

AGE-GENDER STRUCTURE OF CROATS IN VOJVODINA PROVINCE¹

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Abstract: The paper elaborates the age - gender structure of Croats in Vojvodina and gives insight how old is the Croatian population and does it in general older than population of Vojvodina. Particular attention was given to the period after the Second World War, e.g. on the second half of 20th and at the beginning of 21st century. The main task of the paper was the identification of tendencies in age structure of Croats. Statistical methods and mathematics proceeding are used to compare different parameters of age structure (e.g. middle age, index of ageing etc). The paper proves that Croats are one of the oldest ethnic groups among the population of Vojvodina province. The results of the study will enhance the knowledge about demographic characteristics of Croats in Vojvodina and therefore might be useful for further research in the field.

Key words: Age structure, Gender structure, Croats, Vojvodina

Introduction

The Serbia in terms of ethno-demographic processes is one of the most complex entities in Europe (Vojkovic, 2003, 28). The demographic and socio-cultural terms of Vojvodina is a unique multicultural, multiethnic and multi-area, not only in Serbia, state in which the part is located, but also in Europe (Stepanov, Lazar, 2002, 137). Croats are one of the 29 "national minorities" in Serbia. The concept of "national minority" has no internationally recognized definition. Accordingly, minorities are identified based on linguistic, ethnic, national and/or religious differences with the majority population (Sircelj, 2002, 10). Croats represent 0.9% of total population in Serbia (Republički zavod za statistiku, 2003a, 16). From 70.602 Croats in Serbia, 80.1% live in Vojvodina region, 14.7% in Belgrade and others (5.2%) inhabit the territory of Central Serbia. According to

census 2002, Croats had a portion of 2.8% in total population of Vojvodina region.

Age-gender structure of Croats in Vojvodina is elaborated in the paper. Special attention is given to the second half of the 20th and the beginning of the 21st century. The most Census data are acquired by the same statistical methodology. All numerical data relate to the Croats in Vojvodina, but official statistics founds two more ethnicity on the territory of Vojvodina which can be added to Croats. Those are Bunjevaz and Schokaz who often declared themselves as Croats during the history.

The literature about Croats in Vojvodina is very scarce. Information about Croats in Vojvodina can be found sporadically and in the texts about other national minorities, as additional information.

Croats in Vojvodina before the Constitution of Yugoslavia

In the list of taxpayers, there is some evidence about Croats on the territory of Vojvodina. There was a certain number in Srem. At the

¹Paper is a part of the project (Contract Project EVB. 146017D) "Demographic transitions in Serbia" financed by the Ministry of Science and Technological Development.

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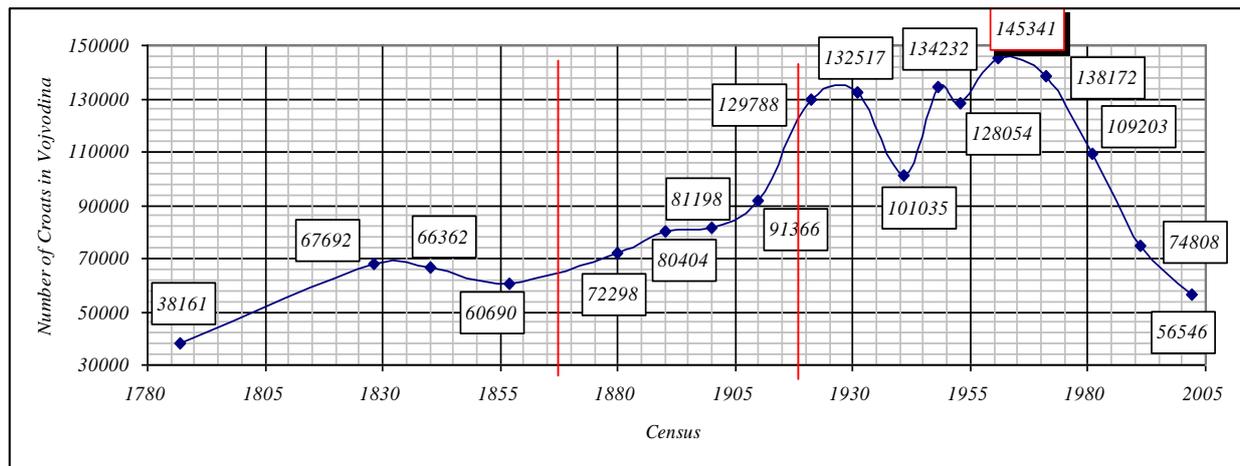


Figure 1. The number of Croats in Vojvodina, according Censuses between 1781-2002

end of 17th century, they came to Vojvodina along with Serbs and settled down in Hrtkovi and Nikinci. In 1720, a small ethnic group called “Bunjevci” occupied the north of the Backa region. Later, they started to declare themselves as Croats (Kicošev, Kovačević, 2004, 86). From 1711 to 1867, the number of Croats in Vojvodina was almost double (Figure 1). During the reign of Francis I, the main target of colonization was the scarcely inhabited Banat. In this period, the significant number of Hungarians, Slovaks, Romanians, Croats and Czechs settled here besides Germans. Croats were colonized in the central part of Banat, in the following settlements: Radojevo, Neuzina and Boka. During the Napoleonic Wars, the colonization organized by the government was halted. However, around 6000 German and Croatian refugees withdrew from French troops and fled to South Hungary (Kocsis, Kicošev, 2004).

Period of Austro-Hungarian domination was characterized by the enlargement of all ethnic groups, mostly because of the huge natural growth of the population (11-14‰) (Tomićet all 2004, 70-75). The natural assimilation also slightly contributed to the increase in the number of inhabitants declaring themselves as Hungarians. This could be observed mainly among German, Croat (Bunjevatz), Jewish, Serbian urban middle class population and Catholic Bulgarians in the Banat (Maletić, 1968). In the period between 1867 and 1918, the number of Croats in Vojvodina increased. Intensive

growth occurred just before the disintegration of the Monarchy. At the time of the 1910 Hungarian census, the large-scale immigration of Germans, Croats and Hungarians happened to be in the Srem sub region (Kocsis, Kicošev, 2004, 1 and 2).

The Number of Croats in Vojvodina after the Constitution of Yugoslavia

Yugoslavia was constituted at the end of the World War I (1914-1918). The consequences of the World War I can be divided in two groups. The first group includes the consequences of the war itself, such as the physical loss (people who lost their lives in battles or died of epidemics) and the demographic loss (the negative natural growth of population). The second group includes the consequences caused by the end of the war and the change of the government (emigration of certain ethnic groups, changes in ethnic declaring, etc). The extreme growth was registered in the Croatian ethnic group, caused by the decision of the Bunjevci to declare themselves as Croats (Tomićet all, 2004, 73).

The first census of the country of South Slav nations, in 1921, shows that it was about hundred and thirty thousands Croats in Vojvodina Region. According to the Census in 1931, the number of Croats in Vojvodina increased for 2%.

According to calculations, Kocsis and Kicošev (2004) noticed the following fact.

Between 1918 and 1931, 3000 optant Bunjevatzes were settled besides local Slavs on the land of 468.989 cadastral acres on the present territory of Vojvodina, in the Hungarian ethnic space, mainly about 50 km from the border. As a result, the number of settlements with Croatian ethnic dominance increased from 20 to 22.

Census 1941 wasn't organized on the state level, because of the Second World War. According to data of Hungarian census, which was conducted between 11th and 25th November 1941, compared to the Census 1931, the number of Croats has decreased for more than $\frac{1}{4}$ (23.8%). The period between 1941 and 1944 was very turbulent. Independent State of Croatia was declared in Zagreb on 10th April. According to the resolution of the Vienna Conference, Srem, the southwest part of Vojvodina, was given to the Independent State of Croatia (Mirnić, 1947). That fact had had small influence to the number of Croats in Vojvodina.

The consequences of the World War II had negative influence for the ethnic structure of Vojvodina. The scopes of war losses were exceeded by the results of migrations. Between September 1945 and July 1947, all Germans from Vojvodina and Yugoslavia were expelled and the Yugoslav population was colonized on their settlements. Of the total of these 225.696 colonists, there were 7134 Croats (3.2%) (Gaćeša, 1984, 404).

The next census was organized in 1948 and it showed that in Vojvodina province 134.232 Croats was registered (table 1). It was only 1.3% more than 1931. During the postwar period, until the middle of 60s, there was the expansion of all ethnic communities because of the high rate of natural growth of population. The greatest number of Croats was registered in 1961.

However, during the last four decades, the rate of natural population growth was significantly lower, which caused the decreasing of the majority of ethnic groups in Vojvodina, such as Croats (Tomićet all, 2004, 73). Since the end of the 1940s, social and special mobility increased in Vojvodina as well, within the framework of building the Yugoslavian communist society. Economic development based on heavy industry

attracted several hundred thousand village dwellers into the towns, causing deagrarization and urbanization. This caused a gradual breaking up of traditional rural society and ethnic rural communities. In urban environment, the intense ethnic combining and mixed marriages of the rapidly growing new urban population, with different lingual and religious backgrounds, intensified natural linguistic assimilation and vanishing of ethnic identity, as well. This trend was intensive from the '70s, reflected by the rapid growth in the proportion of those who could not or did not want to define their ethnic affiliation. The great majority of this population identified themselves only as „Yugoslav“. In 1981, „Yugoslav“ population, both in absolute and relative terms, reached the greatest share in the bigger towns (Novi Sad, Subotica, Zrenjanin, Sombor, Pančevo) with vast attraction zones and extremely mixed ethnic hinterlands.

Between 1948 and 1991 the population of Croats in Vojvodina, who were especially struck by the increasing loss of their ethnic identity, i.e. who got „Yugoslavized“ and tempted by the attracting „guest work“ opportunities in the West. The number of settlements with Croatian majority in Vojvodina decreased from 19 to 17 between 1948 and 1991 (Kocsis, Kicošev, 2004).

The Number of Croats in Vojvodina after the Constitution of Republic of Croatia

Since the disintegration of Yugoslavia in 1991, there have been three wars in the “former” Yugoslavia, taking place in Slovenia, Croatia, and Bosnia-Herzegovina; with further conflicts situated within each of these conflicts (Hudson, 1999, 71). The beginning of the '90s introduced new, significant changes in the ethnic structure of Vojvodina. Croatia was internationally recognized on 15 January 1992. The aroused nationalism in the republics of the former SFR Yugoslavia, led to the emigration of some ethnic groups into their original republics. For example, according to Croatian Central Bureau of Statistics in 2001, Serbs represented 4.5% of Croatia's population.

Table 1. Changes in the number of Croats in Vojvodina 1921-2002

Census	Number of Croats	Males (In %)	Females (In %)	Share in population of Vojvodina	Index increase (base year 1961)	Chain index
1921	129788	No data	No data	8,5	100,0	-
1931	132517	No data	No data	8,2	102,1	102,1
1941	101035	No data	No data	6,1	77,8	76,2
1948	134232	No data	No data	8,1	103,4	132,9
1953	128054	No data	No data	7,5	98,7	95,4
1961	145341	46,9	53,1	7,8	112,0	113,5
1971	138561	46,5	53,5	7,1	106,8	95,3
1981	109203	46,5	53,5	5,4	84,1	78,8
1991	74808	46,1	53,9	3,7	57,6	68,5
2002	56546	43,4	56,6	2,8	43,6	75,6

Source: Kocsis, 2007, 47, Kocsis, Kicošev, 2004, Knežević, 2005, 104-105, Republički zavod za statistiku, 2003, 15, author calculations

The drop in the size of Serbs in comparison with the 1991 census was for 65% (Tatalovic, 2006, 47-48). In Vojvodina, it was most strikingly obvious when the Croats started to leave or to declare themselves again as Bunjevci and Shokci (Kicošev, Kovačević, 2004, 90). However, their emigration was caused not only by political (refusal of mobilization, feeling of uncertainty, etc), but also by economical reasons: bad life conditions caused by economic sanctions against FR Yugoslavia (Tomić et al, 2004, 75). Stepanov and Lazar (2002, 137) indicates that the primitive state centralization, unreasonable policies with the international community act of defiance, war conflicts with the republics of former Yugoslavia, and finally with NATO, the isolation of the state, criminalization of society and the drastic impoverishment of the population, followed by continuous violations of human and minority rights, put it in a very difficult position most of Serbia's citizens, especially members of national minorities.

Between 1991 and 1996, almost one quarter of a million of Serbs came into Vojvodina, which has significantly changed the ethnic structure of the region. The emigration of one part of national minorities has additionally intensified this process. In certain settlements, the immigration of refugees has lead to the change of ethnic

structure, but this was mostly the consequence of property exchange. Such exchanges were characteristic for several settlements in Srem, in which Croats used to be a majority (Kicošev, 1999).

In 2002, the number of Croats, Bunjevatzes and Shokatzes together, often mentioned in the same category because of their common Roman Catholic religion, was 76.312 by ethnicity. However $\frac{3}{4}$ of them, declared themselves as Serbs, concerning their mother tongue, while the number of those claiming to be Croatians by their native language amounted only to 21.053. The number of ethnic Croats and Bunjevatzes dropped by almost 22.000 (22.2%), compared to 1991 (Kocsis, Kicošev, 2004). This decrease could mostly be attributed to the fact that during the time of the war between Serbs and Croats, the majority of Croats from Srem emigrated or were expelled to Croatia. As a result of their moving away and the Serbs moving in, now Hrtkovci, Novi Slankamen, Kukujevci, Gibarac, Sot and Stara Bingula in Srem, can be considered as settlements of Serbian ethnic dominance. According to results of Census 2002, the Croats represented the majority in three municipalities (Subotica, Sombor and Apatin) e.i. in 9 villages in Bačka (Mala Bosna, Gonji Tavankut, Donji Tavankut, Bikovo, Đurđin, Stari Žednik, Bački Breg, Bački Monoštor and Sonta) (Figure 2).

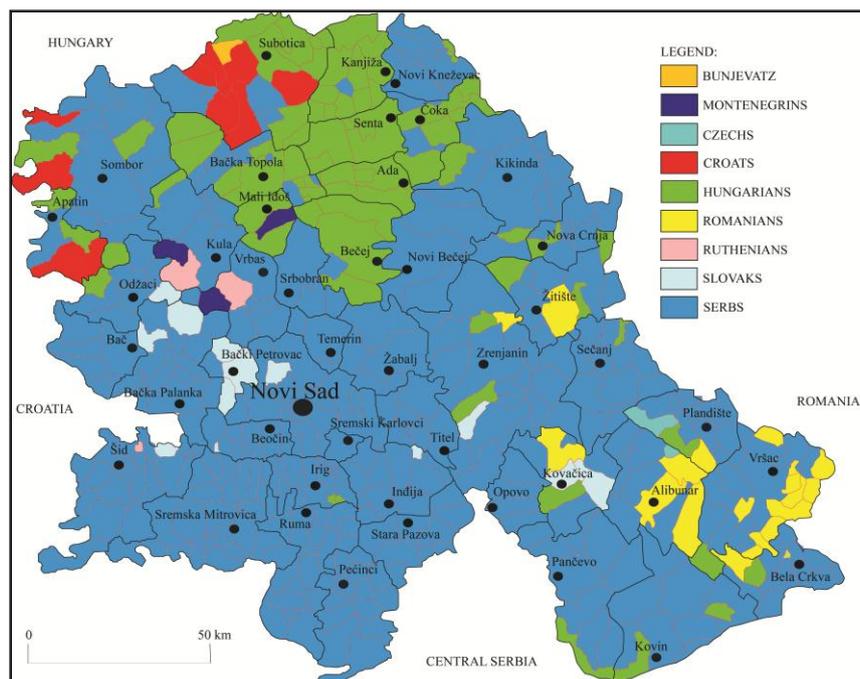


Figure 2. Settlements with Croats majority (red), according to Census 2002 (Author: Tamara Kovačević)

Source: Republički zavod za statistiku, 2003a

Age Structure

Population aging is an objective process, which is most generally characterized by a continuous increase in the elderly population and a simultaneous decrease in the young population. It has important demographic, economic and social effects. The demographic effect is a reduced reproductive capacity of the population, for an ever-smaller number of young people reach reproductive age and an ever-smaller number of children are born (Hristov, 2004, 119). In other words, rising life expectancy and low fertility rates are radically transforming Europe's demographic profile (Murray, 2008, 31), (Nordheim, 2003, 11), (Nancu, Guran-Nica, Persu, 2010, 34), (Weil, 2006), (Kinsella, Phillips, 2005, 14). The same process was also present among the population of Serbia. The economic effects are also adverse, since the labor force declines and the number of senior citizens, who depend on the rest of the population to varying degrees, goes up. Parallel with the economic consequences there are also numerous social effects, which influence the overall life of society (Hristov, 2004, 119).

From the middle of 20th century to the begging of 21st century, the share of young

people of Croats in Vojvodina was declined more than 2 times (from 25.7 in 1961 to 10.8 % in 2002). It means that in 1961, every fourth Croat in Vojvodina was young. In 2002, every 10th Croat was 0-14 years old.

In the first three respected censuses, 1961, 1971 and 1981, more than half of the population (51.9-54.6 %) of Croats in Vojvodina belongs to the biggest population category (15-49). That share start to decline in 1991, because the oldest category of population, which is more than 50 years old, continuously grew. In 2002, the age category 15-49 and the oldest category of population of Croats in Vojvodina had the same share (44.6 %) in total population (table 2). In 2002, the value for the age category between 15 and 49 was smaller than average of total population of Vojvodina, but for the age category above 50 +, it was higher.

Demographic ageing is inevitable, but future changes in labor force and population at working age are not only determined by population dynamics. This gives societies a variety of policy options including rising retirement age, higher labor force (for population age 15-65) participation of women and a pro-active recruitment of migrant labor and skills (Muenz, 2007, 13).

Table 2. Age structure of population of Vojvodina and Croats (in %),
According to Censuses 1961-2002

Age structure of population of Vojvodina	Census				
	1961.	1971.	1981.	1991.	2002.
0-14	26,6	21,2	19,9	19,2	15,9
15-49	50,2	54,6	51,4	48,5	49,4
50+	23,1	24,1	28,7	32,3	34,8
Sum	100,0	100,0	100,0	100,0	100,0
60+	11,9	14,8	15,2	18,7	21,9
Age category of Croats	Census				
	1961.	1971.	1981.	1991.	2002.
0-14	25,7	20,4	16,7	14,2	10,8
15-49	51,9	54,6	52,7	46,9	44,6
50+	22,4	25,1	30,5	38,9	44,6
Sum	100,0	100,0	100,0	100,0	100,0
60+	11,0	15,2	15,9	21,5	29,8

Source: Republički zavod za statistiku, 2003, Savezni zavod za statistiku, 1970, Savezni zavod za statistiku, 1974, Pokrajinski zavod za statistiku, 1982, Savezni zavod za statistiku, 1993

The percentage of the aged people (more than 60 years) in populations is in progress. In 1999, in Western Europe proportion was 18.6%, in North America 16%, in Croatia this percentage was 19%. Croatian population reacts to economic and socio-cultural pressures by changing migration and mobility patterns. In the same time, during last thirty years there has been an increase in life expectancy of elderly population (Jovanovic, 1999, 106).

Rozga (2003, 13) has found that in 1991, the share of elderly (aged 60 and over) was 17.5 percent. He said that Croatia's population is marked by very accelerated aging and a very high degree of old age. Comparing with Croatia's population. Croats in Vojvodina had larger share of the oldest people (aged 60 and over) (21.5%).

Stages of demographic age not only reflect the level of aging, but "an instrument for understanding the demographic history and demographic forecast of the future" (Penev, 1995, 155). According to typology of Sundbarg, in 1961 and 1971, the population of Vojvodina had stationary type of age structure (Đurđev, 1996, 39). After that, from Census 1981 to 2002, its age structure becomes regressive (Kovačević et al, 2008, 134). In the time of Census 1961, Croats in Vojvodina have been very close to stationary type of age structure. From Census 1971, they belong to regressive age structure. Typology of Sundbarg

appeared at the beginning of 20th century and has only three types. Therefore, it is reasonable why it cannot illustrate all changes in the age structure of particular population (Petrović et al, 1981).

Rosset's model was based on the share of inhabitants, which are older than 60 in total populations (Kovačević et al, 2006, 48). In 1961, population of Vojvodina and Croats in Vojvodina has less than 12% of population, which has more than 60 years old (table 2). According to this

model, they belong to the type „in process of ageing“, as defined by Rosset (1968, 60-61). From census 1971, both populations got more than 12%, which is older than 60 years, which means that they changed the type of Rosset model and belongs to the type called "demographic old age". The differences between population of Vojvodina and Croats in Vojvodina are evident. Aging process of Croats in Vojvodina is faster in comparison with the population of Vojvodina (Kicošev, Golubović, 2004, 167-184).

Proves of the previous facts can be found in the typology of Friganović (1978, 111), concerning the analysis of the youngest category (0-19). According to the result of Census 1961, Croats in Vojvodina were on the level of "age". Other Censuses have remarked that Croats in Vojvodina are situated on the level of "deep age".

Different typologies have found the same situation and they named it with the similar terminology. The common conclusion is that Croats in Vojvodina, according the Censuses, have become older and older.

According to Ministry of Human Rights and Rights of Minorities in Serbia and Montenegro (2004, 455-456) and the Census 2002, Croats in Serbia were older compared to Croats in Vojvodina. In the youngest age category (0-14), they had only 9.0% of population.

Age-gender Pyramids

When age groups are put in to the graph, we usually get the age pyramid, as the most descriptive way for analysis of age structure. The population pyramid is a visually striking representation of the age and sex structure of a population. To make up a pyramid, a population is classified into age groups (cohorts) and by gender (male/female). The actual number of people, or sometimes the percentage of a population that falls into each of these age categories, is then graphed. The percentage of males in specific age groups is shown on the left and the percentage of females on the right. The general shape of the graph indicates the relative growth of the population. Age-gender pyramids graphically display this information to improve understanding and make the comparison easier. Age-gender pyramids display the percentage of a population broken down by gender and age. According to that fact, comparisons between them are allowed (Breznik, 1980), (McManus, 2007, 50). The five-year age increments on the y-axis, allow the pyramid to vividly reflect long term trends in the birth and death rates, but also reflect shorter term baby-booms, wars and epidemics.

Relative slow-down in the numerical growth of younger population is usually the result of decreases in fertility levels and birth rates; this form of ageing is known as "ageing at the bottom of the age pyramid". An acceleration of growth of the elderly is generally a consequence of more rapid decline in mortality rates in older than younger ages; such ageing is called "ageing at the top of the age pyramid". These forms do not usually appear in the historical evolution of individual populations at the same time and they carry different social and economic implications (Avramov, Maskova, 2003, 30).

The major drivers of the aging of the population are the declining birth rate, the large emigration and the changes in the mortality by age. The sliding birth rate leads to a decline in the number of children and of their relative share of the population, which is known in demography as aging at the base of the age pyramid, because its base is

narrowing. Apart from this, another well-known phenomenon is also aging at the top of the age pyramid, owing to increases in the number and relative shares of the population at mature and higher ages. These increases are also due to the long-term decline in the birth rate, as well as to a second factor: considerable emigration predominantly amongst the young and active population (Hristov, 2004, 119)

Analysis of age pyramids of Croats in Vojvodina was gotten following facts. The pyramid of 1961 has already got stationary type (Figure 3). The biggest population groups of Croats in Vojvodina were between 25-34 years old. They were born in the period between two World Wars. In the second group were their children, e.i. age group, which were born after the Second World War. This age group was smaller then the previous. There are few explanations for this phenomenon, such as that families with numerous children wasn't in fashion any more and that mixed marriages were popular (Kovačević et al, 2008, 136). From census 1961, the category "Yugoslav" was given as a possibility of declaration, which made some Croats from mixed marriages to declare their children as Yugoslavs. Moreover, anomaly in the pyramid was perceived in population group, which was born during the First and Second World War.

From the gender aspect, male population groups, in comparison with females, were numerous in the three young age groups (0-9, 15-19). Females of Croats in Vojvodina were often born in the period between two World Wars. The biggest difference between the number of males and females has existed in the oldest age category (65+) (Figure 3). Between all categories, the share of females is dominant in the categories, which are elder than 35-39, except for the category 55-59. Since women live longer than men do, they have domination in the oldest age groups.

Under the conditions of a primarily agrarian socioeconomic structure, natural/geographic and pure demographic factors played the principal role, while during the phase of industrialization and urbanization, economic and social factors assumed the greatest importance (Breznik 1982).

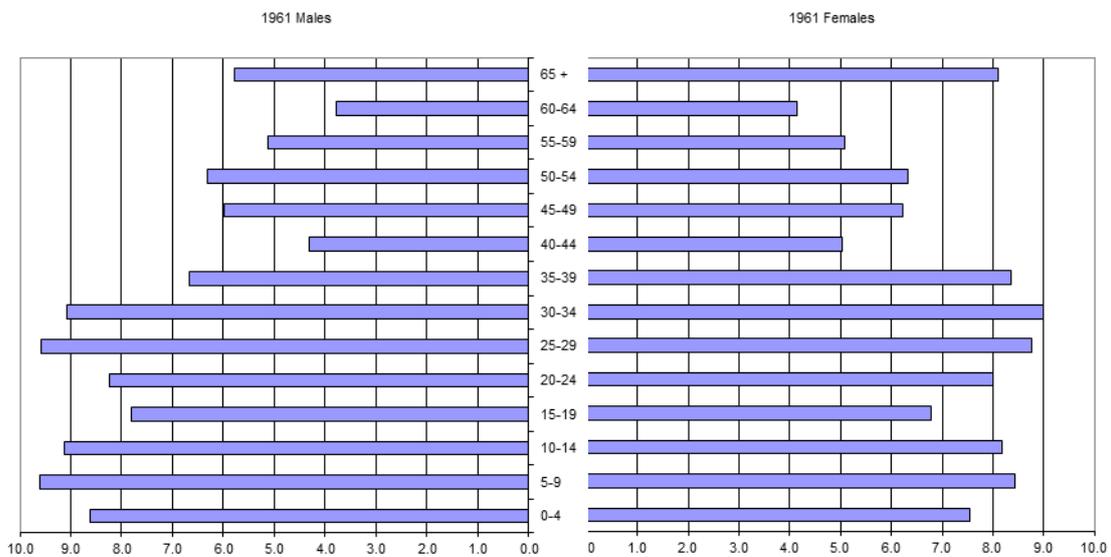


Figure 3. The Age Structure of Croats in Vojvodina (in %), According to Census 1961

Source: Savezni zavod za statistiku, 1970, author calculations

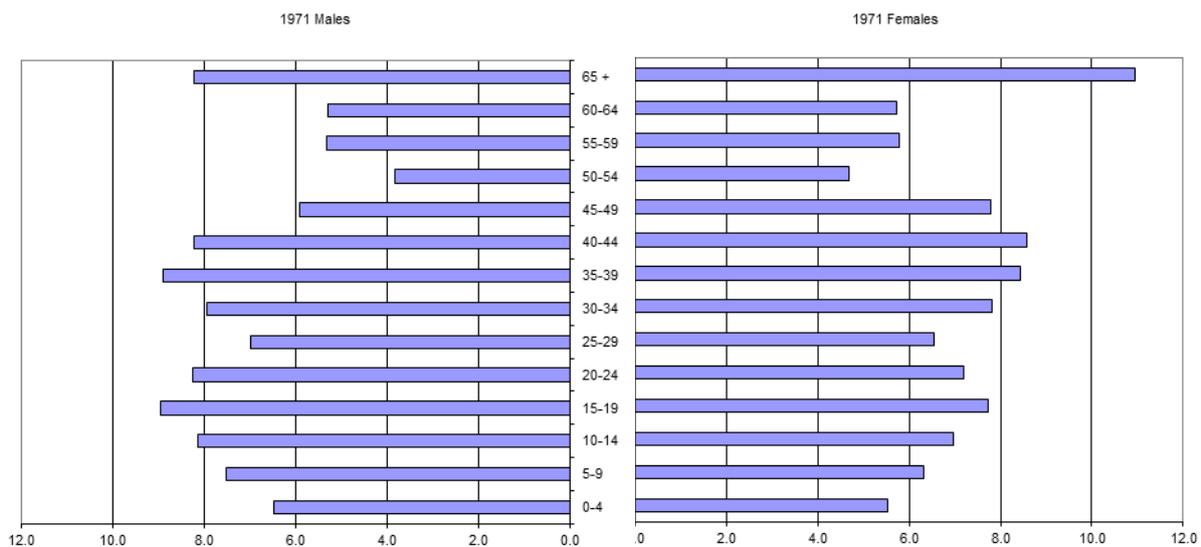


Figure 4. The Age Structure of Croats in Vojvodina (in %), According to Census 1971

Source: Savezni zavod za statistiku, 1974, author calculations

In 1971, population became 10 years older than 1961, but relations between sizes of age categories in the pyramid of 1971 were changed partially (Figure 4). Age category 65+ has become the biggest. The most numerous generation and their children from 1961, are positioned on the second and third place. From the age categories of 15-19, every following single younger category was smaller. Pyramid has started to transform in regressive form. Because of smaller number of children, basis of the pyramid was reduced. Small basis of the pyramid means that population may

fell, i.e. to lost the future of their existence (Figure 4). In absolute values, males Croats in Vojvodina compared to females were dominant in the four youngest age categories. However, their shares in total number of every age category are bigger in the youngest half of the pyramid, i.e. from age category 0-4 to 35-39. In the nature, i.e. in the states with most number of inhabitants as China and India, on each 100 female babies, 107 male babies were born (United Nations, 2007). That can be explanation for the greater number of males among the youths of Croats in Vojvodina.

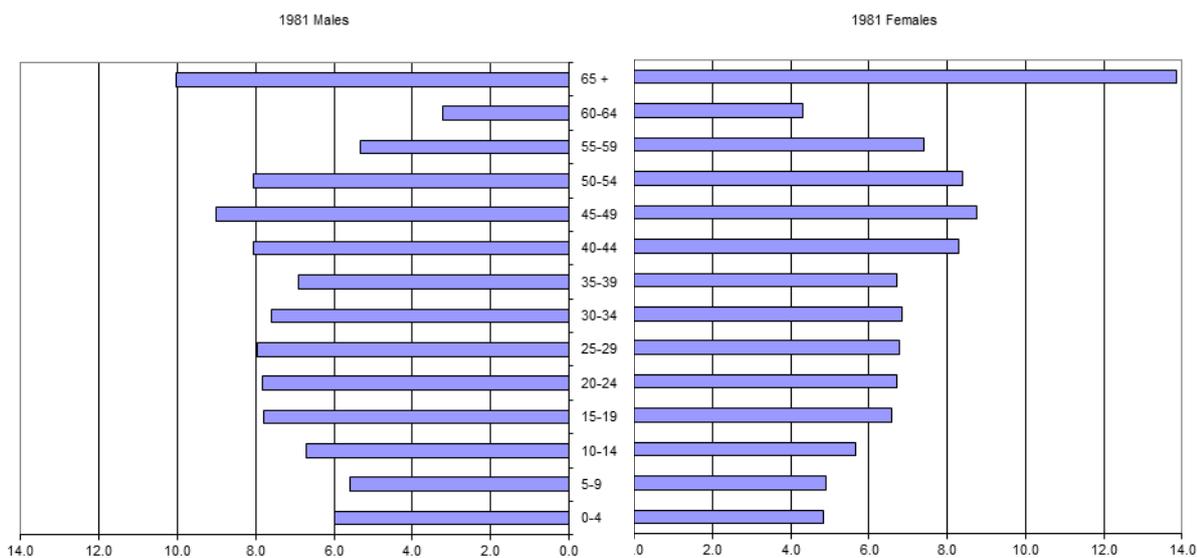


Figure 5. The Age Structure of Croats in Vojvodina (in %), According to Census 1981
 Source: Pokrajinski zavod za statistiku, 1982, author calculations

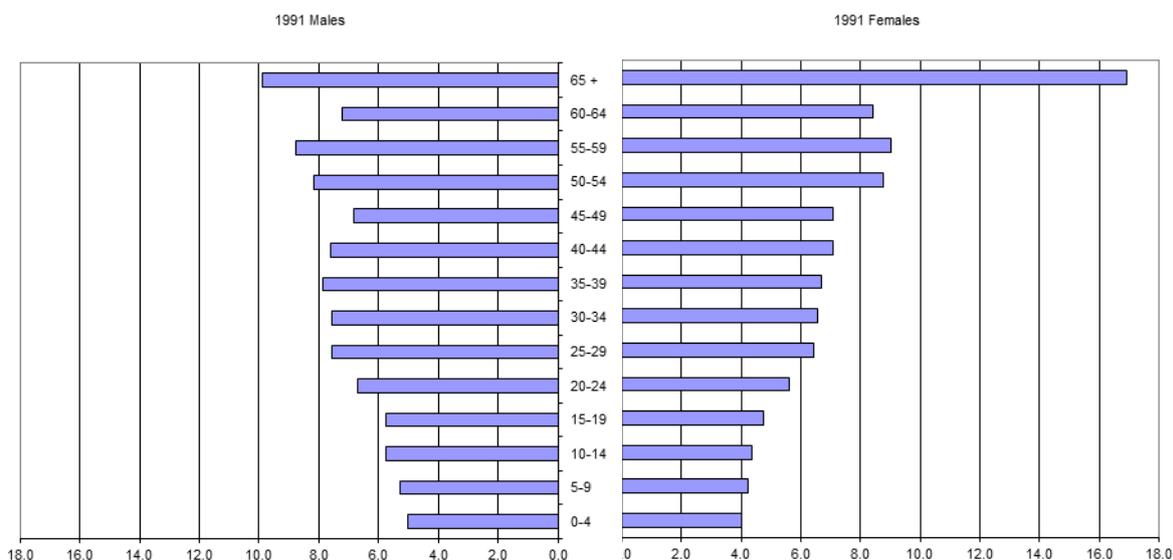


Figure 6. The Age Structure of Croats in Vojvodina (% of both sex total populations), According to Census 1991
 Source: Savezni zavod za statistiku, 1993, author calculations

According to the Census of 1981, the number of Croats decreased more than 1.3 times compared to 1961. The oldest age category (65+) was dominant in the age pyramid (12.1%). The shares of other age categories do not exceed 9% (Figure 5). Population, which was born in the second half of the '30s, is numerous. They are between 45-49 years old and are not any more in the reproduction period. Shares of age categories from 10-14 to 55-59 were bigger than 6%. Only the youngest age categories had about 5%. The smallest portion, 3.8%, belongs to the generation which was born in the First World War. In 1981, they were

between 60-64 years old. Males were dominant in the six youngest age groups (Figure 5). Because of hard work and an unhealthy way of life, males generally live shorter than females (Kovačević, Ivkov, Djurdjev, 2005, 53). A precise explanation of why women live longer than men still eludes scientists because it involves the complex interplay of biological, social, and behavioral conditions (Kinsella, Phillips, 2005, 24-25).

Census 1991 was the last one of the Socialist Federal Republic of Yugoslavia, a state which had incorporated the Republic of Croatia and Vojvodina Province. According to that

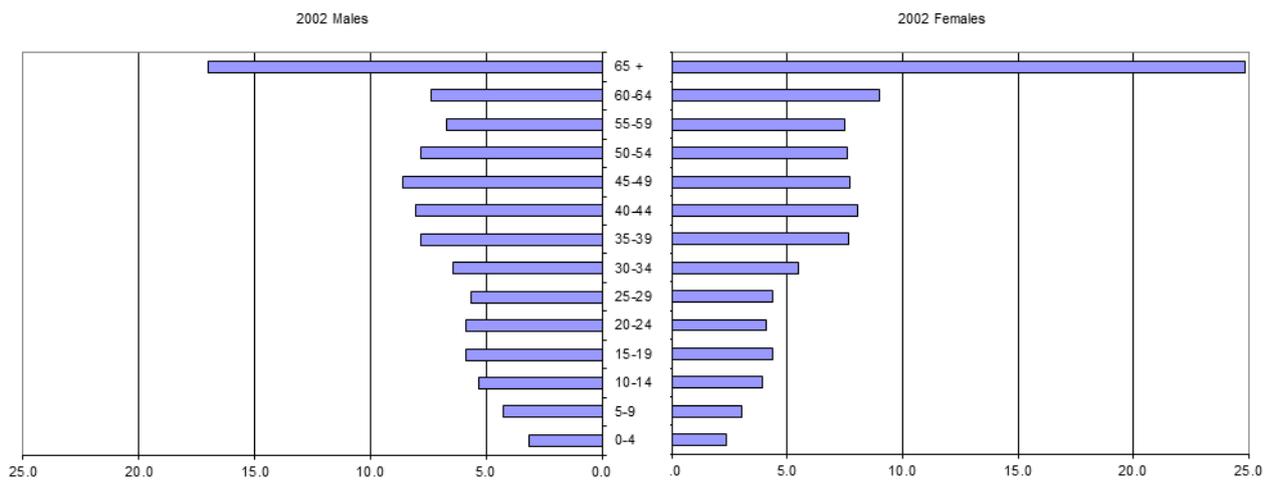


Figure 7. The Age Structure of Croats in Vojvodina (in %), According to Census 2002

Source: Republički zavod za statistiku, 2003, author calculations

census, shares of age categories, which were born after the Second World War, have shown certain regularity. Their portion in total population of Croats in Vojvodina became less and therefore the Pyramid got regressive form. Mrđen and Friganović (1998, 45) have analyzed the age structure of population in Croatia. They have also found declining of the ratio of young people and increase of the portion of old people. Share of females of Croats in Vojvodina was numerous compared to males in the five oldest age categories (Figure 6).

After the separation of Croatia, Socialist Federal Republic of Yugoslavia has started to disintegrate. For only five year, the territory of Yugoslavia was reduced more than 2.5 times. Vojvodina, as a Province of Serbia, was influenced by different internal and external factors. Between the censuses 1991 and 2002, the political situation was instable (Kovačević, Kicošev, 2007). Civil wars were in the neighborhood region. Period of transition towards a market economy led to a deep economic crisis characterized by high unemployment and inflation, a deterioration of health and social services and a fall in living standards (Sardon, 2001, 50-51). Consequently, economic crisis and embargo has a negative influence on the quality of life of population. Many people abandoned Vojvodina (Kovačević, Kicošev, 2007).

According to the terminology of the last Census, Croats has transformed from ethnic group of Yugoslav people into the national

minority. The census 2002, showed that the share of age category 65+ was dominant (21.5 %), compared to other age categories of Croats in Vojvodina. More than 1/5 of Croats in Vojvodina were older than 65 years. It was 1.4 higher values than the same age category in the population of Croatia, according to the Census 2001 (Podgorelec, Klempić, 2007, 111). Age pyramid of Croats in Vojvodina became slimmer than in 1991 (Figure 7). Share in every age category was reduced. It could be the consequence of mixed marriages, but also the consequence of moving some Croats, especially from reproductive age categories, abroad. Some Croat families have exchanged their houses in Serbia with Serb families in Croatia, keeping their properties.

Women constitute a majority of the older population and their majority increases with age (Kinsella, Phillips, 2005, 23). According census 2002, share of females of Croats in Vojvodina was numerous, in comparison with males, only in three oldest age categories.

Average Age

In 1995, Penev gave parameters for seven different stages of age (Vojković, Devedžić, 1997, 33-41), according to which Croats in Vojvodina were passing though three stage of age, during the second half of the 20th century. In 1961, they were in the threshold of demographic ageing. Average age from

Table 3. Stages of demographic age and criteria for their identification

Stages	Average age	Index of ageing
1. Early demographic youth	< 20 years	< 0,07
2. Demographic youth	20-25	0,07-0,14
3. Demographic maturation	25-30	0,14-0,28
4. Threshold of demographic ageing	30-35	0,28-0,50
5. Demographic ageing	35-40	0,50-0,83
6. Deep demographic ageing	40-43	0,83-1,25
7. Deepest demographic ageing	43+	1,25+

Source: Penev, 1995, 117-145

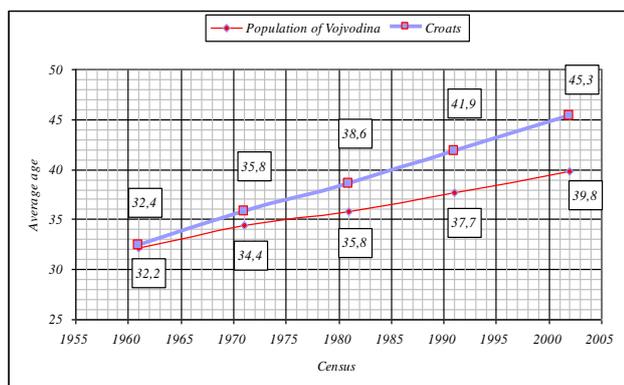


Figure 8. The Average age of Croats in Vojvodina,

According to Censuses 1961-2002

Source: Republički zavod za statistiku, 2003, Savezni zavod za statistiku, 1970, Savezni zavod za statistiku, 1974, Pokrajinski zavod za statistiku, 1982, Savezni zavod za statistiku, 1993, author calculations

Censuses 1971 and 1981 shows, that Croats in Vojvodina were in demographic ageing (table 3 and 4). From Census 1991 to Census 2002, Croats in Vojvodina are in the deepest ageing.

In Croatia, at the county level, there is relative uniformity in the both the age structure and aging of the population. As many as 18 of 21 counties, according census 2001, can be designated as experiencing deep demographic aging (Nejašmić, Njegač, 2001, 1).

Average ages in both cases (in the case of Vojvodina population and in the case of Croats in Vojvodina) are uprising. From 1961, Croats in Vojvodina had higher values of average age compared to population of Vojvodina. In every following Census, the differences were more obvious. Distinction in

average age among Croats in Vojvodina and population of Vojvodina was 0.2 years in 1961 and 5.5 in Census 2002 (Figure 8). According to Penev (1995) and to data from last Census, the population of Vojvodina is on the threshold of the last stage and the demographic situation is very serious.

Average age of Croats in Serbia, according to the Census 2002, is 2 years higher (47.5) in comparison with Croats in Vojvodina (Ministrastvo za ljudska i manjiska prava Srbije i Crne Gore, 2004, 455-456).

The study of average age of population is very important because of reproduction ability of this category. It is known that female reproductive period ending at 45. From the beginning of 21st century, an average age of Croat female in Vojvodina was exceeded reproduction ability. Number of Croats in Vojvodina couldn't grow any more by natural reproduction (table 4). According to Census 2002, average age of females of population of Vojvodina has just approached to 4th decade. Population politics must find a solution very quickly for the rest of the population in Vojvodina in general.

Median Age

Median age is a useful and very often used parameter when it compared with an average age. Therefore, extreme values of the five-year age groups don't make influence on the average age (Đurđev, 1996, 41). From 1961 to 2002, median age of Croats in Vojvodina constantly increased. Compare to Vojvodina population, median age of Croats in Vojvodina increase faster. From 1961 to 2002, median age of population of Vojvodina increased for 10.3 year. In the same period, median age of Croats in Vojvodina increased for 16.2 years (table 5).

The population of Croats in Vojvodina is older than Yugoslavs in Vojvodina, but they are younger compared to Slovenians in Vojvodina. In 2002, median age of Yugoslavs in Vojvodina have the similar value as the median age of Croats in Vojvodina which was calculated in 1971 (Kovačević et al, 2006, 50). However, in 2002, median age of Croats in Vojvodina have not achieved the age of

Table 4. The Average age of Croats in Vojvodina, According to Censuses 1961-2002

Census		1961	1971	1981	1991	2002
Sum	Population of Vojvodina	32,2	34,4	35,8	37,7	39,8
	Croats in Vojvodina	32,4	35,8	38,6	41,9	45,3
M	Population of Vojvodina	31,2	35,4	34,9	39,0	38,3
	Croats in Vojvodina	31,2	34,1	36,6	39,3	42,3
F	Population of Vojvodina	33,2	33,3	37,4	36,3	41,3
	Croats in Vojvodina	33,6	37,2	40,3	44,1	47,5

Source: Republički zavod za statistiku, 2003, Savezni zavod za statistiku, 1970, Savezni zavod za statistiku, 1974, Pokrajinski zavod za statistiku, 1982, Savezni zavod za statistiku, 1993, author calculations

Table 5. Median age of Croats in Vojvodina, according to censuses 1961-2002

Census	1961	1971	1981	1991	2002
Population of Vojvodina					
Summ	30,0	33,5	34,6	37,4	40,3
M	28,9	32,1	33,2	36,0	38,6
F	31,2	34,8	36,4	38,8	42,0
Croats in Vojvodina					
Summ	30,5	35,1	38,0	42,2	46,7
M	29,0	32,6	35,4	39,2	43,6
F	31,3	36,2	40,7	45,2	49,2

Source: Republički zavod za statistiku, 2003, Savezni zavod za statistiku, 1970, Savezni zavod za statistiku, 1974, Pokrajinski zavod za statistiku, 1982, Savezni zavod za statistiku, 1993, author calculations

Slovenians in Vojvodina, which was calculated in 1991 (Kovačević et al, 2008, 140).

In 1961, Croatia's population (32.0) was for 1.5 year older than Croats in Vojvodina. Only thirty years later Croats in Vojvodina become older than Croatia's population (37.1) for 5.1 year. Age gap between these

populations has increased in 2002 on 7.1 year (39.6) (Hristov, 2004, 120).

In 1960, during the unfolding of the baby boom, the median age of all 25 countries that now belong to the European Union was 32 years. For Europe, the demographic process analyzed here can be characterized as a gradual shift from a society with quantitatively dominant younger cohorts to a society in which the elderly form a solid majority. This is best reflected when looking at the median age. In 2005 this median age of EU25 was 38.5 (Muenz, 2007, 5). According the fact, only fifteen years ago, Croats in Vojvodina were younger than majority of Europe. On the beginning of the 21st century, they are for 8.2 years older. The median age of country populations will increase everywhere (Kinsella, Phillips, 2005, 8).

In observed period, median age of females of Croats in Vojvodina is higher compared to males (Figure 9). Explanation might be the fact that women are numerous because they live longer (Kinsella, Phillips, 2005, 25).

The Old Age Index

If the old age index is less than 0.40, the population is young. If the value is above this number, then the population indicates aging (Rančić, 1980, 190). If it is over 1.00, old population has overbalanced the number and portion of young population. This indicates the adverse relation on age structure and it has negative consequences on its reproductive and active potential (Živić, Pokos, 2005, 211). According to Census 1961, population of Vojvodina and Croats in Vojvodina were still young. The limit of 0.40 has already been overcome in 1971 (table 6). However, in both cases, the old age index has grown slowly. In 1971, the old age of Croats in Vojvodina had similar value of old age index (0.53), as population of Vojvodina in census 1981 (0.57). From 1961 to 2002, the old age index of Croats in Vojvodina increased almost 5.7 times (Figure 10).

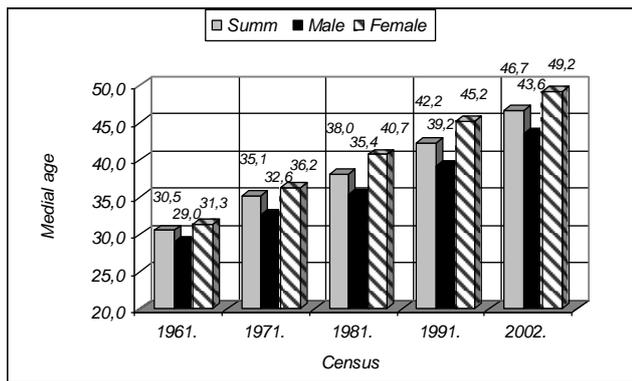


Figure 9. Median age of Croats in Vojvodina, according to censuses 1961-2002

Source: Republički zavod za statistiku, 2003, Savezni zavod za statistiku, 1970, Savezni zavod za statistiku, 1974, Pokrajinski zavod za statistiku, 1982, Savezni zavod za statistiku, 1993, author calculations

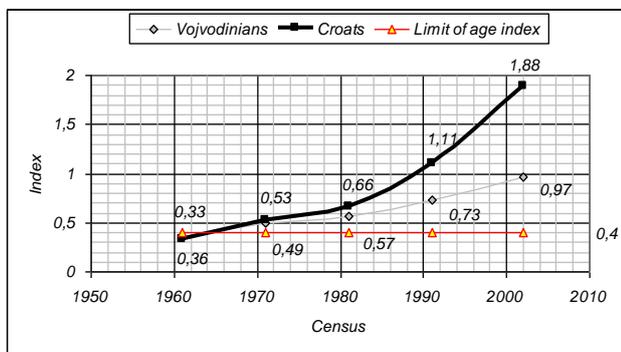


Figure 10. The Age indexes of Croats in Vojvodina, according censuses 1961-2002

Source: Republički zavod za statistiku, 2003, Savezni zavod za statistiku, 1970, Savezni zavod za statistiku, 1974, Pokrajinski zavod za statistiku, 1982, Savezni zavod za statistiku, 1993, author calculations

Comparing the values of old age index of Croatia's population and Croats in Vojvodina during the second half of 20th century, the following conclusions can be made. Firstly, in 1961, Croats in Vojvodina had smaller value of old age index. After that, Croats in Vojvodina has grown old faster. Their values of the old age index has even been very similar, but in different censuses. For example, in 1991, index of old age of population in Croatia (0.67) was similar to the index which was calculated for Croats in Vojvodina, according to the results of census 1981 (Živić, Pokos, Turk, 2005, 37), (Rozga, 2003, 13). On the beginning of the 21st century, it was two times higher than the old age index of population in Croatia (0.91) (Živić, Pokos, 2005, 211).

The old age index of Croats in Serbia, according to the Census 2002, is 1.3 times higher (2.47) compared to Croats in Vojvodina (Ministarstvo za ljudska i manjiska prava Srbije i Crne Gore, 2004, 455-456). The small number of Croats in Central Serbia, with high value of old age index announces their soon disappearance.

The research of Campbell (1971, 112) shows that the cadre of political activists came from all stages of the life cycle, but they are most frequent among the middle age categories. For conformation of this postulate it can be used the case of Croats in Vojvodina. Recently, when their age of index is double higher of the age index of the Provincial average, they have organized in six parties (http://en.wikipedia.org/wiki/Croats_of_Vojvodina#cite_ref-6). Even they represent 2.8% of total population, Croats in Vojvodina try to realize all their rights. Except policy, Croats in Vojvodina are organized in other different activities, as culture, education and information. They have several cultural societies and four journals (<http://www.mvpei.hr/hmiu/tekst.asp?q=oihmi-hmio12>). Presents of old age categories are visible in their religious life, since they are a very religious nation, visiting churches regularly. The base of their strong society stems from the great number of mutual links and contacts.

Coefficients of Old Age and Youth

Coefficients of old age directly show negative age process in some populations. Age process includes increase of the share of population, which is older than 60 in total. When that

Table 6. The Old age index of Croats in Vojvodina, according censuses 1961-2002

Census	1961	1971	1981	1991	2002
Population of Vojvodina	0,36	0,49	0,57	0,73	0,97
Croats in Vojvodina	0,33	0,53	0,66	1,11	1,88

Source: Republički zavod za statistiku, 2003, Savezni zavod za statistiku, 1970, Savezni zavod za statistiku, 1974, Pokrajinski zavod za statistiku, 1982, Savezni zavod za statistiku, 1993, author calculations

number has passing by 12.0%, than the population start to aging in demographic sense (Kicošev, Golubović, 2004, 174). According to the results of Census 1961, Croats in Vojvodina had less coefficient of old age, compared to population of Vojvodina. Since 1971, population of Vojvodina and Croats in Vojvodina has entered the aging process. After 1961, Croats in Vojvodina have never had the smallest coefficient of old age than population of Vojvodina (table 7). In 2002, its coefficient was almost 1.4 times higher in comparison with population of Vojvodina. It seems that population of Vojvodina made negative influence on the Croats in Vojvodina.

Table 7. Coefficients of old age and youth of Croats in Vojvodina (in %), According censuses 1961-2002

Census	1961	1971	1981	1991	2002
Coefficient of old age					
Population of Vojvodina	11,9	14,8	15,2	18,8	21,9
Croats in Vojvodina	11,0	15,2	15,9	21,5	29,8
Coefficient of youth					
Population of Vojvodina	33,2	30,0	26,8	25,7	22,6
Croats in Vojvodina	32,9	28,7	23,9	19,4	15,8

Source: Republički zavod za statistiku, 2003, Savezni zavod za statistiku, 1970, Savezni zavod za statistiku, 1974, Pokrajinski zavod za statistiku, 1982, Savezni zavod za statistiku, 1993, author calculations

Coefficient of youth in the both cases decreased, but in the case of Croats in Vojvodina decreasing is more significant. In 1961, population of Vojvodina has very similar coefficient of youth with Croats in Vojvodina, and it is a bit higher. In 2002, the difference was more obvious since the coefficient of youth of Croats in Vojvodina was 1.4 times less than coefficient of youth of population of Vojvodina (table 7). From 1961 to 2002, coefficient of youth of Croats in Vojvodina decreased 2.1 times.

Conclusion

During the 20th century, every new census has noted decrease in the number of Croats in Vojvodina and especially decreasing the young

generations. All parameters of age structure show that Croats in Vojvodina are very old. According to the last census, the average age of Croats in Vojvodina was 45.3 year, but median age was higher (46.7 year). Moreover, old age index was almost 2 times higher compared to population of Vojvodina (1.93). Coefficient of old age approach 29.8% and coefficient of youth was 15.8%. If the ageing process of Croats in Vojvodina continues, they will soon disappear and therefore, from this historical moment, intensive efforts must be taken.

Furthermore, Croats in Vojvodina have always been a small community. Croats still have not got own television terms, schools etc. in Croatian language, as other numerous national minorities (Hungarians, Romanians, Slovaks etc) have. They have always lived under strong influence of other ethnicity. From 1961 to 1981, in Vojvodina was very popular to feel as Yugoslav. Mixed marriages were in fashion as well. All these factors had transformed and assimilated Croats, or motivated them to migrate abroad. On the begging of 20th century, independence of Republic of Croatia, instable political and unfavorable economic situation in Vojvodina has caused emigration.

At the moment, Croats return to Vojvodina from commercial reasons. Because of that, the number of Croats in Vojvodina may arise, which can lead to the revival of their age structure. Finally, it can be concluded that certain potentials exist, but there is a question whether the Croat society is able to take advantage of them.

The main task for the coming decades will be to provide satisfactory levels of elderly well being, including care, in both qualitative and quantitative terms, in the face of limited human and financial resources (Sircelj, 2002, 4).

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