

7. Demographic characteristics and processes in Ljubljana

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The city of Ljubljana and its urban region experienced very dynamic population growth after 1945. Up until the 1970s, population growth was mainly a consequence of intensive migration from rural and less developed areas of Slovenia and the rest of Yugoslavia. Immigrants provided the labor force needed for the rapidly growing manufacturing and services sectors. Characteristic was concentration of population in Ljubljana as well as in other, smaller towns in the region. At the same time a positive natural increase is also characteristic of this period, which together with a positive migration increase contributes to the growth in population. In the 1980s and 1990s the relocation of the population to suburban settlements at the edge of the city intensified. In this way the largest suburbanized area in Slovenia, with around 150.000 inhabitants, took form. The city centre and older areas of housing experienced depopulation. The natural increase declined due to a drop in fertility and in 1996 Ljubljana recorded a negative natural increase for the first time. After 1991 the Ljubljana urban region experienced rapid economic development, which attracted new migration flows. The region has the highest migration balance of all the Slovenian regions. In the same period, due to negative natural and migration growth, the number of inhabitants in Ljubljana itself decreased.

The main objective of this chapter is to present the major characteristics of population development in Ljubljana and the Ljubljana urban region. Population development is placed and explained in the context of general demographic and urbanization processes in Slovenia. We attempted to determine to what extent the growth in population is a consequence of migration trends or natural increase. Special attention is given to particular parts of the city of Ljubljana and the urban region and to the latest urbanization and demographic processes. In the second part of the chapter we give greater attention to an overview of the demographic characteristics of Ljubljana, with an emphasis on the age structure of the population. Population development and demographic characteristics have a great influence on the spatial development of the city and urban region; we therefore highlight the problem of spatial planning in a situation in which the population is both declining and aging.

7.1. Population development and demographic characteristics of Ljubljana and the Ljubljana urban region before 1991

The current size, spatial distribution and demographic characteristics of the population in Ljubljana and the Ljubljana urban region are primarily the result of migration flows which occurred in Slovenia and in the former Yugoslavia after 1945. Although a relatively low degree of urbanization is still typical for Slovenia, with only slightly more than 50 %

of the population living in urban areas, during the first postwar period up to the end of the 1970s, the country was characterized by accelerated urbanization, which was fueled mainly by strong migration of the population from the countryside (Ravbar, 1994). The population immigrated from Slovenian rural areas and a large part, about one third, came from migrants from regions in the former Yugoslavia. Besides Ljubljana some larger urban settlements within the urban region also grew quickly, in particular Domžale, Vrhnika, Litija and Grosuplje.

The population of the present-day territory of the Urban Municipality of Ljubljana increased from approximately 120.000 to approximately 270.000 from 1948 to 1991, or by about 120 % (Figure 23). The rate of population growth after 1945 increased steadily and achieved a peak between 1961 and 1981. After 1981 population growth slowed considerably, and at the end of the 1980s it began to stagnate. The causes for this kind of population development can be found in demographic, urbanization, and socio-economic processes which took place in Slovenia during the period studied (Rebernik, 1999). Compared to other European countries, Slovenia is characterized by a relatively low level of urbanization, with just a bit over 50 % of the population living in urban areas. Nevertheless, rapid urbanization characterized the 1950s, 1960s, and 1970s: the share of the urban population increased from 26 % in 1948 to 36 % in 1961, 45 % in 1971 and 49 % in 1981. Urbanization was mainly a consequence of the abandonment of farming, industrialization, and the migration of population into cities from rural areas of Slovenia and the rest of Yugoslavia. The population grew most rapidly in major regional centres and highly industrial cities. In the 1970s the fastest growth was shown by towns in the urbanized environs of Ljubljana, Maribor, and Celje. Here it should be stressed that urbanization in Slovenia was less pronounced than in other Yugoslav republics. The relatively weak urbanization in Slovenia was a result mainly of commuting by the labor force from rural settlements to urban centres of employment and the initiation of a policy of polycentric economic and urban development. Polycentrism in Slovenia became the basic concept of spatial development in the 1970s and 1980s. The development of industry and services in smaller urban and rural settlements and in less developed parts of Slovenia was actively encouraged. Access to jobs in the countryside slowed the rural-urban migration. In comparison with other major cities in the republics of the former Yugoslavia, the growth of Ljubljana was considerably slower. In 1948 about 8 % of the population lived in Ljubljana, and in 2007 about 13 %, which is a considerably smaller share than in the cases of Belgrade, Zagreb, Sarajevo and Skopje.

Figure 23: Population development in the territory of the Urban Municipality of Ljubljana between 1945 and 2009²¹.



Source: Statistical office of the Republic of Slovenia.

After 1981 a slower growth of the urban population can be observed. While the population in the majority of cities continued to grow, in the 1980s for the first time there was a drop in population in some cities. Large cities in the more urbanized regions lost population, while towns in less urbanized parts of the country continued to grow. It is thus clear that classical urbanization, i.e. the process of concentration of the population in cities, changed to the suburbanization of the more densely populated areas in the wider vicinity of larger towns and cities (Ravbar, 1994). In the 1980s, the highest rate of growth of the population occurred in settlements on the outskirts of major regional centres, due to the outmigration of the urban population. In the 1990s the processes mentioned further intensified. The total number of inhabitants in cities declined, most noticeably in major centres. The share of the population living in urban settlements thus declined by 1 % between 1996 and 2002. At the same time there was a continuation and intensification in the deconcentration of the population into surrounding suburbanized areas. In the first half of the 1990s population growth was most rapid in suburbanized settlements at the city's edge, but between 1996 and 2002 small rural settlements with good access to major urban centres had the most rapid growth. Thus in the most recent period there has been an urbanization process in the broader hinterland of urban regions.

²¹ Data are recalculated according to the methodology of the 2002 Census for the territory of the present-day Urban Municipality of Ljubljana.

Tables 11 and 12 show the total, natural, and migration growth of the population for particular years, which enables a more detailed analysis of population development in Ljubljana. Data for the period between 1945 and 1964 were accessible for the area of the city of Ljubljana as defined by the Statistical Agency at that time—the settlement of Ljubljana and selected settlements along its edge (Mauser, 1970). For the period between 1965 and 1993 data were collected for five Ljubljana municipalities (Center, Bežigrad, Moste, Šiška and Vič-Rudnik), which now comprise the Administrative Unit of Ljubljana and thus include a considerably wider area. For this reason data from the two periods are not directly comparable, but they nevertheless make possible the identification of basic trends in the demographic development of Ljubljana. The spatial extent of Ljubljana municipalities is not the most suitable for our analysis, since it also includes entirely rural settlements in the municipality of Vič-Rudnik and also partially in the municipality of Moste, while it does not include the urbanized settlements in the municipalities of Domžale, Vrhnika and Grosuplje, which are closely connected to Ljubljana. Despite some deficiencies, the data cited are nonetheless a sufficiently good indicator of basic trends in population development in the territory of Ljubljana and its urban region.

A more detailed view of population development shows that the annual growth of the population fluctuated greatly. The annual growth in the territory of the city of Ljubljana between 1945 and 1964 ranged between 2000 and 6000 inhabitants, with an average of 3500 to 4000. The rate of population growth reached a value of between 2-3 %, greatly surpassing the value for the whole of Slovenia as well as the values for urban settlements. Between 1965 and 1980 the annual growth in the territory of the five Ljubljana municipalities at the time was between 5000 and 7000 inhabitants, or 2-2.5 %. After 1980 there was a sharp drop, and in 1991 and 1992 it was even negative (Rebernik, 1999).

Population growth in cities is the result of the natural increase of the urban population and immigration into the city. We were interested in finding out what proportion of the annual population growth in Ljubljana and its environs was contributed by natural increase and what proportion was due to immigration or rather the migration balance. In Ljubljana up until 1981, with the exceptions of the periods 1945-1946 and 1950-1953, much of the population growth was the result of immigration into the city: more than two-thirds of the increase can be attributed to a positive migration balance. Between 1945 and 1964, 46.779 people moved into the city of Ljubljana, whereas only 26.628 people were born there. Between 1965 and 1980, 57.198 people moved into the territory of the five Ljubljana municipalities, while 41.171 were born there. This is evidence that the principal cause of the rapid growth of population between 1945 and 1980 is migration of population from rural areas to the city, but also that the share of natural increase in the total growth gradually increased. Thus in the 1970s the annual natural increase already reached the level of the migration balance and after 1979 it exceeded it. Between 1980 and 1993, of the total growth of 18.462 inhabitants, only 409 inhabitants were due to migration trends (Rebernik, 1999). Here we should note that immigration, particularly from republics of the former Yugoslavia, was also present after 1980. But at the same time there began intensive emigration by the urban population to surrounding settlements, which in 1989 for the first time exceeded immigration. Thus there were two processes simultaneously at work in the 1980s: suburbanization of the areas adjacent to the city of Ljubljana, with the emigration of the urban population, and "classic" urbanization with the immigration of population from less developed regions of Slovenia and the former Yugoslavia.

Almost the entire growth in population after 1981 was thus the result of the natural increase of the urban population, since immigration and emigration flows were roughly equivalent. The natural increase of the population also underwent considerable changes in the postwar period. We can explain its dynamics by means of general demographic trends in Slovenia and with the specific age and family structure of the population of Ljubljana. Between 1946 and 1954 the natural increase was between 1.2 and 1.4 %. In the next decade it dropped to about 0.6 to 0.9 % annually. Up until 1982 the rate of natural increase maintained similar values and became very stable and considerably higher than the average for Slovenia, since there was a steady flow of younger immigrants into the city who then had families. After 1982, with changed migration trends and consequently a changed age and family structure of the population, the natural increase also dropped sharply (Rebernik, 1999).

The large role played by immigration in the population growth of Ljubljana in the first decades after the Second World War is shown by data on the share of the immigrant population in the total population of the city. In 1991 46.5 % of the population of the Urban Municipality of Ljubljana were immigrants. With respect to origin, most were from other municipalities in Slovenia (63 %), followed by immigrants from the republics of the former Yugoslavia (32 %). Two-thirds of the immigrants in this period thus came from Slovenia and one-third, or almost 40.000 people, from the other republics of the former Yugoslavia, for the most part from Serbia, Bosnia and Herzegovina, and to a lesser extent from Kosovo, Macedonia and Montenegro.

Table 11: Total, natural, and migration increase of the population of Ljubljana²² between 1945 and 1964.

	Total increase	Total growth per 1000 inhabitants	Natural increase	Natural increase per 1000 inhabitants	Migration increase	Migration increase per 1000 inhabitants
1945	3145	28.4	-252	-2.3	3397	30.7
1946	3145	27.6	1652	14.5	1493	13.1
1947	3143	26.8	1547	13.2	1596	13.6
1948	4648	38.6	1536	12.7	3112	25.9
1949	4477	35.9	1607	12.9	2870	23
1950	3571	27.6	1914	14.8	1657	12.8
1951	3032	22.7	1674	12.7	1358	10.2
1952	2050	15.3	1774	13.1	276	2
1953	2646	19.2	1646	12	1000	7.2
1954	3192	22.7	1403	10	1789	12.7
1955	3844	26.7	1367	9.5	2477	17.2
1956	4098	27.8	1066	7.3	3032	20.5
1957	3912	25.7	1000	6.5	2912	19.2
1958	2559	22.8	890	5.7	1669	17.1
1959	2749	17.3	1088	6.9	1661	10.4
1960	3754	23.1	1013	6.2	2741	16.9
1961	4615	27.8	1093	6.6	3522	21.2
1962	3517	20.6	1423	8.3	2094	12.3
1963	5934	34.1	1604	9.2	4330	24.9
1964	5376	29.8	1583	8.7	3793	21.1

Source: Statistical Office of the Republic of Slovenia.

²² Data are based on the territory of the city of Ljubljana as defined by the then Agency of Statistics—the settlement of Ljubljana and selected settlements at the city's outskirts (Mauser, 1970)

Table 12: Total, natural, and migration increase of the population in the territory of the Administrative Unit of Ljubljana²³ between 1965 and 1994.

	Total increase	Total growth per 1000 inhabitants	Natural increase	Natural increase per 1000 inhabitants	Migration increase	Migration increase per 1000 inhabitants
1965	6401	28.6	2311	10.32	4090	18.26
1966	7130	30.9	2295	9.96	4835	20.98
1967	6747	28.4	2219	9.34	4528	19.06
1968	5582	24.8	2148	8.79	3434	14.06
1969	6021	24.1	2214	8.86	3807	15.24
1970	5704	22.3	2172	8.49	3532	13.8
1971	5117	19.6	2506	9.58	2611	9.98
1972	5625	21.1	2521	9.45	3104	11.64
1973	4989	18.3	2293	8.42	2696	9.9
1974	5290	19.1	2400	8.65	2890	10.42
1975	5915	20.1	3352	11.86	2563	9.07
1976	7248	25.1	2700	9.36	4548	15.76
1977	7089	23.9	2592	8.76	4497	15.2
1978	6381	21.1	2796	9.23	3585	11.84
1979	6680	22.2	2857	9.24	3823	12.36
1980	6450	20.4	3795	12.01	2655	8.4
1981	3180	9.9	2445	7.58	735	2.28
1982	3516	10.8	2597	7.98	919	2.82
1983	2104	6.4	1753	5.33	351	1.07
1984	2109	6.1	1749	5.28	270	0.82
1985	1987	5.9	1559	4.68	428	1.28
1986	1961	5.8	1615	4.82	346	1.03
1987	2257	6.7	1458	4.32	799	2.37
1988	1836	5.4	1380	4.07	456	1.34
1989	643	1.9	1331	3.9	-488	-2.02
1990	477	1.4	956	2.8	-479	-1.4
1991	-974	-2.8	690	2.03	-1664	-4.89
1992	-699	-2.0	423	1.24	-1122	-3.3
1993	65	0.2	207	0.61	-142	-0.42
1994	331	1.0	165	0,5	176	0,5

Source: Statistical Office of the Republic of Slovenia.

Population development in the rest of the territory of the present-day Ljubljana Urban Region was much slower in the period up to 1971 than in Ljubljana. The exceptions are smaller satellite towns and urbanized settlements in the broader vicinity of Ljubljana, particularly Domžale, Vrhnika, Medvode, Litija and Grosuplje. After 1971 population growth intensified in the narrower suburbanized outskirts of Ljubljana, especially in the northern and western edge settlements, due to strongly increased immigration. In the decade between 1981 and 1991, due to suburbanization and emigration of population from Ljubljana, the settlements in the narrow suburbanized belt around Ljubljana, especially in the northern part between Ljubljana, Domžale and Kamnik, and the area at

²³ The Administrative Unit of Ljubljana comprises five former Ljubljana municipalities.

the northern edge of Ljubljana Marsh (Ljubljansko barje), experienced extremely high growth in population. Settlements in the suburban belt around Ljubljana grew by 20 to 60 % between 1981 and 1991 (Ravbar, 1994). In this way the largest suburbanized region in Slovenia took shape around Ljubljana. In 1991 it comprised a third of the territory of the present-day Ljubljana urban region with around 150.000 residents.

Thus three characteristic forms of settlement took shape in the region: cities (Ljubljana and satellite towns), suburbanized and densely settled regions in the immediate gravitational hinterland of Ljubljana, and less densely settled rural areas. Characteristic of the areas of suburbanization is dispersed individual housing construction, made possible by the liberal and relatively inexpensive purchase of lands and the low costs of municipal infrastructure. Under socialism individual construction represented the only possibility for investing savings since other forms of investment were not possible. The increase in car ownership and better transportation access made commuting possible, since employment was concentrated in towns. The basic reasons and conditions for the rise of suburbanization in Slovenia in the 1970s and 1980s were: a shortage of housing and very high prices of apartments and land in cities in conjunction with relatively low prices of land and municipal services at the outskirts of cities and towns, the desire to live in one-family houses, a better quality living environment, investment of savings in housing construction, the rise of private car ownership, the construction of roads and resultant improved traffic access to settlements in the vicinity of cities, and ineffective urban planning and regulation (Rebernik, 2004).

7.2. Population development and demographic characteristics of Ljubljana and the Ljubljana urban region after 1991

The Ljubljana urban region still remained an area of population immigration after 1991. Table 13 shows that the region over the last ten years has had a positive migration balance, especially after 2005. Slovenia as a whole is characterized by relatively weak interregional population migrations, but the Ljubljana urban region shows the highest migration balance. It is interesting that a large part of the immigrant population is from outside the country, which indicates an intensification of immigration to Slovenia after a sharp drop at the beginning of the 1990s, particularly in the Ljubljana urban region. Among foreign immigrants, citizens of Bosnia and Herzegovina, Serbia, Macedonia, and Croatia predominate. Immigration is associated mainly with employment, since the Ljubljana urban region has the fastest growth and most diverse structure of jobs and the most favorable economic development trends. In this connection it should be stressed that the actual extent of immigration is considerably greater, since many people, especially those with Slovenian citizenship, do not register their change of permanent residence. In contrast to Slovenia, the region throughout the period studied also showed a positive natural increase, on average between 1 and 2 per 1000 inhabitants. This is primarily the result of a more favorable age structure of the population in the region, which is the result of the immigration of younger and middle younger generations from the rest of Slovenia and from abroad. Between 1991 and 2007 the number of inhabitants in the territory of the Ljubljana urban region thus increased from 460.000 to more than 500.000, or by more than 10 %.

Table 13: Total, natural, and migration increase of the population in the territory of the Ljubljana urban region and Slovenia between 1996 and 2007.

	Total increase LUR / per 1000 inh.		Total increase SLO / per 1000 inh.		Natural increase LUR / per 1000 inh.		Natural increase SLO / per 1000 inh.		Migration increase LUR / per 1000 inh.		Migration increase SLO / per 1000 inh.	
1996	528	1,0	691	0,3	534	1,1	168	0,1	-6	-0,0	697	0,3
1997	438	0,9	-477	-0,2	527	1,1	-763	-0,4	-89	-0,2	286	0,1
1998	-518	-1,0	-3288	-1,6	404	0,8	-1183	-0,6	-922	-1,8	-2105	-1,1
1999	1175	2,3	983	-0,5	576	1,2	-1352	-0,6	599	1,2	2335	1,2
2000	1586	3,2	2207	1,1	728	1,5	-408	-0,2	858	1,7	2615	1,3
2001	1877	3,7	1961	1,0	445	0,9	-1031	-0,5	1432	2,8	2992	1,5
2002	1163	2,3	665	0,3	558	1,1	-1200	-0,6	605	1,2	1865	0,9
2003	1609	3,2	1282	0,6	280	0,6	-2130	-1,1	1329	2,7	3412	1,7
2004	1972	3,9	1340	0,7	698	1,4	-562	-0,3	1274	2,6	1902	0,9
2005	3303	6,6	5768	2,8	813	1,6	-668	-0,3	2490	5,0	6436	3,2
2006	3787	7,5	7019	3,5	1193	2,4	752	0,4	2594	5,2	6267	3,1
2007	6111	12,2	15489	7,7	1549	3,1	1239	0,6	4562	9,1	14250	7,1

Source: Statistical Office of the Republic of Slovenia.

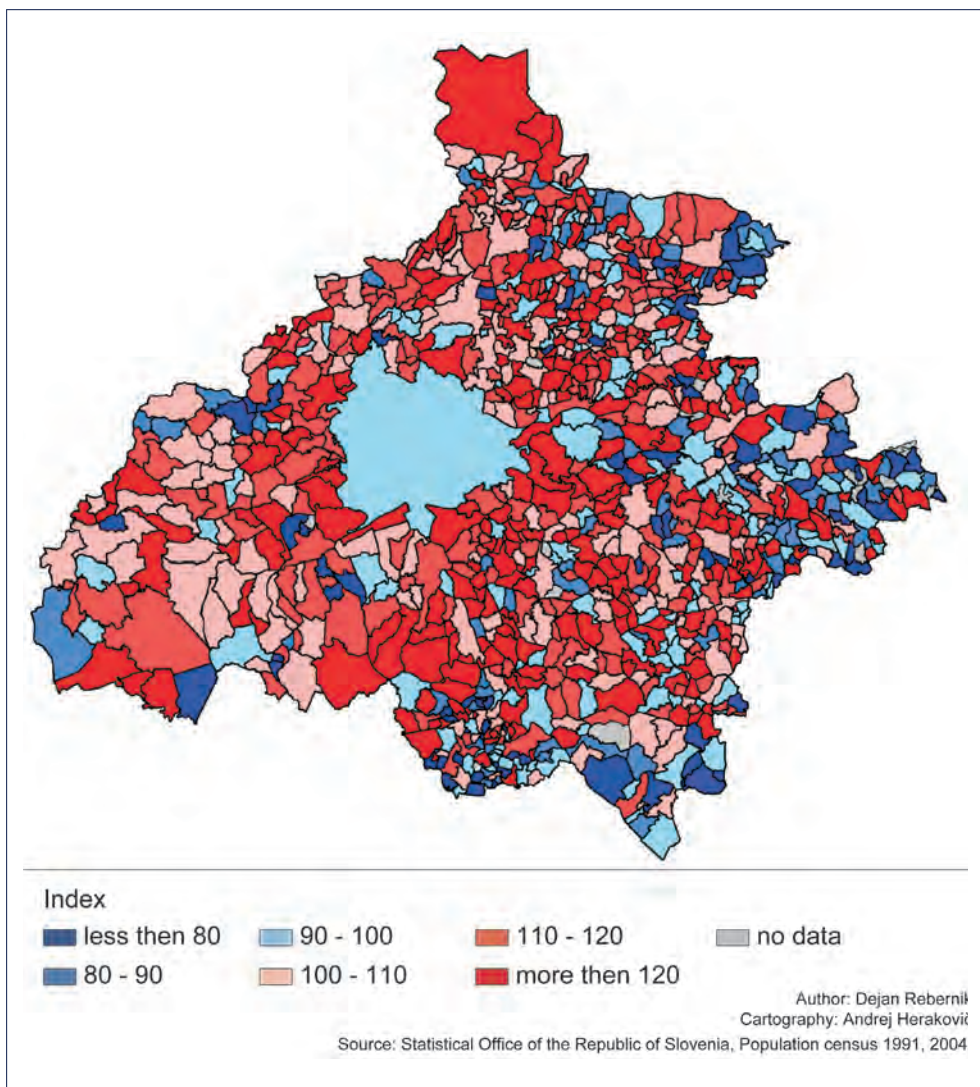
Table 14: Population development in the Ljubljana urban region (LUR) between 1991 and 2007.

Municipality	1991	2002	2007	1991/2002	2002/2007	1991/2002
LUR	463802	488364	506829	105,30	103,78	109,28
Ljubljana	268120	265881	267920	99,16	100,77	99,93
Other municipalities	192155	217754	235005	113,32	107,92	122,30
Borovnica	3527	3839	3904	108,85	101,69	110,69
Brezovica	7667	9334	10179	121,74	109,05	132,76
Dobrepolje	3328	3544	3727	106,49	105,16	111,99
Dobrova-Polhov Gradec	5740	6691	7071	116,57	105,68	123,19
Dol pri Ljubljani	3695	4341	5011	117,48	115,43	135,62
Domžale	26523	29902	32410	112,74	108,39	122,20
Grosuplje	13195	15665	17853	118,72	113,97	135,30
Horjul	2398	2622	2729	109,34	104,08	113,80
Ig	4447	4555	6030	102,43	132,38	135,60
Ivančna Gorica	11928	13567	14519	113,74	107,02	121,72
Kamnik	24461	26477	28033	108,24	105,88	114,60
Komenda	3957	4451	4826	112,48	108,43	121,96
Litija²⁴	18242	19120	19886	104,81	104,01	109,01
Logatec	9665	11343	12298	117,36	108,42	127,24
Lukovica	4288	4972	5273	115,95	106,05	122,97
Medvode	12541	14161	14793	112,92	104,46	117,96
Mengeš	6073	6662	6927	109,70	103,98	114,06
Moravče	4008	4508	4794	112,48	106,34	119,61
Škofljica	5051	7119	8028	140,94	112,77	158,94
Trzin	2592	3385	3664	130,59	108,24	141,36
Velike Lašče	3271	3735	4087	114,19	109,42	124,95
Vodice	3456	3871	4262	112,01	110,10	123,32
Vrhnika	15629	17729	18605	113,44	104,94	119,04

Source: Statistical Office of the Republic of Slovenia.

²⁴ Due to the split of the Municipality of Litija the data on the population for the year 2007 represent the municipalities Litija and Šmartno pri Litiji.

Figure 24: Population development in the Ljubljana urban region by municipality between 1991 and 2007.



Source: Statistical Office of the Republic of Slovenia.

After 1991 there were some important changes in the trends and distribution of the population. For the first time there was a drop in the population in the area of the city of Ljubljana as a whole. While the population of Ljubljana grew by 11.000, or 4 %, between 1991 and 2002 the number of inhabitants fell by 9000, from 267.000 to 258.000, a decrease of 3.5 %. The decline in population, which in the 1980s was characteristic only for the city centre and some of the oldest suburbs, thus intensified and expanded to other parts of the city. A decline in population thus remains characteristic for the majority of

the city centre, the older suburbs and the older apartment block neighborhoods, which up until 1991 were characterized by population growth (Rebernik, 2004). For the Urban Municipality of Ljubljana negative migration and natural growth and consequently a decline in the total population was characteristic up until 2004. Due to the shortage and high prices of apartments a large part of the younger generation of Ljubljana residents who moved out of their parents' homes solved their housing problem by building a house or buying an apartment in one of the municipalities in urban region. The emigration of population from Ljubljana to the suburbanized settlements intensified after 2000: the municipality of Ljubljana has a negative migration balance with all the other municipalities in the urban region. The annual negative migration balance of the Urban Municipality of Ljubljana with all the other municipalities in the urban region is between 1000 and 2000 people.

In the second half of the 1990s and at the beginning of the new century the fastest population growth was typically shown by smaller rural settlements in the Ljubljana urban region. In comparison with the period between 1981 and 1991, the area of population growth thus expanded spatially from the narrower and more densely settled suburban areas to include rural areas in the region as well. New settlement in the countryside was extremely dispersed, frequently outside or at the edge of existing rural settlements. The phenomenon has all the characteristics of the process of "urban sprawl." It consists entirely of new construction in the form of one-family houses, most often "individual do-it-yourself building." New construction is located separately or in small groups. As part of this process a transformation of settlements of vacation homes into settlements with permanent residence was also characteristic, as for instance in the case of the settlement of Rakitna. Parents thus moved into former vacation homes and left their apartments in Ljubljana to their children. This kind of development was encouraged by a shortage and high prices of apartments and building land in Ljubljana and also in suburbanized areas. We can thus conclude that in the Ljubljana urban region suburbanization is moving into the phase of peri-urbanization, exurbanization, or "expanded" suburbanization, for which the movement of the population from densely settled and compact urban and suburban parts of the region to sparsely settled and dispersed rural areas is characteristic. In this way the region has passed into a new phase of the urbanization cycle (Rebernik, 2004).

After 2005 there are some important changes in Ljubljana population migration trends. For the first time in a long time the migration growth of Ljubljana is positive, due particularly to strong immigration from abroad, and the drop in the total population is halted. A very large increase in migration growth is particularly evident after the year 2007, exceeding 2500 persons in Ljubljana and 6500 persons in the Ljubljana urban region. Due to the short time period we cannot say whether this is a long-term trend in the growth of immigration from abroad into the city of Ljubljana and its urban region. Over a longer period there is also, similar to the situation for Slovenia as a whole, a positive natural increase in the population. Based on the data we can conclude that in the period after 1991 there is a simultaneous process of deconcentration of the population within the urban region in the form of suburbanization, and a continuation of population immigration from abroad to the city of Ljubljana. Trends over the last three years indicate a strong increase in immigration into the Ljubljana urban region and renewed growth in the population within the Urban Municipality of Ljubljana.

Table 15: Total, natural, and migration increase in the population of the Urban Municipality of Ljubljana²⁵ between 1995 and 2007.

	Total increase	Total increase per 1000 inh.	Natural increase	Natural increase per 1000 inh.	Migration increase	Migration increase per 1000 inh.	Migration increase from abroad	Migration increase between municipalities
1995	-1175	-4,4	48	0,2	-1223	-4,5	0	-1223
1996	-1331	-4,9	-51	-0,2	-1280	-4,8	166	-1466
1997	-1653	-6,0	-38	-0,1	-1615	-5,8	72	-1687
1998	-1992	-7,3	-119	-0,4	-1873	-6,9	52	-1925
1999	-2085	-7,7	-287	-1,1	-1798	-6,6	135	-1933
2000	-1091	-4,0	30	0,1	-1121	-4,1	809	-1930
2001	-463	-1,7	-161	0,6	-302	-1,1	1113	-1415
2002	-1803	-6,7	-92	-0,3	-1711	-6,4	-91	-1620
2003	1665	-6,2	-230	-0,9	-1435	-5,4	-9	-1426
2004	-366	-1,4	-3	-0,0	-363	-1,4	982	-1345
2005	198	0,7	101	0,4	97	0,4	1610	-1513
2006	204	0,8	159	0,6	45	0,2	1479	-1434
2007	1783	6,6	394	1,5	1389	5,2	2656	-1267

Source: Statistical Office of the Republic of Slovenia.

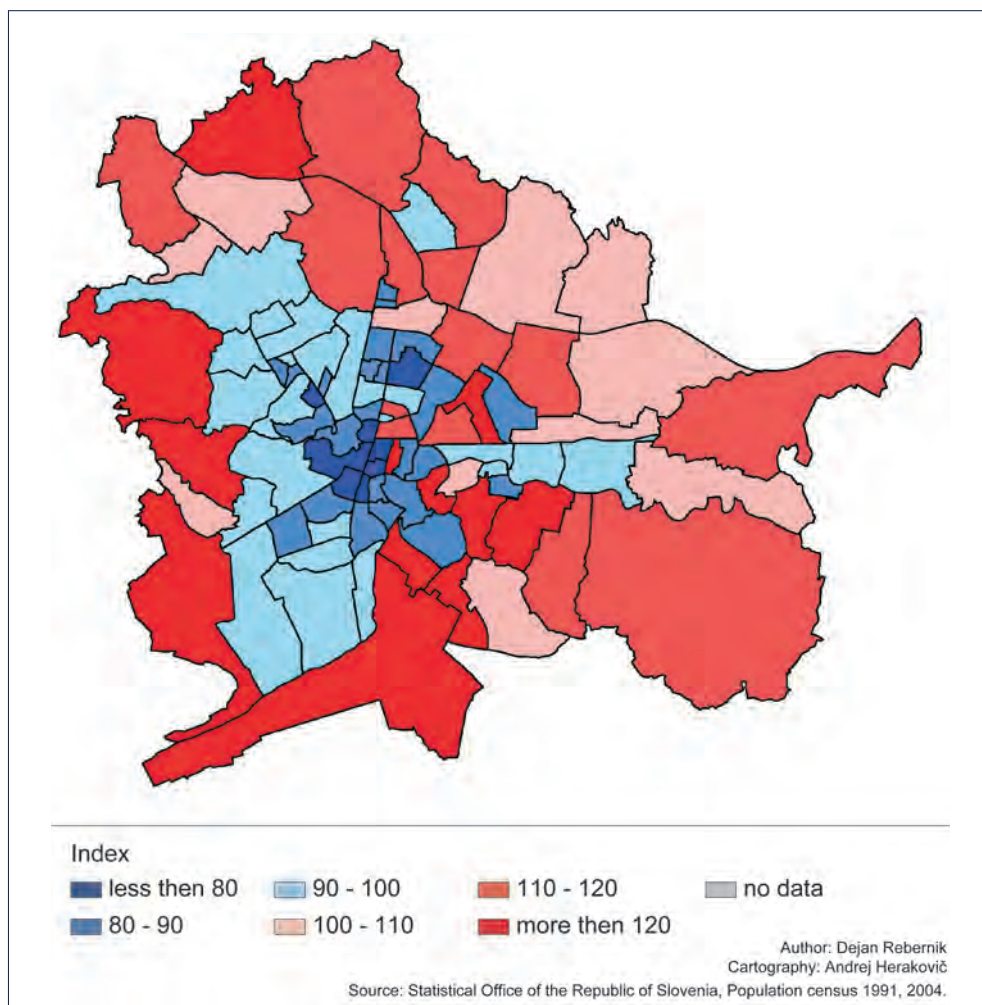
Migration within the city has had an important influence on changes in the number and structure of inhabitants in particular parts of the city. Compared to other European cities of comparable size, the migration mobility of the population within the city is relatively weak: in 1998 there were only 45 moves per 1000 inhabitants. Between 1995 and 1999 there were thus 31.770 moves recorded in Ljubljana (Dolenc, 2000). In the last decade, with the liberalization of the real estate market and renewed intensification of housing construction, we could observe a trend of increasing residential mobility of the urban population. Moves are most commonly connected with changes in the family situation of people, as for example marriage, births, deaths, or adult children leaving home. In this connection Ljubljana has shown a characteristic increase in the number of households despite a drop in the number of the population. Average household size thus fell from 2.71 members in 1991 to 2.59 members in 2002. This process has stimulated demand for housing, which despite the drop in population still remains quite strong.

Against the general decline or stagnation in population in the Urban Municipality of Ljubljana, there are large differences among individual parts of the city with respect to population development. Figure 25 shows the development in the number of inhabitants between 1991 and 2002 in the former local communities. A sharp drop in the number of inhabitants in the central part of the city and growth along the whole of the city edge can be observed. Strong decline in population numbers is characteristic in particular for most of the city centre and the older residential neighborhoods, especially in the apartment block neighborhoods that were built between the 1950s and 1980s. A high share of elderly population and households with an older middle generation of parents and "adult children" is characteristic for these parts of the city. Young adults are in the phase of creating their own families and looking for housing. When they move out

²⁵ The Urban Municipality of Ljubljana was established in 1995 after the reform of local self-management in Slovenia

from their parents' homes, the number of inhabitants in these parts of the city is reduced, but at the same time a great demand for housing is created despite the stagnation in the total number of people. Due to the shortage and high cost of housing, a large part of this population moves outside Ljubljana, most often into neighboring municipalities. On the other hand the population is growing in parts of the city with intensive housing construction, for example along most of the city's edge as well as in smaller sections in the central part of the city (Tabor, Poljane, Mostec, parts of Bežigrad). New construction and renovation of housing areas in the city centre and at its edge entered an upswing especially after 1995. Given the general shortage of building lots, the high demand for housing, and the high prices of real estate, housing construction in the central part of the city also attracted private investors. New apartments in prime locations attract residents with above average incomes, such that particular parts of Ljubljana as for instance Tabor, Poljane, parts of Old Ljubljana, and Zelena jama have experienced re-urbanization and gentrification.

Figure 25: Population development in Ljubljana between 1991 and 2002.



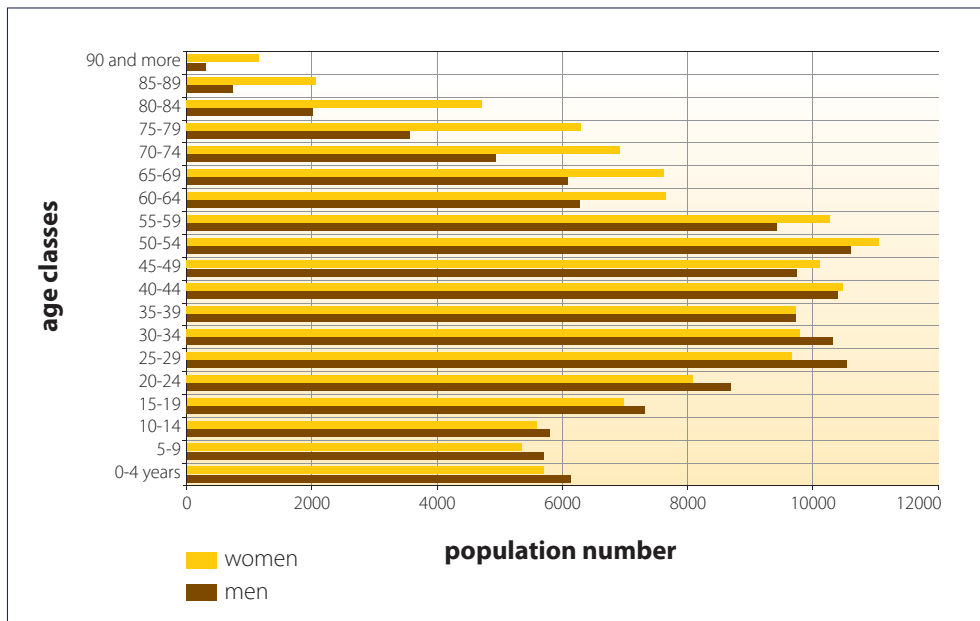
Source: 2002 Population Census, Statistical Office of the Republic of Slovenia.

7.3. Demographic characteristics and future population development of Ljubljana

One of the most important structures of the population for future demographic development as well as due to its social and economic significance is the age structure of the population. The age structure of the population is shown by the number or share of particular age groups, and is thus an indicator of the needs for public services, such as kindergartens, schools, retirement homes and health care as well as an indicator of the economic potential and human capital. The current age structure is the result of demographic development over a longer time period; it is a “mirror” of past demographic characteristics. The continued long-term development of the population is to a large degree determined by the age structure. The age structure of the population is thus the basis for making demographic projections. Below we analyze the basic demographic characteristics and future population development for the case of Ljubljana and the Ljubljana urban region based on the age structure of the population.

The age structure of the population of Ljubljana has a pronounced “lightbulb” shape, which is an indicator of an older demographic regime. Ljubljana does not differ significantly in its age structure from the majority of urban areas in central Europe. There is a high share of population in middle age, particularly age groups between 40 and 59, and a low share of children up to the age of 15, as confirmed by a high index of aging (135, compared to 116 in Slovenia as a whole). This situation is a consequence of the relatively high fertility and positive natural increase in the 1950s, 1960s, and 1970s (the so-called “baby boom” generation) and a sharp drop in fertility and consequently negative natural increase from the 1980s onward. A very low share of children is of course also a function of migration trends, particularly the emigration of the younger generation, who are starting families, to the other municipalities in the urban region. Due to a low number of women in their fertile years we can predict that the number of children born in the coming decades will be small or at any rate lower than today, even if there is a possible increase in fertility. On this basis we can expect a negative natural increase in Ljubljana in the next two decades. The only factor which can influence a higher number of births is a strong influx of members of the younger generation through immigration, who would start their families in Ljubljana. Based on the present-day age structure of the population we can thus with high certainty predict a further increase in the number and share of the middle-aged and especially the older generation, which will have a great influence on the social, economic, and spatial development of the city.

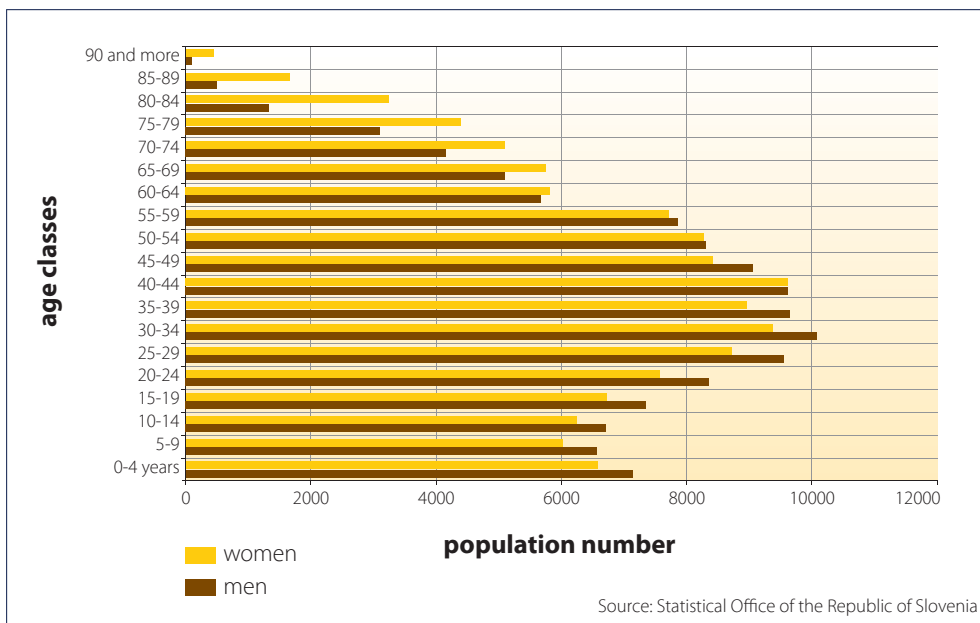
Figure 26: Age structure of the population in the Urban Municipality of Ljubljana, as of 30 June 2006.



Source: Statistical Office of the Republic of Slovenia.

The age structure of the population in the Ljubljana urban region is much more favorable than that of the Urban Municipality of Ljubljana. There is a noticeably higher share of the younger middle generation and children, i.e. young families with children, and a lower share of the elderly population. This is confirmed by a very low index of aging (70). This kind of age structure is a consequence of suburbanization and the migration of the younger population, particularly younger families with children, from Ljubljana to the outlying municipalities. Large differences in the age structure of the population between the city and its outskirts are a general feature of European urban regions. In the case of the Ljubljana urban region this represents a great challenge to spatial planning, especially for the suitable distribution of public services and jobs with respect to the numbers of people in particular age cohorts. Thus in many municipalities at the city outskirts there is a lack of places in kindergartens and primary schools while in Ljubljana school capacities are too large, even as vacancies in retirement and nursing homes are too few. The migration of the active working-age population to the edge of the urban region and a concomitant concentration of jobs in Ljubljana cause an intensification of commuting (Ravbar, 2002).

Figure 27: Age structure of the population in the Ljubljana urban region not including the Urban Municipality of Ljubljana, as of 30 June 2006.



Source: Statistical Office of the Republic of Slovenia.

7.4. Conclusions

Population development of Ljubljana during the period of classic urbanization, which is driven by rural-urban migration, up until the end of the 1980s was characterized by steady population growth. In the 1980s the city of Ljubljana experienced stagnation and later a drop in population as a result of suburbanization. The focal points for population concentration have shifted to the edge of the urban region, where the population is continuing to grow. Demographic development is marked by a gradual aging of the population. The demographic characteristics and processes noted have a great influence on the economic, social and spatial development of Ljubljana. In conclusion we would like to highlight the changed position and role of spatial planning in conditions of demographic regression or stagnation. New demographic conditions require new approaches in spatial and urban planning. Spatial planning to date has been based in particular on assumptions of constant population growth. In the case of demographic stagnation, which is also characteristic of Ljubljana, the basic guidelines for the continued spatial development of the city need to be set differently. A good example of this is the planning of areas of housing construction in Ljubljana. Despite the drop in the number of inhabitants, there is still high demand for housing in Ljubljana. The Urban Planning Institute has estimated the housing deficit in Ljubljana up until the year 2015 to be 15.000 apartments (Rebernik, 2007). Housing construction has again intensified after a cessation at the beginning of the 1990s, such that in recent years it has reached a level of about 1000 newly constructed apartments per year, but this is not sufficient to cover the deficit. Here the question arises as to why housing demand remains high even in

conditions of demographic contraction. Slovenian geographer Jakoš (Jakoš, 2006) notes the phenomenon of the “demographic housing deficit”, which he explains as a housing shortage which arises as a result of specific demographic characteristics and processes. The main factor behind housing demand is thus no longer population growth but rather the emergence of new households due to the younger generation moving out of the homes of middle-aged parents. Due to the specific age structure of the population this phenomenon in Ljubljana is especially intensive. At the same time there is a large imbalance between the existing structure and housing demand. The increase in the number of elderly people, who have specific residential and social needs, calls for new approaches and solutions (retirement and nursing homes, assisted living facilities, home care). All this places numerous new challenges before spatial planning.