

Make Your Publications Visible.

A Service of



Leibniz-Informationszentrum Wirtschaft Leibniz Information Centre

Nejašmić, Ivo; Njegač, Dražen

## **Conference Paper**

# Spatial (Regional) Differences of Demographic Development of the Republic of Croatia

41st Congress of the European Regional Science Association: "European Regional Development Issues in the New Millennium and their Impact on Economic Policy", 29 August - 1 September 2001, Zagreb, Croatia

## **Provided in Cooperation with:**

European Regional Science Association (ERSA)

Suggested Citation: Nejašmić, Ivo; Njegač, Dražen (2001): Spatial (Regional) Differences of Demographic Development of the Republic of Croatia, 41st Congress of the European Regional Science Association: "European Regional Development Issues in the New Millennium and their Impact on Economic Policy", 29 August - 1 September 2001, Zagreb, Croatia, European Regional Science Association (ERSA), Louvain-la-Neuve

This Version is available at: https://hdl.handle.net/10419/115281

## Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

#### Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



ERSA Congress, Zagreb

Ivo NEJAŠMIĆ

Teacher Education Academy, Zagreb, Croatia

e-mail: nejasmic@uciteljska-akademija.hr

Dražen NJEGAČ

Faculty of Science, Zagreb, Croatia

e-mail: drazen.njegac@zg.hinet.hr

Spatial (Regional) Differences of Demographic Development in the Republic of Croatia

**Abstract** 

Consideration of the essential components of demographic development in the Republic of Croatia has shown considerable spatial discrepancies. Settlement patterns are extremely unequal. Rural areas are depleted; the population is clustered around a small number of central settlements. The domination of Zagreb in all segments of society is accelerating. Migration shows the full extent of the dichotomy in Croatia's territory. Ten counties have a positive migration balance, while eleven have a negative balance. To a certain extent, territorial homogenization is also occurring. All counties are beset by reproductive depopulation. 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 can be designated as experiencing deep demographic aging. Trends are also unfavorable. Densely populated regions are recording further growth in the number of inhabitants, while sparsely populated regions are subject to constant depopulation. In exceptionally depopulated areas there are low population levels with unpromising biological and educational structures. This is a limiting factor for further development. It is therefore necessary to implement a planned and functional redistribution of the population. However, faster economic growth is a key prerequisite to the alleviation of very unfavorable demographic trends.

## Introduction

Demographic development, particularly the distribution of populations, is influenced by many factors: a) geographic, b) economic and social, c) political, d) pure demographic, and others. Additionally, a special role is played by inherited settlement structures, modes for the emergence and development of cities, the degree of exploitation of natural and human resources, the existence of and changes in state and other borders, etc. The effects of the aforementioned factors on demographic development is very complex. It is therefore difficult to know which factors will predominate during a given period. This, for example, also holds for the distribution and redistribution of populations. 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). Rendered in simpler terms, the population density, the number and composition of the population and the distribution and forms of settlements are inscribed by the past, reflect the present and herald the future.

The Republic of Croatia consists of three large natural-geographic units. These are: the lowland region (a part of the Pannonian Plain), the littoral region (part of the Mediterranean), and the highland-alpine region, which is located between the previous two (part of the Dinaric mountain system). The complexity of Croatia's position, determined by its contact with and the influence of diverse ethnic, cultural, economic and political European entities, or rather civilizational spheres (Central European, Mediterranean, and Balkan) is unique. This has greatly influenced the differentiation of larger and smaller portions of the its national territory. All of this, in turn, is reflected in its social, economic and cultural features (Friganović, Živić 1994).

Territorial variations are certainly present as well in the population density, and changes in the number and composition of the population. This work represents an attempt to determine how and to what extent. The focus has been placed on the distribution of the population, while spatial (regional) differences in other essential components of demographic development in the Republic of Croatia are also considered.

## **Population Distribution or Overall Population Density**

With its 4,784,265 inhabitants (1991 census) or 84.6 persons/km², the Republic of Croatia is a more sparsely than densely populated European country. Approximately three fourths of Europe's countries are above, and only one fourth are below Croatia. Considering just this data, we could conclude that Croatia, given its specific natural features and economic potential, possesses a certain advantage which gives it better prospects for the future (Friganović 1992a). However, since a wide range of values and very unequal population distribution stand behind these statistics on average population density, such a state of affairs cannot be considered either an advantage or a potential stimulus to development.

The extremely varied population density becomes apparent already at the level of the largest geographic components of Croatia. These are: the plains or Pannonian region (103 persons/km², 1991), the highland-alpine or Dinaric region (18 persons/km²) and the littoral or Adriatic/Mediterranean region (85 persons/km²). Thus, the ratio has the extreme values of 1:5.7.

A comparison of the five main components (macro-regions) leads to this conclusion: the most populous is Central Croatia (the Zagreb macro-region, 116.0 persons/km²), while the most sparsely populated is Highland Croatia (Lika and Gorski kotar, 18.1). The northern littoral (Istria and Kvarner, 84.5), the southern littoral (Dalmatia, 80.9) and Eastern Croatia (Slavonia, Baranja and Western Srijem, 80.4) have roughly equal population densities (approximately average values). This means that the ratio between the most sparse and densest macro-regions is 1:6.4.

Furthermore, there are considerable variations in population density between individual counties (Table 1); from Lika-Senj County (16.3 persons per km<sup>2</sup>) to Međimurje County (164.2). The ratio between the most sparsely and most densely populated counties is 1:10. The city of Zagreb, with its characteristic urban density, belongs in a category of its own (1,215.4 persons/km<sup>2</sup>).

Within the macro-regions and counties, the differences are even greater in terms of population density and general population trends. These differences are particularly great and significant between urban and rural regions, and between the more markedly urban and rural municipalities, i.e. between lowland-plains and highland-alpine regions (Nejašmić 1986; Friganović 1992b; Akrap 1998).

<u>Table 1:</u> Population in 1991 and the share (%) of the population in individual counties in the overall population of Croatia and overall population density (persons/km<sup>2</sup>)

COUNTY	Number	%	Persons/km <sup>2</sup>
	1	2	3
CITY OF ZAGREB	777,826	16.26	1,215.35
BJELOVAR-BILOGORA	144,042	3.01	54.60
BROD-POSAVINA	174,998	3.66	86.38
DUBROVNIK-NERETVA	126,329	2.64	70.85
ISTRIA	204,346	4.27	72.67
KARLOVAC	184,577	3.86	50.92
KOPRIVNICA-KRIŽEVCI	129,397	2.70	74.58
KRAPINA-ZAGORJE	148,779	3.11	120.96
LIKA-SENJ	86,992	1.82	16.25
MEĐIMURJE	119,866	2.50	164.20
OSIJEK-BARANJA	367,193	7.68	88.46
POŽEGA-SLAVONIA	99,334	2.08	54.52
PRIMORJE-GORSKI KOTAR	323,130	6.75	89.96
SISAK-MOSLAVINA	251,023	5.25	56.47
SPLIT-DALMATIA	474,019	9.91	104.78
ŠIBENIK-KNIN	152,477	3.19	50.89
VARAŽDIN	187,853	3.93	149.09
VIROVITICA-PODRAVINA	104,625	2.18	51.72
VUKOVAR-SRIJEM	231,241	4.83	94.46
ZADAR	212,920	4.45	58.49
ZAGREB	283,298	5.92	92.07
CROATIA	4,784,265	100.00	84.62

Source: 1991. Census data, Croatian Central Bureau of Statistics, Zagreb

At the level of the smallest administrative/territorial units, i.e. municipalities and cities (and administrative city-districts)—of which there is a total of 538 (416 municipalities and 122 cities/towns)—the differences in population density are very great, as expected. Some municipalities, particularly those in the highland-alpine (Dinaric) karst tracts and on the Adriatic islands, constitute a true semi-wilderness (sub-

ecumene). Thus in 1991, an overall density of not more than 15 persons per km<sup>2</sup>, meaning a very sparse population, was recorded by 25 municipalities and two administrative city-districts; only 1.6 percent of Croatia's population lived in them on a total of 12.1 percent of its national (mainland) territory. The lowest density was recorded in the Karlobag municipality (3.7 persons/km<sup>2</sup>), followed by the Lanišće municipality in the Istrian interior (4.2 persons/km<sup>2</sup>), and then the Udbina (6.8 persons/km<sup>2</sup>) Lovinac (7.9 persons/km<sup>2</sup>) and Žumberak (8.8 persons/km<sup>2</sup>) municipalities, and so forth.

As opposed to these municipalities, many are very densely populated or even over-populated. These are generally municipalities in northwestern Croatia and cities (and administrative city-districts) throughout Croatia. There are 27 administrative-territorial units (25 cities and 5 municipalities), which encompass 3.9 percent of Croatia's total area and 39.5 percent of its population, that can be described as over-populated, i.e. the general density accounts for over 300 persons/km². All municipalities in this group are suburban; the most populous municipality (with the exception of cities and administrative city-districts) is Podstrana, near Split (486.2 persons/km²), Župa Dubrovačka (348.9), Sveta Nedjelja, near Zagreb (343.9), etc.

The ratio between the most sparsely and most densely populated municipalities (with the exception of cities and administrative city-districts), meaning Karlobag and Podstrana, is 1:131.4. If all administrative/territorial units are taken into consideration, thus the largest cities as well, then the ratio becomes over 1:1,000! In this vein, a vast discrepancy in the population and settlement structure of the Republic of Croatia is obvious.

The numerical indicators of population distribution in Croatia presented above depict the conditions which were valid during the last population census (1991). There is every indication that the current situation is even less favorable. The Great Serbian aggression against Croatia and the war provoked tremendous demographic disorders. The situation is particularly difficult in those regions directly hit by the war (Lajić 1995; Šterc, Pokos 1993; Bubanović 1998). Even before wartime destruction, a part of these regions had the characteristics of marked demographic regression (Nejašmić 1991a; Šterc 1991). The war, in turn, had the effect of "salt on an open demographic wound." A deeper understanding of these changes will only be possible after an analysis of the data from the 2001 census. Nonetheless, on the basis of certain partial indicators and general trends, even now it can be stated that there is a real danger that the once occupied and

devastated Croatian regions will (with the possible exception of regions in Eastern Slavonia and Baranja) become marginal rural zones.

## **General (Inter-census) Population Trends**

Changes in the number of inhabitants from 1981 to 1991 indicate spatial variations, both at the regional level and in rural and urban areas (Nejašmić 1988; Akrap 1998). Out of the total twenty-one counties (including the City of Zagreb), fourteen have recorded population growth, while seven have recorded a decline. The largest growth was experienced by Dubrovnik-Neretva County and the City of Zagreb, while the most marked decline was noted in Lika-Senj and Bjelovar-Bilogora Counties.

A more detailed and real view of general demographic trends is offered by data for settlements. During the 1981-1991 period, out of a total of 6,694 settlements, 30.4 percent recorded population growth, 1.55 percent zero-growth and the remaining 68.05 percent a decline. As many as 2,914 settlements, or 43.5 percent, experienced an intense reduction in their populations (10 or more percent), while 66 settlements (1%) remained without any permanent inhabitants at all ("idle villages") (Nejašmić 1996a). A spatially contiguous zone of marked depopulation, in which this "illness" has ensnared over 50 percent of the settlements, consists of four counties: Koprivnica-Križevci, Virovitica-Podravina, Bjelovar-Bilogora and Sisak-Moslavina; they encompass 11,625 km² (20% of the national mainland territory) and 2,090 settlements (31.2% of all settlements).

These unpromising trends continued even during the past decade. This is shown by the estimated number of present inhabitants (according to the principle of usual residence) for 2000 by county in comparison to the number of present inhabitants in 1991 (Table 2). Out of the twenty-one Croatian counties (including the City of Zagreb), all of four recorded population growth over the course of the last decade, and these are: Zagreb County, the City of Zagreb, Split-Dalmatia County and Istria County (in the last case it is actually a matter of stagnation!). Other counties recorded lesser or more intense depopulation. The greatest reduction in the number of inhabitants was recorded in Lika-Senj County (39.9%), Šibenik-Knin County (22.5%), Sisak-Moslavina County (21.6%), Karlovac County (20.9%) and Zadar County (19.6%), etc. All of these are counties that were directly hit by the war and in which smaller or larger portions were already beset by depopulation even before the war.

Differences in the modifiers and intensity of population changes increased the already striking unequal territorial distribution of the Croatian population. The extreme cases are: Lika-Senj County only 1.07 percent of Croatia's total population lives in 9.47 percent of the (mainland) national territory (estimate for 2000), while on the other hand, in the City of Zagreb and Zagreb County (together) 24.84 percent of the population lives in 6.57 percent of the territory!

<u>Table 2:</u> Estimate of usual residence population by county in mid-2000 and comparison with 1991\*

	Population		Change	
COUNTY	1991**	2000	absolute	index
				2000/91
	1	2	3	4
CITY OF ZAGREB	753,200	776,800	23,600	103.1
BJELOVAR-BILOGORA	134,800	125,000	-9,800	92.7
BROD-POSAVINA	162,600	159,800	-2,800	98.3
DUBROVNIK-NERETVA	119,900	118,300	-1,600	98.7
ISTRIA	201,200	202,500	1,300	100.6
KARLOVAC	169,000	133,600	-35,400	79.1
KOPRIVNICA-KRIŽEVCI	123,700	119,300	-4,400	96.4
KRAPINA-ZAGORJE	144,200	138,700	-5,500	96.2
LIKA-SENJ	76,600	46,000	-30,600	60.1
MEĐIMURJE	111,000	109,900	-1,100	99.0
OSIJEK-BARANJA	340,900	331,100	-9,800	97.1
POŽEGA-SLAVONIA	91,500	82,600	-8,900	90.3
PRIMORJE-GORSKI KOTAR	315,500	303,100	-12,400	96.1
SISAK-MOSLAVINA	235,200	184,300	-50,900	78.4
SPLIT-DALMATIA	442,800	455,300	12,500	102.8
ŠIBENIK-KNIN	143,000	110,800	-32,200	77.5
VARAŽDIN	182,500	179,200	-3,300	98.2
VIROVITICA-PODRAVINA	99,000	89,500	-9,500	90.4
VUKOVAR-SRIJEM	213,500	184,800	-28,700	86.6
ZADAR	189,400	152,300	-37,100	80.4
ZAGREB	271,000	289,100	18,100	106.7
CROATIA	4,520,500	4,292,000	- 228,500	94.9

<sup>\*</sup> Authors' estimate according to the usual residence concept; territorial structure in 2000.

# **Polarization of Demographic Development**

<sup>\*\*</sup> Source: Census data (1991), Croatian Central Bureau of Statistics, Zagreb; data adapted to the usual residence concept.

To understand demographic events and, consequently, the distribution of the population, special attention must be given to the fact that traditional agrarian settlement patterns are dispersive, because they greatly depend on land, water and other natural resources. Even after the Second World War, the settlement structure in Croatia was characterized precisely by dispersed settlement patterns and a large number of small settlements (Popovski, Seferagić, Stojković 1987). Such an inherited settlement structure was completely inappropriate under altered socio-economic conditions, because the accelerated development of secondary and tertiary activities sought, and induced, among other things, a certain level of concentration in the population. What occurred was therefore a transition from one to another type of settlement pattern, during which many village were depopulated, particularly those located farther from civilizational and developmental flows. This spatial redistribution of the population "passed over" smaller and medium-size central settlements and "jumped" directly to larger cities (Nejašmić 1992). This in turn thoroughly upset the more balanced distribution of the population, and therefore also the chances for more balanced socioeconomic development.

Parallel to urbanization, an intense de-agrarianization and de-ruralization occurred (Vresk 1995; Njegač, Toskić 1999). Irrational and ideologically-guided developmental policies (urban-based industrialization with a small number of hubs) prompted "flight" from agriculture and the village. Rural settlements declined and continues to decline in *all* regions. All county seats experienced growth in the number of inhabitants in the period from 1981 to 1991 (from 1.4% in Osijek, to 20.5% in Zadar). In the same fashion, all counties recorded growth in the number of inhabitants in other urban settlements which have (jointly) double the growth rate of the county seats. As to non-urban settlements (considered jointly), in the majority of counties their general trends have been regressive (Nejašmić 1996a).

Interregional differences, particularly urban-rural divisions, have already represented a fundamental and general territorial-settlement feature for a considerable period, but in recent years they have become a characteristic of almost all Croatian counties. The population distribution discussed above is a reflection of precisely these regional variations and polarized general and demographic development (Vresk 1996).

The data show that the concentration of people in urban settlements is continuing (Vresk 1992). In 1991, 51.7 percent of Croatia's population lived in urban settlements (according to a somewhat modified model /Vresk 1982-83/, there were 122,

or 1.8% of total settlements), while the rest of the population was "scattered" throughout 6,572 non-urban settlements! An even better indicator of developmental and demographic polarization ensues from the fact that in 1991, 25.9 percent of Croatia's population lived in the four macro-regional centers (in their narrower urban zones), while Zagreb alone (inner urban zone) accounted for 16.3 percent of the population!

The intense concentration of the population, the high degree of urbanization, relatively dynamic economic development (particularly tertiary activities) as well as the greater differences between it and other parts of the Republic of Croatia, separate the Zagreb region as a core region (Njegač 2000). After the Republic of Croatia gained its independence, the domination of this metropolis continued and accelerated in practically all social segments (Stiperski 2000). This will lead to a situation which will simply be described as "Zagreb and the Croatian desert" (Nejašmić, Toskić 2000).

## **Features of Population Reproduction**

Among the counties, the City of Zagreb has the lowest general fertility rate, despite the fact that it has the highest positive migration balance (Nejašmić 1996a). Primorje-Gorski Kotar and Zagreb Counties (Table 3) also have low rates. On the other hand, some of the regions marked by emigration have recorded above-average fertility rates (Međimurje, Krapina-Zagorje). Therefore, it can be stated that current internal migration does not have an essential impact on the fertility rates of the overall population, at least not at the county level.

All Croatian counties have population reproduction indicators that are below the values necessary for simple renewal. Accordingly, their common feature is reproductive depopulation (Table 3). This means that in the future the regional demographic picture of Croatia will largely be determined by certain current (and future) levels of reproductive depopulation (Wertheimer-Baletić 1992, 1997).

<u>Table 3:</u> General Fertility Rate (Women – GFR) and Total Fertility Rate (TFR') by county in 1990; Natural Increase Rate by county in 1998 and 1999.\*

COUNTY	GFR	TFR'	Natural Increase Rate	
			1998	1999
	1	2	3	4

CITY OF ZAGREB	41.8	1.46	-0.65	-0.79
BJELOVAR-BILOGORA	48.7	1.71	-4.53	-4.97
BROD-POSAVINA	59.3	2.08	1.83	0.11
DUBROVNIK-NERETVA	54.4	1.90	2.26	1.35
ISTRIA	48.1	1.69	-2.42	-2.72
KARLOVAC	44.8	1.57	-6.96	-6.50
KOPRIVNICA-KRIŽEVCI	48.2	1.69	-3.75	-4.46
KRAPINA-ZAGORJE	52.0	1.81	-4.17	-4.78
LIKA-SENJ	47.6	1.67	-7.38	-7.78
MEÐIMURJE	52.9	1.86	-0.34	0.12
OSIJEK-BARANJA	48.7	1.71	-1.71	-1.81
POŽEGA-SLAVONIA	55.2	1.94	-0.01	-0.38
PRIMORJE-GORSKI KOTAR	42.6	1.48	-3.29	-3.68
SISAK-MOSLAVINA	47.6	1.67	-2.32	-3.49
SPLIT-DALMATIA	52.3	1.84	1.98	2.09
ŠIBENIK-KNIN	47.4	1.65	-1.72	-2.37
VARAŽDIN	50.0	1.75	-2.79	-2.52
VIROVITICA-PODRAVINA	50.5	1.77	-2.44	-3.30
VUKOVAR-SRIJEM	55.4	1.94	0.88	-0.19
ZADAR	52.1	1.81	1.22	1.20
ZAGREB	44.0	1.55	-0.97	-1.69
CROATIA	58.9	1.69	-1.23	-1.58

<sup>\*</sup> Population encompassed according to the usual residence principle; the number of residents in the middle of given years (the base for calculating the rate) has been estimated.

Source: For GFR and TFR', Nejašmić 1996b; for absolute data on natural growth, the Croatian Central Bureau of Statistics.

The 1980s brought the territorial expansion of natural (biological) depopulation, i.e. an excess of deaths over live births. Eight counties were involved; most intensely in Bjelovar-Bilogora and Lika-Senj Counties. The 1990s saw a continuation of the territorial expansion of natural (biological) depopulation. The data for 1998 and 1999 show that disadvantageous natural trends beset 17 counties; most intensely in Lika-Senj, Bjelovar-Bilogora, Krapina-Zagorje, Koprivnici-Križevci, etc. (Table 3). The City of Zagreb and Zagreb County, which account for Croatia's most populous region (as well

as the region with the highest immigration), have also recorded negative natural changes.

From the standpoint of "usual residence," analyses have shown that larger cities are not suitable for optimum reproduction levels. Under the circumstances of the demographic weakening of villages, the populations of smaller towns are practically the most vital agents of reproduction, and they have among the best other demographic features (Nejašmić 1996a).

It can be concluded that in Croatia, the process of territorial homogenization on the low fertility level is marked. The acceptance of low birth standards is the reality in all Croatian regions (counties). The data considered here show that population reproduction is below the levels that pervade in developed modern society. Reproductive and generational depopulation are in force in Croatia.

## **Migration Balance**

Analysis by counties shows divisions of Croatian territory in terms of net migration and the type of general population movement. During the 1981-1991 intercensus period, ten counties recorded a positive migration balance, while eleven recorded a negative balance (Table 4). Counties with the largest positive migration balance are generally those whose seat is also a regional center, which also means a strong immigration center (Zagreb, Split, Rijeka, Zadar and others). As many as six counties fall within the type of general population transition characterized by a **demographic aging trend** (type E<sub>4</sub>). These six counties are: Lika-Senj, Virovitica-Podravina, Krapina-Zagorje, Koprivnica-Križevci, Sisak-Moslavina and Bjelovar-Bilogora. In contrast to these, the territory of the City of Zagreb is the highest immigration zone in Croatia (type I<sub>1</sub>).

<u>Table 4:</u> Net migration balance by county in the 1981-1991 period (vital-statistics method) and the type of general population trends

COUNTY	Net migration balance	Type*
	1	2
CITY OF ZAGREB	30 912	$I_1$

BJELOVAR-BILOGORA	-233	$E_4$
BROD-POSAVINA	610	E <sub>1</sub>
DUBROVNIK-NERETVA	6 073	$I_1$
ISTRIA	10 122	$I_1$
KARLOVAC	933	14
KOPRIVNICA-KRIŽEVCI	-176	$E_4$
KRAPINA-ZAGORJE	-1 062	E <sub>4</sub>
LIKA-SENJ	-2 276	E <sub>4</sub>
MEĐIMURJE	-640	$E_1$
OSIJEK-BARANJA	2 731	$I_1$
POŽEGA-SLAVONIA	-560	$E_1$
PRIMORJE-GORSKI KOTAR	12 165	$I_1$
SISAK-MOSLAVINA	-1 686	$E_4$
SPLIT-DALMATIA	12 572	$I_1$
ŠIBENIK-KNIN	-2 298	$E_1$
VARAŽDIN	-1 977	$E_1$
VIROVITICA-PODRAVINA	-606	$E_4$
VUKOVAR-SRIJEM	-2 148	$E_1$
ZADAR	10 213	$I_1$
ZAGREB	24 342	$I_1$
TOTAL REPUBLIC OF CROATIA	97 011	$I_1$

<sup>\*</sup> The type of general population trends is based on the ratio between natural and census-determined dynamics (according to: Friganović 1990)

Source: Calculated by the authors on the basis of data from the Croatian Central Bureau of Statistics.

## **Composition by Age and Population Aging**

Croatia's population is marked by very accelerated aging and a very high degree of old age. In 1991, the share of young people (aged 0 to 19) was 26.2 percent, while that of the elderly (aged 60 and over) was 17.5 percent. The age index (60+/0-19) was 0.67, which means that the overall population was marked by *deep demographic aging*. An essential territorial feature of the age structure and population aging is the relative uniformity at the county level. As many as 18 of the 21 counties are marked by *deep* 

demographic aging. The aged population and continuing aging are characteristics of all Croatian counties, while the least promising age structure (pursuant to other demographic territorial-differential features) can be found in: Lika-Senj (age index 1.10), Karlovac (0.97), Bjelovar-Bilogora (0.94), Koprivnica-Križevci (0.86), etc. (Friganović, 1996).

## **On Certain Consequences of Unequal Settlement Patterns**

The basic negative consequences of concentrated urbanization, and this also implies unequal population distribution, can be seen in: a) unequal regional development, b) maintenance and exacerbation of the inequalities between villages and cities, and between central and peripheral zones, c) an unequally developed settlement network, d) social segregation (inequalities between social groups in the territorial sense, but also among settlements and within large cities), e) different opportunities for populations depending on place of residence, f) a decline in the quality of urban life in large cities, etc. (Seferagić 1985).

The characteristics of unequal population distribution show that this phenomenon has passed the threshold from *a consequence to a factor* of socioeconomic development. In sparsely populated, markedly depopulated areas, a small number of inhabitants remain with a poorer biological and educational structure, and this becomes a limiting factor for further development. Such regions are increasingly stagnating. This is no longer solely a consequence of inappropriate social care, but also of an objective shortcoming of these largely less well-developed regions. Following the unwavering causality of general developmental and demographic processes, the negative consequences are multiplying, and this reduces the prospects for reviving "depressed" regions and brings into question the general balance and stable development of Croatia.

In regions with sparse populations and constant depopulation, significant physiognomic (landscape) alterations occur. A sort of *depopulation landscape* is created in which the signs of "dwindling hearths" predominate (Nejašmić 1991a).

## A Possible Approach to Overcome General and Populational Territorial Imbalances

First it should be emphasized that the role of planning (general territorial, regional, urban) in the redistribution of the population is not negligible. Variations and inequalities never correct themselves; their correction has to be planned. A democratic society (meaning also the balanced distribution of power), territorial planning and an uniformly developed territory go together hand in hand.

An orientation toward endogenous or "inward" development, local initiatives and autochthonous development factors could be a solution to the situation in which Croatia has found itself. In the course of such a "bottom-up approach" to regional developmental problems, it is necessary to take into consideration all local specific features, problems and perspectives; this would thereby achieve territorially differentiated local developmental policies (Maleković 1991).

A very unpromising demographic situation imposes the need for a planned and functional spatial redistribution of the population. Migration thereby plays an essential role in the regional redistribution of the population and the process of more balanced economic development. In Croatia's case, this role generally pertains to: the disburdening of large urban agglomerations (city-to-village migration), the maintenance of populations within regional frameworks and the daily circulation of the working population. Changes in the territorial distribution of jobs, particularly new activities, may be the most effective path to altering the migration formula. The State must subsidize the establishment of companies for which it is known in advance that, at least upon the commencement of operations, they cannot be profitable. Only one condition should be placed on such aid: that the companies must be located in undeveloped (sparsely populated, emigration) regions, and their activity has to spark the economic life of these regions. It should be considered "normal" (even though it is a market economy) that the risks—to which production is subject in undeveloped regions—be borne by the State, because this is a generally public interest. The revival of peripheral zones and sectors of society with peripheral socio-economic features cannot be within the realm of private investment in and of itself. This is a task of local social agents as well as those on the national, state level (Lay 1998).

Changes in the spatial distribution of the population, conditioned by changes in the global concept from rural/agrarian to urban/industrial, were obviously unavoidable. However, attempts should be made to ensure that large tracts of land do not become deserted and almost unused. To achieve this, it is necessary to secure the existence of an appropriate number of regional and sub-regional centers, and then a network of

settlements in which small and medium-size towns will be present, which means that a decentralized (dispersive) type of urbanization emerges within reasonable limits. This means that the growth of the largest cities should be slowed down, while the growth of smaller regional centers should be encouraged in the interests of overall progress. The populations of these smaller towns, as mentioned above, are practically the primary agents of demographic renewal; large cities are not suitable for this, while villages do not have the strength to resume their former leading role. A thinning of the settlement structure has necessarily occurred in rural areas, and many settlements can no longer be "saved." Therefore it is vital to recognize the potential of medium-size settlements and encourage their development. In this manner, at least the populations in them would be maintained, and the depopulation of larger areas would be prevented (Nejašmić 1991b; Šterc 1992).

In addition to the direct encouragement of investment in regions experiencing developmental stagnation, a more balanced distribution of the population may also be attained through the construction of transit routes which link rural areas with urban centers. Similar effects would be attained by means of housing construction oriented toward smaller settlements near and even at greater distances from larger cities.

For the needs of redistributive population policies, i.e. the implementation of specific measures, the country's territory should be divided (categorized). When we speak of rural regions, and this encompasses practically everything outside of cities or at least outside of uninterrupted rural-urban zones, then for Croatia it would be interesting to apply the tripartite typology of rural regions: 1) rural regions next to urban centers and zones, which are under great pressure from cities, in which many vacation homes ('second homes'), dense road networks, dislocated industrial plants and bedroom communities can be found, and where the natural environment is the most threatened; these include the belts around Zagreb and the larger cities of northern Croatia and those along the continuous rural-urban belt along the Adriatic coast, 2) rural regions outside of the range of urban pressure, where there is much less non-agricultural work and the urban infrastructure is less developed; such regions include large sections of central Slavonia, Moslavina, the Dalmatian hinterland and other areas; and 3) marginal rural regions which were left out of the economic diversification process and which are therefore stagnating and becoming depopulated (highland-mountain zones, certain islands, parts of central Istria) (Puljiz 1993).

In the shortest response to the question of what is to be done, it could be stated that faster overall economic development is vital. A richer and better developed society can allocate greater funds for demographic renewal, while poorer societies are left with resolutions and programs on paper. Faster overall development is a key prerequisite to halt immigration, which is still a devastating factor in overall demographic conditions and processes (Županov 1997). Alongside this, an economically and culturally better developed Croatia would attract a part of the country's diaspora, as well as foreigners. This would alleviate unfavorable demographic trends to a certain extent.

## **Conclusion**

A considerable differentiation of Croatian territory, as well as clear divisions, have been established in the essential features of its demographic development. Data show that the demographic situation is very unpromising. Entire regions have a low population density and are beset by depopulation; villages are deserted, while people are concentrated around a small number of central settlements. In addition, general trends are unfavorable as well. Densely populated and over-populated regions are recording continued population growth, while sparsely populated regions are subject to constant depopulation. In regions greatly effected by population aging, and this includes Croatia's entire rural zone, economic activity is declining, social and cultural life is dwindling, and optimism and the entrepreneurial spirit are fading.

Therefore, in the interests of overall progress, more balanced regional development and population distribution are necessary. Above all, this implies: a) a situation in which the population as a whole will be offered the healthiest possible environment, without the negative environmental consequences brought by an excessive concentration of people in a given region, or accelerated depopulation in another, b) development and distribution that will offer the population approximately similar living standards (personal, cultural, health-care, etc.) and in which opportunities will not depend on place of residence, c) a distribution that will facilitate the utilization of the country's entire territory and all available natural and human resources.

### References

- Akrap, A. (1998): Saldo migracija Republike Hrvatske i županija 1971-1981. i 1981-1991. za ukupno stanovništvo i stanovništvo u zemlji, in: *Migracije u Hrvatskoj:* regionalni pristup, Institut za migracije i narodnosti, Zagreb, 1, 11-68.
- Breznik, D. (1982): Razvitak stanovništva, njegov razmeštaj i planiranje, *Ekonomska revija*, Ljubljana, 3-4, 255-262.
- Bubanović, H. (1998): Obnova i revitalizacija područja posebne državne skrbi Republike Hrvatske, *Geografski horizont*, Zagreb 1, 19-28.
- Friganović, M. (1990): *Demogeografija stanovništvo svijeta*, Školska knjiga, Zagreb (IV. izdanje).
- Friganović, M.A.(1992a): Stanovništvo i naseljenost Republike Hrvatske, Geografski

- horizont, Zagreb, 2, 49-61.
- Friganović, M.A. (1992b): Promjene u dinamici stanovništva Hrvatske 1981-1991. kao funkcija urbanizacije, *Geografski glasnik*, Zagreb, 54, 63-74.
- Friganović, M.A.; Živić, D.: (1994): Regionalne različitosti i problemi kretanja stanovništva Hrvatske 1948-1991, *Geografski glasnik*, Zagreb, 56, 33-51.
- Friganović, M.A. (1996): Regionalni demografski procesi u Hrvatskoj 1948-1981., in: *Nacionalni program demografskog razvitka*), Ministarstvo razvitka i obnove, Zagreb, 77-90.
- Lajić, I. (1995): Demografski razvitak Hrvatske u razdoblju od 1991. do 1994, *Revija za sociologiju*, Zagreb, 1-2, 55-64.
- Lay, Vladimir (1998): Teorijske, društvene i političke neprilike s periferijom, in: *Duge sjene periferije: prinos revitalizaciji hrvatskog ruba* (ur. I. Rogić, M. Štambuk), Institut društvenih znanosti Ivo Pilar, Zagreb, 13-40.(Biblioteka Zbornici; knj. 4)
- Maleković, S. (1991): Nove strategije europskog regionalnog razvoja i iskustva za Hrvatsku, *Razvoj /Development*, Zagreb, 1-2, 79-92.
- Nacionalni program demografskog razvitka (1997)(ur. Franka Vojnović et. al.), Zagreb: Ministarstvo razvitka i obnove.
- Nejašmić, I. (1986): Prirodno kretanje stanovništva SR Hrvatske prema tipu naselja boravka, *Geografski glasnik*, Zagreb, 48, 123-136.
- Nejašmić, I. (1988): Uloga i značajke preseljavanja u suvremenom populacijskom razvoju gradova SR Hrvatske, *Geografski glasnik*, Zagreb, 50, 45-54.
- Nejašmić, I. (1991a): *Depopulacija u Hrvatskoj korijeni, stanje, izgledi*, Globus (etc.), Zagreb.
- Nejašmić, I. (1991b): Moguća revitalizacija sociodemografski depresivnih (seoskih) prostora Hrvatske, *Sociologija sela*, Zagreb, 1991, br. 111-114, 11-24.
- Nejašmić, I. (1992): Osnovne značajke unutarnje migracije stanovništva Hrvatske 1880-1981, *Migracijske teme*, Zagreb, 2, 141-166.
- Nejašmić, I. (1996a): Demografske promjene u gradskim i ostalim neseljima Republike Hrvatske (1981-1991), *Zbornik radova I. hrvatskog geografskog kongresa*, HGD, Zagreb, 243-254.
- Nejašmić, I. (1996b): Regional Characteristics of Population Reproduction in the Republic of Croatia, *Geografski glasnik*, Zagreb, 58,1-14.
- Nejašmić, I.; Toskić, A.(2000): Razmještaj stanovništva u Republici Hrvatskoj dio općih demografskih i društveno-gospodarskih procesa, *Geoadria*, Zadar, 5, 93-

- 104.
- Njegač, D.; Toskić, A.: (1999): Rural diversification and socio-economic transformation in Croatia, *GeoJournal*, Netherlands, 46, 263-269.
- Njegač, D.(2000): Regionalna struktura Hrvatske, in: *Zbornik 2. hrvatskoga geografskog kongresa* (Lovran, 1999), Hrvatsko geografsko društvo, Zagreb, 191-199.
- Popovski, V.; Seferagić, D.; Stojković, A. (1987): *Mreža naselja SRH*, Zagreb: IDIS, (Studije i izvještaji).
- Puljiz, V. (1993): Ljudski faktor i ruralni razvitak Hrvatske, *Sociologija sela*, Zagreb, 1-2 (119 -120),11-15.
- Seferagić, D. (1985): Za planiranu urbanu dekoncentraciju, *Pogledi*, Split, 4, 52-57.
- Stiperski, Z. (2000): Geografski aspekt suvremenih gospodarskih kretanja u Hrvatskoj: rast dominacije Zagreba, in: *Zbornik 2. hrvatskoga geografskog kongresa* (Lovran, 1999), Hrvatsko geografsko društvo, Zagreb, 165-174.
- Šterc, S. (1991): Opća demografska slika Republike Hrvatske, in: *Političko-geografska i demografska pitanja Hrvatske*, Savez geografskih društava Hrvatske, Zagreb, 1-39 (Posebna izdanja, sv, 8).
- Šterc, S. (1992): Prostorni i demografski aspekti revitalizacije ruralnih naselja u Hrvatskoj, *Društvena istraživanja*, Zagreb, 1, 127-156.
- Šterc, S. I Pokos, N.(1993): Demografski uzroci i posljedice rata protiv Hrvatske, *Društvena istraživanja*, Zagreb, 4-5, 305-333.
- Vresk, M. (1982-1983): Neka obilježja urbanizacije SR Hrvatske 1981. g., *Radovi* (Geografski odjel PMF-a), Zagreb, 17-18, 39-53.
- Vresk, M. (1992): Urbanizacija Hrvatske 1981-1991., *Geografski glasnik*, Zagreb, 54, 99-116.
- Vresk, M. (1995): Regionalna struktura Hrvatske socioekonomske osnove strukturiranja, *Geografski glasnik*, Zagreb, 57, 55-70.
- Vresk, M. (1996): Urbanizacija i polarizirani razvoj Hrvatske, in: *Zbornik radova I. hrvatskog geografskog kongresa*, Hrvatsko geografsko društvo, Zagreb, 66 -73.
- Wertheimer-Baletić, A. (1992): Demografske promjene i globalni demografski procesi u Hrvatskoj u poslijeratnom razdoblju, *Encyclopaedia moderna*, 2 (38), Zagreb, 238-251.
- Wertheimer-Baletić, A. (1997): Demoreprodukcijski procesi u Hrvatskoj, in: Nacionalni

program demografskog razvitka (ur. Franka Vojnović et.al.), Ministarstvo razvitka i obnove, Zagreb, 55-75.

Županov, J. (1997): Gubitak ljudskih resursa i kulturnog kapitala zbog iseljavanja, in: Nacionalni program demografskog razvitka, Ministarstvo razvitka i obnove, Zagreb, 103-112.