249 | -3483 | -2916 | -1.8 | -1.6 | -1.8 | -1.9 | -1.9 | -1.8 | -1.7 -2.7 | .7 | 5.3 |
| Warmińsko-mazurskie | -2347 | -2461 | -2772 | -3030 | -2183 -2518 | 2518 | -3098 | -5055 | -3792 | -1.6 | -1.7 | -1.9 | -2.1 | -1.5 | -1.8 | -2.2 -3.5 | | -2.7 |
| Wielkopolskie | 1728 | 1444 | 2248 | 2051 | 2104 | 2453 | 2301 | 527 | 1872 | 0.5 | 0.4 | 0.7 | 9.0 | 9.0 | 0.7 | 0.7 | 0.2 0 | 9.(|
| Zachodniopomorskie | -799 | -610 | -1048 | -1352 | -1576 - 1392 | 1392 | -1723 | -1802 | -1772 | -0.5 | 4.0- | -0.6 | -0.8 | -0.9 | -0.8 | -1.0 -1.1 | | -1.0 |

Tab. 7 (cont.)

| Visited | | | Total ne | t migrat | Total net migration in absolute numbers | solute n | umbers | | | T | otal ne | Total net migration per 1000 people ^a | on per | 1000 | people | a |
|---------------------|---------------|--------|----------|----------|---|----------|--------|--------|-------------|---------|-------------|--|--------|-------------|-------------|------------------|
| voivodesnips | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 1999 20 | 00 200 | 1999 2000 2001 2002 2003 2004 2005 2006 2007 | 003 2 | 004 20 | 05 200 | 6 2007 |
| Urban areas | 1286- | -20571 | -19960 | -32042 | -41180 | 48794 | 43077 | -61269 | 62082 | -0,4 | 6,0- 6,0- | -1,4 | -1,8 | -2,1 | -1,8 $-2,6$ | -2.7 |
| Dolnośląskie | -2906 | -3254 | -2252 | -4289 | -5153 | -5084 | -4371 | -6951 | -6719 | -1,4 | -1,5 $-1,1$ | 1 - 2, 1 - 2, 5 - 2, 5 | -2,5 | | -2,1 $-3,4$ | ,4 –3,3 |
| Kujawsko-pomorskie | 821 | -787 | -1822 | -2521 | -3174 | -4444 | -4412 | -5660 | -4965 | 0,6 | -0.6 -1.4 | 4 -2,0 -2,5 | -2,5 | -3,5 | -3.5 | ,5 4,0 |
| Lubelskie | 163 | -741 | -1833 | -2657 | -3552 | -4602 | -4635 | -5568 | -5501 | 0,2 | -0,7 $-1,7$ | -2,6 | -3,5 | 4.5 | -4,6 -5,5 | ,5 –5,5 |
| Lubuskie | -363 | -842 | -1273 | -1442 | -1261 | -1860 | -1589 | -2064 | -2138 | -0,5 | -1,3 $-1,9$ | -2,2 | -1,9 | -2,9 | -2.5 -3.2 | $\frac{2}{-3,3}$ |
| Łódzkie | -401 | -1130 | -1327 | -2191 | -2787 | -4039 | -3754 | -4749 | -5129 | -0,2 | -0.7 $-0.$ | -0,8 -1,3 | -1,7 | -2,4 | -2,3 $-2,9$ | ,9 –3,1 |
| Małopolskie | -1465 | -623 | 322 | -618 | -1550 | -1789 | -943 | -2937 | 2880 | -0,9 | -0,4 0,2 | -0,4 | -1,0 | -1,1 | -0.6 -1.8 | ,8 –1,8 |
| Mazowieckie | 6884 | 7079 | 7950 | 8637 | 8442 | 7473 | 9243 | 0606 | 6349 | 2,1 | 2,2 2,5 | 2,6 | 2,6 | 2,3 | 2,8 | 2,7 1,9 |
| Opolskie | -1804 | -2224 | -2560 | -3317 | -3219 | -2694 | -2575 | -3445 | -3372 | -3,2 | -3,9 -4,5 | -5,9 | -5,8 | -4,9 | -4,6 -6,3 | ,3 –6,2 |
| Podkarpackie | -1148 | -1649 | -2474 | -3089 | -3654 | -3556 | -3380 | -3835 | -2923 | -1,3 | -1.9 -2 , | -2,8 -3,6 | -4,3 | -4,2 | 4,0 4,5 | ,5 –3,4 |
| Podlaskie | 1595 | 651 | 405 | -188 | -975 | -1396 | -1568 | -1942 | -1981 | 2,3 | 9,0 6,0 | -0,3 | -1,4 | -2,0 | -2,2 $-2,7$ | ,7 –2,8 |
| Pomorskie | 122 | -544 | -197 | -1120 | -2083 | -2374 | -1946 | -3951 | -3933 | 0,1 | -0.4 -0.1 | -0.8 | -1,4 | -1,6 | -1,3 $-2,7$ | ,7 –2,7 |
| Śląskie | -11026 -14167 | | -11713 | -12122 | -12639 | -12206 | -11962 | -15008 | -14247 | -2,9 | -3,7 $-3,1$ | -3,2 | -3,4 | -3,3 | -3,2 | ,1 –3,9 |
| Świętokrzyskie | -1259 | -1482 | -1735 | -2655 | -3036 | -3323 | -2793 | -3513 | -3322 | -2,1 | -2,4 $-2,8$ | 4,4 | -5,1 | -5.6 -4.8 | 4,8 -6,0 | ,0 –5,7 |
| Warmińsko-mazurskie | -57 | -472 | 444 | -1228 | -1160 | -1994 | -2069 | -31111 | -2570 | -0,1 | -0.5 -0 , | -0.5 -1.4 | -1,4 | -2,3 | -2,4 $-3,7$ | ,7 –3,0 |
| Wielkopolskie | 1316 | 141 | 243 | -1289 | -2633 | -3494 | -3763 | -5084 | -6058 | 0,7 | 0,1 0, | 1 - 0,7 - 1,4 | | -1,8 | -2,0 $-2,7$ | ,7 –3,2 |
| Zachodniopomorskie | -343 | -527 | -1270 | -1954 | -2746 | -3367 | -2620 | -2541 | -2693 - 0,3 | | -0,4 $-1,$ | -1,1 $-1,7$ $-2,3$ | -2,3 | -2,9 | -2,2 $-2,2$ | ,2 –2,3 |

Tab. 7 (cont.)

| Voision | | Ι | Total net migration in absolute numbers | migrati | ion in al | bsolute 1 | numbers | S | | | Tot | Total net migration per | nigrati | on per | 1000 | 1000 people ^a | e. | |
|---------------------|-------|-------|---|---------|-----------|-----------|---------|-------|-------|------|------|-------------------------|---------|--------|----------|--------------------------|-----|------|
| v OI vouesimps | 1999 | 2000 | 2001 | 2002 | 2003 | 2004 | 2005 | 2006 | 2007 | 1999 | 2000 | 2001 2 | 2002 2 | 2003 2 | 2004 2 | 2005 2006 | | 2007 |
| Rural areas | -4140 | 606 | 3217 | 14097 | 27415 | 39367 | 30119 | 25135 | 41597 | -0.3 | 0,1 | | 1,0 | 1,9 | 2,7 | | | 2,8 |
| Dolnośląskie | 1443 | 1283 | 1237 | 2187 | 2896 | 3678 | 2522 | 3325 | 5149 | 1,7 | | | 5,6 | 3,5 | 4, | | | 6,1 |
| Kujawsko-pomorskie | -1642 | -281 | 396 | 1000 | 1811 | 3093 | 2332 | 2073 | 2593 | -2,0 | -0,3 | 0,5 | 1,3 | 2,3 | 3,9 | 2,9 | | 3,2 |
| Lubelskie | -3282 | -2341 | -1909 | -1259 | -1018 | 142 | | -1025 | -250 | -2,7 | | | -1,1 | 6,0- | 0,1 | | | -0,2 |
| Lubuskie | 43 | 263 | 218 | 446 | 642 | 1467 | 943 | 470 | 923 | -0,1 | 0,7 | | 1,2 | 1,8 | 4,1 | 2,6 | 1,3 | 2,5 |
| Łódzkie | -923 | -165 | -172 | 585 | 1699 | 2531 | | 1840 | 3001 | -1,0 | -0,5 | -0,5 | | 1,8 | 2,8 | | | 3,3 |
| Małopolskie | 3125 | 2667 | 2265 | 3717 | 5102 | 4993 | 4126 | | 5595 | -1,9 | 1,7 | | | 3,1 | 3,0 | | | 3,4 |
| Mazowieckie | 156 | 2043 | 2220 | 3804 | 5343 | 6685 | 5842 | | | 0,1 | 1,1 | 1,2 | | | 3,7 | | | 4,6 |
| Opolskie | -379 | -1508 | -1205 | -1301 | - 1 | -703 | 029— | -1353 | | -0.7 | -2,9 | | | | 4,1 | -1,3 | | -1,4 |
| Podkarpackie | -431 | -331 | 190 | 82 | 1176 | 1398 | 995 | -155 | | -0,3 | -0,3 | | | | | | | -0,2 |
| Podlaskie | -2569 | -2243 | -1869 | -1615 | -919 | -259 | -375 | 968- | -547 | -5,0 | 4, | -3,6 | | | -0,5 | 8,0- | | -1,1 |
| Pomorskie | 1006 | 962 | 1048 | 1802 | 3095 | 4290 | 3019 | 3070 | 5176 | 1,5 | 4,1 | | | | | | | 7,0 |
| Śląskie | 2862 | 1958 | 1566 | 2313 | 3220 | 3614 | 3264 | 2819 | | 2,9 | 2,0 | 1,6 | | 3,2 | 3,6 | | | 4,3 |
| Świętokrzyskie | -1119 | -634 | <i>L</i> 99– | 196 | 500 | 1040 | 544 | 30 | 406 | -1,5 | -0,9 | -0,9 | | 0,7 | 1,5 | 8,0 | | 9,0 |
| Warmińsko-mazurskie | -2290 | -1989 | -2328 | -1802 | -1023 | -524 | -1029 | -1944 | | -3,9 | -3,3 | | | | 6,0- | -1,8 | | -2,1 |
| Wielkopolskie | 412 | 1303 | 2005 | 3340 | 4737 | 5947 | 6064 | 5611 | 7930 | 0,3 | 6,0 | 1,4 | 2,3 | 3,3 | 4,1 | 4,5 | | 5,4 |
| Zachodniopomorskie | -456 | -83 | 222 | 602 | 1170 | 1975 | 897 | 739 | 921 | -0,9 | -0,2 | 0,4 | 1,1 | 2,2 | 3,8 | 1,7 | | 1,7 |
| | | | | | | | | | | | | | | | | | | |

a-registered for permanent residence.

A large differentiation of total net migration can also be noticed when considering the division into urban and rural areas. In the case of urban areas, positive net migration can only be seen in Mazowieckie Voivodeship (and Małopolskie in 2007). As a result of territorial mobility, the region of Mazowieckie gained +71.1 thousand people. Urban areas of the other voivodeships lost as a result of migration movement between 5.4 thousand in Podlaskie Voivodeship to 6.7 thousand in Małopolskie Voivodeship and to even 115.1 in Śląskie Voivodeship. That 100 thousand is as much as in one big city. Urban areas in some voivodeships initially had positive net migration (Kujawsko-Pomorskie, Lubelskie, Podlaskie, Pomorskie, Wielkopolskie), but later the decline was so large that the final calculations showed negative net migration.

Rural areas in total for the whole country achieved a positive net result. An increase in population in all years taken into consideration was recorded in such voivodeships as: Dolnośląskie, Małopolskie, Mazowieckie, Pomorskie, Śląskie and Wielkopolskie. Emigration was especially visible in rural areas of the following voivodeships: Opolskie, Podlaskie and Warmińsko-Mazurskie. Extreme values in rural areas were recorded in: Małopolskie (35.8 thousand) and Warmińsko-Mazurskie (–14.1 thousand people) Voivodeships.

Because of the different levels of population in individual voivodeships, comparing absolute numbers does not provide an accurate view on the role of migration in the real growth of population. Mr A. Gałązka, who has already been quoted, also calculated annual average net migration for the 5-year period 2002 – 2006 per 1000 people. These findings are very useful and it is worthwhile to use them here.

It follows from them that the highest net migration in that period was in Mazowieckie Voivodeship (2.84 ‰). Apart from that one, only two more voivodeships achieved a positive result: Małopolskie (0.50) and Wielkopolskie (0.52). These are regions where there are the most dynamically developing urban conurbations. The centres of these regions fulfil metropolitan functions. They are favourable to population inflow.

All other voivodeships showed negative total net migration, while the country's average amounted to -0.75 ‰. A record high decline in migration could be found in Opolskie Voivodeship (-6.35). A high rate, over 2 or 3 people per 1000 population, is also characteristic of: Śląskie (-3.15), Warmińsko-Mazurskie (-2.63) Lubelskie (-2.23) and Świętokrzyskie (-2.04) Voivodeships. Over minus one per mille was shown in the following voivodeships: Podlaskie (-1.83), Podkarpackie (-1.46), Kujawsko-Pomorskie (-1.11), Zachodniopomorskie (-1.11) and Dolnośląskie (-1.05), and in three voivodeships we can notice values below -1: Lubuskie (-0.96), Łódzkie (-0.73) and Pomorskie (-0.01).

Comparing annual average values of the measure from the years 2002–2006 with the rate from 2007, we can notice a process of slight reduction of negative

total net migration per 1000 people from –0.9 in 2006 to –0.5 in the last analysed year. These favourable changes are related primarily to rural areas.

The analysis of absolute and relative size of internal and international migration is very useful to the assessment of changes in demographic situation both in the country and in the regions. It is of particular importance during dramatic social and economic changes. The distribution of economic and demographic potential that was shaped during over 40 years of centrally administered economy does not suit modern day requirements. Therefore, adjustment processes had to be initiated in this respect. Market economy mechanisms trigger strong processes of polarization of development. In Poland, since the beginning of the 1990s, these changes have been additionally strengthened by the programme of restructuring and modernisation of the economy. These phenomena are accompanied by processes which occurred as a result of Poland's accession to the European Union.

This means not only opening of labour markets by the majority of EU countries but also bigger investments made at home with foreign capital. This all has a modifying influence on the directions and intensity of migration existing so far. Under these circumstances, migration movement of population means a process of adjustment of demographic potential to economic potential.

Knowing the general results of spatial mobility of population of individual regions over a longer period of time, including in particular intervoivodeship and international movements, an attempt has been made in this study to create a proper typology of voivodeships and to section larger areas of inflow and outflow of population.

In his analysis of the spatial structure of intervoivodeship movements, Mr K. Dziewoński distinguished the following three groups of voivodeships: centres (areas) of inflow, areas with relatively balanced inflow and outflow, and areas characterised by outflow of population⁷. The author considered the areas with relatively balanced inflow and outflow to be those voivodeships in which net permanent migration within a year was below one person per 1000 people. Referring to the classification made by that author, an attempt has been made here to distinguish similar three groups of the units of territorial division; the middle group (of balanced inflow and outflow) included those voivodeships out of the whole set which achieved a result equal to or higher or lower than one person (+/- one person) per 1000 people.

- The total net migrations in regional order presented above allow us to classify:
 - Mazowieckie and Małopolskie Voivodeships as inflow areas,

⁷ Dziewoński K., Przestrzenne zróżnicowanie migracji w Polsce. Narodowy Spis Powszechny 1978 jako źródło informacji o imigracjach. GUS, Warsaw, pp. 68-69

- Dolnośląskie, Wielkopolskie, Pomorskie and Łódzkie Voivodeships as areas with relatively balanced inflow and outflow,
- the remaining voivodeships, i.e.: Zachodniopomorskie, Lubuskie, Kujawsko-Pomorskie, Podkarpackie, Podlaskie, Świętokrzyskie, Lubelskie, Warmińsko-Mazurskie, Śląskie and Opolskie to typical outflow areas.

Population migration, at least to certain extent, should be controlled. Whether the above presented regional character and structure will be retained or whether there will be changes in some direction will depend on the state economic and population policy as well as on the initiative and actions taken by voivodeship authorities.

6. Summary and Conclusions

The analysis of internal and international migration, their intensity, basic directions and territorial range carried out in the study, confirmed the thesis provided in the introductory part that they influence to a considerable extent the general dynamics of demographic transformations and changes to the spatial and social (rural-urban) arrangement of population, among other things. They constitute a reaction to economic as well as social and political processes taking place or to specific actions within a certain territory. Residents of individual towns and regions are subject, on the one hand, to certain push factors, which encourage or even force some subpopulations to leave a given town or larger area, and, on the other hand, to pull factors which are appealing to potential migrants to a smaller or greater extent.

Both living and working conditions as well as both groups of powers (factors) are unequally distributed, which leads to spatial differentiation of various phenomena and processes. Residents of certain territories initiate and create some actions, values and changes in their environment, and at the same time are influenced from the outside. All these elements contribute to the fact that some regions or countries attract or at least are able to retain the existing demographic potential, and others stagnate or even experience a decline, which in extreme cases leads even to depopulation.

The knowledge of migration processes, their diverse factors and consequences, facilitates taking decisions necessary in respect to relatively overpopulated areas or those with unused demographic capacity, with some excess or shortage of labour. In our opinion, such actions are necessary at least with respect to three basic issues.

The first of them is a need to take certain measures aimed at limiting excessive emigration, especially of various groups of specialists who have high general and professional qualifications.

A second major problem is the need to work out an appropriate migration policy and rules of controlling migration movement of population, as well as to determine tools and means for its implementation.

The third issue which needs clarifying is the need to perfect the recording of spatial movements of population. It refers not only to elusive international migration but also to unregistered changes of the place of residence undertaken by large groups of people inside the country. The authors, however, do not suggest tightening the rules of permanent residence registration but creating a more effective system which gives a knowledge of the scale and directions of movements. Such knowledge would provide an opportunity for taking certain measures and decisions at different management levels.

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