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DEMOGRAPHIC SITUATION IN WROCŁAW AGGLOMERATION*

1. Introduction

The demographic situation in Wrocław agglomeration will be analyzed taking into account the demographic processes that have direct influence on the size of the population and on its structure. Those processes are births, deaths and migrations.

While the number of marriages and the number of divorces in the population have some bearing on the numbers of births and deaths, those processes have no direct influence on the size of the population and therefore will not be considered here.

2. Births

Process of births in the population is discussed using the number of the live births. The study covers the period from the year 1999 to the year 2003. Table 1 shows data for live births in the studied poviats of Wrocław agglomeration, in the voivodship of Lower Silesia and in Poland as a whole.

The dynamics of the birth processes in population are characterized using the dynamics indexes for each studied year comparing to the base year of 1999, as well as using the average rate of change in the researched period. Table 2 shows the dynamics indexes for live births in the studied years.

The analysis of data in Table 1 allows several observations. In 2003, the number of live births in Milicz poviat was up by 3% comparing to the base year of 1999. In all the remaining poviats, the number of live births have declined. The

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biggest drop of 20% is observed in Oława powiat. It should be noted that in Wołów powiat there is an increase in the number of births as compared to the base year until the year 2003 when a small decrease occurs. Comparison between the dynamics of birth process in Voivodship of Lower Silesia and that in Poland as a whole reveals only minor discrepancies.

Table 1. Live births per year during the years 1999-2003

Powiat	Number of live births per year				
	1999	2000	2001	2002	2003
Milicz	405	414	453	381	420
Oleśnica	1090	1037	1066	1051	975
Oława	712	787	672	663	562
Strzelin	469	444	425	395	416
Środa Śląska	481	477	482	449	428
Trzebnica	794	764	793	741	710
Wołów	414	450	468	429	405
Wrocław	965	867	845	882	795
City of Wrocław	4589	4577	4618	4256	4524
Voivodship of Lower Silesia	26575	25498	25872	24558	24103
Poland	382754	375782	368979	354459	351724

Source: www.stat.gov.pl.

Table 2. Dynamics indexes for live births

Powiat	1999 = 100%				
	1999	2000	2001	2002	2003
Milicz	100	102	111	94	103
Oleśnica	100	95	98	96	89
Oława	100	110	94	93	80
Strzelin	100	94	91	84	87
Środa Śląska	100	99	100	93	89
Trzebnica	100	96	100	93	89
Wołów	100	108	113	104	98
Wrocław	100	90	88	91	82
City of Wrocław	100	100	101	93	99
Voivodship of Lower Silesia	100	96	97	92	91
Poland	100	98	96	93	92

Source: author's own computations on the basis of Table 1.

To illustrate the dynamics of birth process for the entire studied period using just one measure (ratio) the yearly average rate of change is used. Values of this measure are calculated for each district using the figures in Table 1 and presented in Table 3.

Table 3. Yearly average rate of change for births expressed in percentages

Powiat	Yearly average rate of change for births in %	
	increase	decrease
Milicz	0.91	
Oleśnica		2.74
Oława		5.49
Strzelin		2.95
Środa Śląska		2.87
Trzebnica		2.75
Wołów		0.54
Wrocław		4.73
City of Wrocław		0.35
Voivodship of Lower Silesia		2.41
Poland		2.09

Source: author's own computations.

The analysis of the data in Table 3 allows the following conclusions. Milicz powiat stands out as the only one with an increase in the number of births during the studied period of time. In all the other powiats of the discussed agglomeration there is a decrease in the number of births, as shown by the negative value of the measure. However, there are noticeable differences between the powiats. The highest average decreases of roughly 5% are noted in powiats of Wrocław and Oława. It means that, on average, the number of births in those districts fell by 5% each year. In the remaining 5 powiats the average yearly decreases do not exceed 3%. It roughly equals the average decrease in number of births for the Voivodship of Lower Silesia. As we can see, the average decrease in number of births in Poland as a whole for the studied period is 2.09%. Clearly, the rate of decrease for Lower Silesia is slightly higher than that for Poland as a whole.

3. Deaths

Death process is characterized by the number of deaths in the population. The process will be analyzed independently for men and for women. Due to the availability of data, deaths during the 1999-2003 period will be analyzed. Table 4 shows data for the number of deaths for men and women during the 1999-2003 period.

As we compare and analyze data in Table 4, it should be noted that for each year the number of deaths among men is higher than the respective number for women. The causes of this trend are not fully examined yet. The discrepancy could possibly be caused by the higher number of men in the population or it could be attributed to the different age structures for men and women, it is not clear.

To study the changes in the number of deaths per year during the whole period, indexes of dynamics are used. Again, the first year of the studied period, i.e. the

year 1999, is set as the base year and numbers from Table 4 are used to calculate the indexes. Table 5 shows the values of those indexes for each year.

Table 4. Number of deaths per year for men and women

Powiat	Number of deaths among men					Number of death among women				
	1999	2000	2001	2002	2003	1999	2000	2001	2002	2003
Milicz	194	192	172	177	185	184	147	142	149	142
Oleśnica	509	484	495	474	456	433	402	379	376	416
Oława	323	321	301	298	330	287	253	239	254	268
Strzelin	231	251	276	260	239	226	210	198	200	196
Środa Śląska	301	275	256	254	244	212	245	222	216	198
Trzebnica	400	372	379	395	395	352	313	345	305	316
Wołów	311	265	249	252	277	216	196	210	206	215
Wrocław	520	493	439	457	483	423	361	360	373	410
City of Wrocław	3304	3218	3093	2999	3085	2929	2973	2726	2761	2905
Voivodship of Lower Silesia	15944	15446	14831	14784	14931	13317	12842	12641	12672	13031
Poland	204544	195967	193459	192141	194415	177686	172815	170504	168029	171530

Source: www.stat.gov.pl

Table 5. Dynamics of death rates expressed by dynamics indexes with 1999 as base year

Powiat	Men					Women				
	1999	2000	2001	2002	2003	1999	2000	2001	2002	2003
Milicz	100	99	89	91	95	100	80	77	81	77
Oleśnica	100	95	97	93	90	100	93	87	87	96
Oława	100	99	93	92	102	100	88	83	88	93
Strzelin	100	109	119	112	103	100	93	87	88	87
Środa Śląska	100	91	85	84	81	100	115	105	101	93
Trzebnica	100	93	94	99	99	100	89	98	87	90
Wołów	100	85	80	81	89	100	91	97	95	99
Wrocław	100	95	84	88	93	100	85	85	88	97
City of Wrocław	100	97	94	91	93	100	101	93	94	99
Voivodship of Lower Silesia	100	97	93	93	94	100	96	95	95	98
Poland	100	96	95	94	95	100	97	95	94	96

Source: author's own computations on the basis of Table 1.

Calculated values of indexes show the overall decreasing trend in death rates of both men and women during the studied period of time. However, there are a few exceptions. In Strzelin powiat there is a sharp increase in death rates during the years 2001 and 2002. During 2001 the number of deaths among men increased by

almost 20% comparing to the base year of 1999. In case of Środa Śląska powiat there is a increase in death rates among women during the three consecutive years 2000 through 2002. After that year the unfavorable trend ends.

Dynamics of death process during the whole studied period are expressed using the average rate of change measure. Values of this measure for each district and for each given year are illustrated in Table 6, independently for men and for women.

Table 6. Yearly average rate of change in deaths (rate of increase) for men and women during the 1999-2003 period

Powiat	Average rate of change in % men		Average rate of change in % women	
	increase	decrease	increase	decrease
Milicz		1.18		6.72
Oleśnica		2.7		0.99
Oława		0.53		1.69
Strzelin		0.85		3.49
Środa Śląska		5.11		1.69
Trzebnica		0.31		2.66
Wrocław		2.85		0.1
Wrocław		1.82		0.77
City of Wrocław		1.69		0.82
Voivodship of Lower Silesia		1.62		0.54
Poland		1.26		0.87

Source: author's own computations on the basis of Table 1.

The analysis of data in Table 6 indicates the overall decreasing trend in death rates in men population, however the rate of the decrease is rather slow. Only five districts have rates of decrease higher then the country's average rate of decrease. Slightly different is situation in the case of women population. None of the districts has escalating number of deaths among women. Moreover, the rates of decrease in number of deaths among women exceed the country's average rate in six districts of agglomeration.

4. Internal migrations

Migration is the next factor influencing the size and the structure of the population. The external migrations will not be discussed here, instead attention is paid to the internal migration processes. The analysis covers the years 1999 through 2003.

As the data in Table 7 demonstrate there is a negative net migration only in the case of Milicz powiat. In all the remaining poviats the net migration is positive. If we look at the agglomeration as a whole, the population has increased by 1641 persons. However, the increase in the population attributed to the migration is

small, as migration is responsible for less than 1% growth in this area. The situation is quite different if we consider the Voivodship of Lower Silesia. Here we notice a decrease, however small, in the size of the population as indicated by the negative net migration value.

Table 7. Internal migrations in 1999

Powiat	Internal migrations in number of people		
	inflow	outflow	net migration
Milicz	439	520	-81
Oleśnica	1358	1355	3
Oława	1019	1019	0
Strzelin	685	637	48
Środa Śląska	646	615	31
Trzebnica	1225	904	321
Wołów	729	697	32
Wrocław	1704	1138	566
City of Wrocław	5567	4846	721
Voivodship of Lower Silesia	33464	33747	-283

Source: www.stat.gov.pl.

Table 8. Internal migrations in 2000

Powiat	Internal migrations in number of people		
	inflow	outflow	net migration
Milicz	419	461	-42
Oleśnica	1069	1129	-60
Oława	871	806	65
Strzelin	476	441	35
Środa Śląska	512	446	66
Trzebnica	1051	855	196
Wołów	555	490	65
Wrocław	1480	878	602
City of Wrocław	4676	4097	579
Voivodship of Lower Silesia	28886	29459	-573

Source: www.stat.gov.pl.

As the data presented in Table 8 show, in the year 2000 there is a negative net migration in two poviats, in addition to Milicz powiat, Oleśnica powiat records a negative net migrations. Still, the decrease in the size of population is not that significant. In the remaining poviats the net migration is positive which, in effect, generates an overall increase of 1551 people for the whole agglomeration. If we consider the entire Voivodship of Lower Silesia, the size of the population decreased in the year 2000, as it did in the previous year.

Table 9. Internal migrations in 2001

Powiat	Internal migrations in number of people		
	inflow	outflow	net migration
Milicz	475	505	-30
Oleśnica	1059	1143	-84
Oława	915	829	86
Strzelin	405	501	-96
Środa Śląska	523	502	21
Trzebnica	1112	756	356
Wołów	492	487	5
Wrocław	1548	953	595
City of Wrocław	5937	3971	1966
Voivodship of Lower Silesia	28545	28368	177

Source: www.stat.gov.pl.

During the year 2001 the net migration is negative in three poviats of the agglomeration. In the previous year the trend was observable in poviats: Milicz and Oleśnica; this year Strzelin poviat goes into the pool of poviats with negative net migration. In the remaining poviats the net migration is positive and quite substantial, making for the overall increase of 2819 people in population of the agglomeration taken as a whole. During the analyzed year the net migration for Voivodship of Lower Silesia is positive; it is the only year in the studied 5-year period that registered a positive net migration.

Table 10. Internal migration in 2002

Powiat	Internal migrations in number of people		
	inflow	outflow	net migration
Milicz	419	475	-56
Oleśnica	1149	1200	-51
Oława	866	755	111
Strzelin	484	473	11
Środa Śląska	617	473	144
Trzebnica	1067	778	289
Wołów	432	545	-113
Wrocław	2036	885	1151
City of Wrocław	5643	4736	907
Voivodship of Lower Silesia	29978	30662	-684

Source: www.stat.gov.pl.

Analysis of data in Table 10 shows that during 2002 net migration for Wrocław agglomeration was positive and equalled the increase of 2819 people in population. At the same time, there was a decrease of 684 people in the population of Voivodship of Lower Silesia taken as a whole.

Table 11. Internal migrations in 2003

Powiat	Internal migrations in 2003		
	inflow	outflow	net migration
Milicz	309	397	-88
Oleśnica	1206	1206	0
Oława	897	795	102
Strzelin	377	510	-133
Środa Śląska	712	471	241
Trzebnica	932	703	229
Wolów	472	520	-48
Wrocław	2281	946	1335
City of Wrocław	5396	5078	318
Voivodship of Lower Silesia	29723	30942	-1219

Source: www.stat.gov.pl.

As depicted by the data in Table 11 during the last year of the studied period the situation has not changed much. Despite the negative net migrations in three of the agglomeration's poviats, the net migration for the whole agglomeration is positive and equals an increase of 1956 people in population. The net migration for the Voivodship of Lower Silesia is negative and equals a decrease of 1219 people. It is the biggest decrease in the population of all the studied years. Interesting fact that should be noted is the negative net migration in Milicz powiat that is consistent throughout the studied years.

5. Population

The size of population and its structure is determined by the above discussed processes; i.e. it is determined by the number of births and the number of deaths in population and by the migration processes.

The structure of population is studied in 3 cohorts – the first one consists of people in the pre-productive age (0-17 years old), the second cohort are people in their productive age (18-60 years old women and 18-65 years old men) and the last cohort are people in their post-productive age (over 60 year old women and over 65 year old men). Due to the data availability, the study covers the years 2000 through 2004.

During the year 2000, the first year of the study, Wrocław agglomeration had 1 165 276 inhabitants. The city of Wrocław played a major role, with its population amounting to over 50% of the total population of the agglomeration. The age structure of the population was as follows: 249 156 people (or 21%) in their pre-productive age, 735 443 people (or 64%) in their productive age and 180 677 people (or 15%) in their post-productive age. It closely resembles the age structure of the population of Voivodship of Lower Silesia where the percentage shares of people in different age groups were 22.4, 62.7 and 14.9%, respectively. The corresponding

ratios for Poland as a whole were 24, 61 and 15%, which again closely follows the ratios for Wrocław agglomeration and those for Voivodship of Lower Silesia.

Table 12. Population by age and by poviát in the year 2000

Poviat	Total number of people	People in pre-productive age	People in productive age	People in post-productive age	Pre-working age population per 1000 persons at working age	Post-working age population per 1000 persons at working age
Milicz	37454	9918	22647	4889	438	216
Oleřnica	105076	26674	65253	13149	409	201
Oława	72298	17304	46440	8554	372	184
Strzelin	46090	11113	27756	7221	400	260
Środa Śląska	49412	12179	30172	7070	404	234
Trzebnica	76553	19416	47000	10137	413	216
Wołów	49742	11951	30239	7552	395	250
Wrocław	94785	23798	57802	13185	412	228
City of Wrocław	633857	116803	408134	108920	286	267
Voivodship of Lower Silesia	2972667	665678	1865067	441922	357	237
Poland	38644211	9304735	23654888	5684588	393	240

Source: www.stat.gov.pl and author's own computations.

Based on the data in Table 13 the ratios of demographic burden by the people in the pre-productive age and by the people in the post-productive age on 1000 persons who are in their productive age are calculated for the agglomeration. Those ratios are as follows: 338 pre-productive age people per 1000 working people and 245 people in their post-productive age per 1000 working people.

As we compare those ratios with the ratios calculated for each individual poviát, we can see that only in the city of Wrocław the ratios of demographic burden by the young population on the working people are smaller than the ratio for Wrocław agglomeration. Looking at the ratios of demographic burden by the people in their post-productive age for each individual district, we note that higher than the agglomeration's average ratios are recorded in city of Wrocław, poviát Wołów and poviát Strzelin.

In the year 2001 Wrocław agglomeration had 1 166 954 inhabitants, that number represents 39% of total population in Voivodship of Lower Silesia and 3% of total Poland's population during that year. The age structure of the population was as follows: 20.5% population in their pre-productive age, 63.9% of people in their productive age, and 15.6% of population in their post-productive age. Again, it very much resembles the age structure of the population of Voivodship of Lower Silesia, where the percentage shares of people in the different age groups were 21.5, 63.5 and 15.0%, respectively. The corresponding ratios for Poland were 23.2, 61.9 and 14.9%, respectively.

Table 13. Population by age and by district in 2001

Powiat	Total number of people	People in pre-productive age	People in productive age	People in post-productive age	Pre-working age population per 1000 persons at working age	Post-working age population per 1000 persons at working age
Milicz	37520	9546	23046	4928	414	214
Oleśnica	105238	25833	66065	13340	391	202
Oława	72550	16617	47195	5968	352	126
Strzelin	45991	10643	28093	7255	379	258
Środa Śląska	49480	11702	30713	7065	381	230
Trzebnica	77035	18798	48120	10117	391	210
Wrocław	95352	23003	59135	13214	389	223
City of Wrocław	634047	111232	412267	110548	270	268
Voivodship of Lower Silesia	2970094	637511	1886424	446159	338	236
Poland	38632453	8970682	23919797	5741974	375	240

Source: www.stat.gov.pl and author's own computations.

Table 14. Population by age and by district in 2002

Powiat	Total number of people	People in pre-productive age	People in productive age	People in post-productive age	Pre-working age population per 1000 persons at working age	Post-working age population per 1000 persons at working age
Milicz	36972	9264	22831	4877	405	214
Oleśnica	103145	24972	64751	13422	386	207
Oława	70829	16063	45982	8784	349	191
Strzelin	44685	10164	27450	7071	370	258
Środa Śląska	48726	11485	30280	6961	379	230
Trzebnica	76397	18329	47850	10218	383	213
Wrocław	96786	23361	60203	13222	388	219
City of Wrocław	639150	106720	421181	111249	253	264
Voivodship of Lower Silesia	2904694	609739	1851509	443446	329	239
Poland	38218531	8663685	23789807	5765039	364	242

Source: www.stat.gov.pl and author's own computations.

The ratios of demographic burden for the year 2001 were calculated using the data in Table 13. The ratios are as follows: 321 people in the pre-productive age per 1000 working persons and 241 people in the post-productive age per 1000 working persons. The corresponding ratios for Voivodship of Lower Silesia and for Poland were also computed and can be seen in Table 13. Comparative analysis of those ratios with the ratios computed for each individual powiat shows that only in the case of the city of Wrocław the ratio of demographic burden by young, pre-productive population is smaller than the respective average ratio for the agglomeration. Also, this ratio for Wrocław is greater than the respective ratios for both, Voivodship of Lower Silesia and Poland. Ratios of demographic burden on working population by the people in their post-productive age are greater than the agglomeration's average for city of Wrocław and for the two powiats: Wołów and Strzelin.

In the year 2002 Wrocław agglomeration had 1 164 460 inhabitants, that number represents 40% of total population in Voivodship of Lower Silesia and 3% of total Poland's population during that year. The age structure of the population was as follows: 19.8% population in their pre-productive age, 64% of people in their productive age and 16.2% population in their post-productive age. Again, it very much resembles the age structure of the population of Voivodship of Lower Silesia where the percentage shares of people in the different age groups were 21, 63.7 and 15.3%, respectively. The corresponding ratios for Poland were 22.6, 62.2 and 15.2%, respectively.

Table 15. Population by age and by district in 2003

Powiat	Total number of people	People in pre-productive age	People in productive age	People in post-productive age	Pre-working age population per 1000 persons at working age	Post-working age population per 1000 persons at working age
Milicz	36929	8931	23143	4855	386	210
Oleśnica	103264	24048	65681	13535	366	206
Olawa	70940	15369	46509	8974	329	191
Strzelin	44572	9808	27730	7034	353	254
Środa Śląska	48977	11147	30823	7007	362	227
Trzebnica	76644	17696	48751	10197	363	209
Wołów	47710	10518	29804	7388	353	248
Wrocław	98032	22696	62072	13264	366	214
City of Wrocław	637548	101715	423882	111951	240	264
Voivodship of Lower Silesia	2898313	583889	1869853	444571	312	237
Poland	38190608	8349808	24038777	5802023	347	241

Source: www.stat.gov.pl and author's own computations.

The ratios of demographic burden for the year 2002 were calculated using data in Table 14. The ratios are as follows: 308 young people per 1000 persons at working age and 244 people in their post-productive age per 1000 persons at working age. The corresponding ratios for Voivodship of Lower Silesia and for Poland were also computed and can be seen in Table 14.

The hitherto analysis shows that the size of the population as well as its structure has not changed significantly over the course of the studied years. Therefore, the analysis of the years 2003 and 2004 will not be performed and it will be assumed that so far established pattern continues.

Table 16. Population by age and by poviát in 2004

Poviat	Total population	People in pre-productive age	Population in productive age			Population in post-productive age	Pre-working age population per 1000 persons at working age	Post-working age population per 1000 persons at working age
			total	mobile	un-mobile			
Milicz	36891	8633	23422	14659	8754	4845	368	207
Oleřnica	103231	23138	66435	42254	24181	13658	348	205
Oława	71073	14871	47160	29089	18071	9042	315	192
Strzelin	44409	9449	27960	17429	10531	7000	338	250
řroda Śląska	49127	10785	31378	20092	11286	6964	344	222
Trzebnica	77072	17230	49550	31210	18400	10232	348	206
Wołów	47616	10111	30386	18898	11201	7406	333	244
Wrocław	99511	22179	64039	40488	23551	13293	346	207
City of Wrocław	636268	98556	425133	263010	162123	112579	232	265
Voivodship of Lower Silesia	2895729	573628	1877193	1154010	723183	5820331		
Poland	38180249	8219385	24140533	15261532	8879001	444908		

Source: www.stat.gov.pl and author's own computations.

6. Population forecast

The earlier analysis will serve now as a foundation for the verification of the important assumptions on which GUS forecasts of population are based. GUS has forecasted the size and the structure of the population up until the year 2030; the first year included in the forecast is the year 2003. For the year 2003 the forecasts

proved to be accurate. For the subsequent years the forecasts are prepared using the algorithm (see [1]). The forecasts are based on the following assumptions:

- It is assumed that the ongoing process of decrease in the fertility rates will continue into the future. It is also assumed that the tendency to postpone the motherhood until the later age for women will also continue. The median age of the first-time mothers had risen fairly consistently over the last years; as of today the median age at first birth is 28 years, and it is expected to grow to 29 and even 30 years in the near future.
- It is assumed that the mortality rates will continue to drop and the average life expectancy will continue to increase.
- The number of the internal migrations substantially decreased in 1990s and it is expected to remain at its low levels for the coming years. The higher levels of population mobility can be expected around the year 2010. After that, during the next decade, the ratios of migration are likely to revert to their 1990's levels.

The analysis performed in the paragraphs 1 through 3 demonstrates that the set forth conditions are satisfied in the studied agglomeration.

In paragraph 4 it is stated that during the years 2000-2004 the size of population as well as its structure has not changed significantly. Let us analyze to what extent does the situation change for the years 2005-2007.

Table 17. Population by age and by poviát in the year 2005 (forecast)

Poviat	Total population	Population in pre-productive age	People in productive age			Population in post-productive age
			total	mobile	unmobile	
Milicz	36984	8438	23602	14671	8931	4944
Oleśnica	103274	22441	69992	42243	27749	13841
Oława	71183	14563	47330	28967	18363	9240
Strzelin	44366	9177	28177	17371	10806	7012
Środa Śląska	48796	10491	31431	19810	11621	6874
Trzebnica	77410	16830	50261	31288	18973	10319
Wołów	47628	9764	30386	18900	11486	7478
Wrocław	98874	21334	64284	40195	24089	13256
City of Wrocław	677162	95455	428256	263416	164840	113451
Agglomeration	1205677	208493	773719	476861	296858	186415

Source: www.stat.gov.pl and author's own computations.

Analysis of the data gathered in Tables 17-19 shows that the overall number of people in the population has slightly decreased. There is a small decrease in the number of people in their pre-productive age; at the same time there is a small decrease in the number of people in their post-productive age in the population.

Table 18. Population by age and by powiat in the year 2006 (forecast)

Powiat	Total population	Population in pre-productive age	People in productive age			Population in post-productive age
			total	mobile	unmobile	
Milicz	37017	8185	23792	14773	9059	5040
Oleśnica	103299	21759	67302	42314	24988	14238
Oława	71303	14192	47538	29042	18496	9573
Strzelin	44278	8935	28352	17358	10994	6991
Środa Śląska	48789	10180	31706	19854	11852	6903
Trzebnica	47778	16418	50908	31554	19354	10452
Wołów	47587	9399	30653	18932	11721	7535
Wrocław	96623	20816	65360	40632	24728	13447
City of Wrocław	635688	92835	427624	262968	164656	115929
Agglomeration	1132362	202719	773235	477427	295808	190108

Source: www.stat.gov.pl and author's own computations.

Table 19. Population by age and by powiat in 2007 (forecast)

Powiat	Total population	Population in pre-productive age	People in productive age			Population in post-productive age
			total	mobile	unmobile	
Milicz	37007	8014	23853	14741	9112	5140
Oleśnica	103338	21099	67651	42478	25173	14558
Oława	71411	13859	47625	29166	18459	9927
Strzelin	4203	8685	28501	17391	11110	7017
Środa Śląska	48844	9884	31992	19948	12044	6968
Trzebnica	78094	15999	51461	31829	19632	10634
Wołów	47546	9085	30871	19018	11853	7590
Wrocław	100319	20357	66279	41087	25192	13683
City of Wrocław	633894	90311	426175	262641	163534	117408
Agglomeration	1124656	197293	774408	478229	296109	192295

Source: www.stat.gov.pl and Author's own computations.

Data contained in Table 20 demonstrate that the structure of the population has changed somewhat in the unfavourable direction. People in their productive ages are more and more burdened by the older population, i.e. by the people in their post-productive years. The burden by the young population is lessening, which in turn suggests that in the future the social security system can be put in jeopardy. The tendency observed in the studied period is only to strengthen and intensify in the coming decades.

Table 20. Ratios of persons in pre- and in post-productive ages per 1000 persons in their productive age by the poviats

Powiat	Ratios per 1000 persons in productive age					
	2005		2006		2007	
	Persons in pre-productive age	Persons in post-productive age	Persons in pre-productive age	Persons in post-productive age	Persons in pre-productive age	Persons in post-productive age
Milicz	357	209	344	219	336	215
Oleśnica	321	198	323	211	312	215
Oława	308	195	298	201	292	208
Strzelin	326	249	315	246	305	246
Środa Śląska	334	219	321	218	309	218
Trzebnica	335	205	322	205	311	207
Wołów	321	246	307	246	294	246
Wrocław	332	206	318	206	307	206
City of Wrocław	223	265	218	271	212	275
Agglomeration	223	241	262	246	254	249

Source: author's own computations.

References

- [1] *Prognoza demograficzna na lata 2003-2030*, Główny Urząd Statystyczny, Warszawa 2004.
- [2] www.stat.gov.pl.

SYTUACJA DEMOGRAFICZNA W AGLOMERACJI WROCŁAWSKIEJ

Streszczenie

Sytuacja demograficzna opisywana jest za pomocą takich procesów, które decydują o liczebności populacji oraz jej strukturze. W szczególności są to procesy urodzeń i zgonów. Małżeństwa, rozwody i migracje nie są rozważane, ponieważ nie mają bezpośredniego wpływu na liczbę ludności. Badania poszczególnych procesów dotyczyły różnych okresów. Spowodowane to było dostępnością danych statystycznych. Badanie ludności przeprowadzono bardzo szczegółowo, było to możliwe ze względu na dostępność danych w przeszłości, a także dostępność sporządzonej przez GUS długookresowej prognozy ludności z podziałem na wiek i płeć.