THE "LAND OF SOUTH SLAVS" BETWEEN OLD AND NEW DEMOGRAPHIC ASSETS ♦

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Abstract: *The objective of this paper is to study the changes in the age structure of populations of the Former Yugoslavia – i.e. Bosnia and Herzegovina, Croatia, Macedonia, Montenegro, Serbia, Kosovo and Slovenia. The analysis relies on the 1981 census data and the 2010 official estimates. Since the demographic ageing is a generalized process, this research will focus on the intensity of this phenomenon by analyzing it with an appropriate dissimilarity index that through a comparison of two different reference dates or territories indicates the magnitude of discrepancies between two situations.*

Keywords: *Countries of Former Yugoslavia, Fertility, Mortality, Population aging process.*

1. Introduction

The "Land of South Slavs", alias Yugoslavia, was one of the leading countries of the Western Balkan Peninsula since 1943 until 1992.

Six Republics and two autonomous provinces have formed what once was the Socialist Federal Republic of Yugoslavia: Bosnia and Herzegovina with Sarajevo its capital, Croatia with capital Zagreb, Macedonia with Skopje, Montenegro with Titograd, Serbia with Belgrade as capital and Kosovo and Vojvodina (with respective capitals Priština and Novi Sad) as two autonomous provinces and finally Slovenia with Ljubljana.

In 1991 four out of six Republics composing the Jugoslav state declared their independence determining the Federation's dissolution.

About twelve years later the remaining two Republics – Serbia and Montenegro – divided giving birth to two independent states.

Recently (2008) one of the two Serbian provinces, Kosovo, requested its autonomy and its own Republic, provoking the Serbian disagreement and obtaining only partial – and somewhat controversial – international recognition.

♦ The present work is the result of a tight collaboration between two authors: however, the drafting of the paragraphs 1 and is to be attributed to dott.ssa Ştefania Girone, while the drafting of paragraphs 3 and 4 is to be attributed to dott.ssa Sara Grubanov-Boskovic.

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The current heterogeneous demographic panorama of the countries belonging to the Former Yugoslavia is, most likely, the result of evolutive processes that have occurred under effect of numerous factors of socio-economic as well as political and cultural nature.

In the light of this, we will focus on the evolution computed by the countries under exam in terms of natural – and, only in part, migratory – movement of the population in the past thirty years (1981-2011).

This is a symptomatic time period which, from the economic point of view, marks the transition from planned economy to market economy and, at the same time, from the demographic point of view represents for countries of South Jugoslav area, like Bosnia and Herzegovina, Macedonia and Montenegro, the end of the "first" and the beginning of what some authors define as the "second" demographic transition.

2. Demographic Scenario in Evolution

Leaving aside historical and economic aspects, in this occasion we will move on a strictly demographic line, in order to demonstrate how the existing demographic differentials are the result of important demographic transformations that have been occurring, with different modalities and times, in the populations of these countries, creating heterogeneities and homogeneities that are sometimes far from being negligible.

Considering a time period that spans over 30 years (1981-2911) we can observe, on one hand, countries (Macedonia, Montenegro, Kosovo and Slovenia) generally in a phase, more or less emphasized, of demographic stagnation or growth and, on another, countries (Bosnia and Herzegovina, Croatia and Serbia) in a condition of demographic implosion.

If we observe the entire area under reference as a whole, on an area covering 225 thousand sq km, in 2011, a population of just over 22 million inhabitants resulted to be located.

The comparison of 1981 and 2011 census data[1], shows that the population of the Former Yugoslavia decreased by 1,17% remaining, therefore, in tendential stagnation (see Table 1). In particular, after having increased slightly over one million inhabitants in the period 1981-2011, the Jugoslav population declined during the two following decades (1991-2011) by 1.3 million units.

If there wasn't for the growth contribution of the Kosovo population, equal to 9,43%[2], and the Slovenian one, equal to 8,37%, the demographic decrease of the entire area would have been much more substantial.

On the other hand, the major decrease, by almost 7,00%, was recorded in Bosnia and Herzegovina and Croatia that is countries mostly marked by the war events.

[1] The 2011 data regarding Bosnia and Herzegovina and Macedonia are population estimations and thus not census data. The next census in Bosnia and Herzegovina will be held in 2011. While the Macedonian census, starting 1st October 2011, has been interrupted due to controversies between the Macedonian and Albanian components of the commission on the issue whether or the population living abroad for more than 12 months should be counted or not as residing population.

[2] The 2011 census in Kosovo has been partially boycotted by ethnic Serbs and therefore the actual number of residing population in Kosovo might be higher.

Table 1

Demographic Dimension of the Former Yugoslavia, 1981-2011.

Countries	1981	1991	2011	Var. % 1981-
Bosnia-Herz.	4.124.256	4.377.033	3.839.737	-6,90
Croatia	4.601.469	4.784.265	4.290.612	-6,75
Macedonia	1.909.136	2.033.964	2.057.284	7,76
Montenegro	584.31	615.035	625.266	7,01
Serbia	7.729.236	7.824.589	7.565.761	-2,11
Kosovo	1.584.440	1.954.747	1.733.872	9,43
Slovenia	1.891.864	1.913.355	2.050.189	8,37
Total	*22.424.711*	*23.502.98*	*22.162.721*	*-1,17*

Source: Census data (Bosnia and Herzegovina Institute of Statistics; Republic of Croatia – Central Bureau of Statistics; Statistical Office of Kosovo; Statistical Office of FYR of Macedonia; Statistical Office of Montenegro; Statistical Office of Serbia and Statistical Office of Slovenia).

In this regard, it is a well known fact that the effects of different demographic growth rates of any country are the result of past significant and differential levels of fertility and mortality: the country's population size as well as its age structure and, as a consequence its degree of demographic aging in one specific year is the consequence of what has occurred during previous decades in the field of natural (fertility and mortality) and migration movement, both inflows and outflows[3].

Considering the above stated, we have decided in the course of this work to carry out - in the first place - a short time reconstruction of the main phases of the demographic transition processes in each one of the Former Jugoslav states by tracking down the evolution of three demographic indicators:

a) Synthetic fertility index or total fertility rate (TFT) which represents the (average) number of (live) births that would be born to a woman – under a certain fertility law – in a hypothesis of zero mortality up to the end of the reproductive age;

b) Life expectancy at birth (E_o, which is an inverse mortality indicator representing the average number of years that a newborn will live according to the mortality law of reference;

c) Migration balance (M_b) calculated as a difference of population size variation observed during the inter-census period and the population variation according to its natural movement for the same time period.

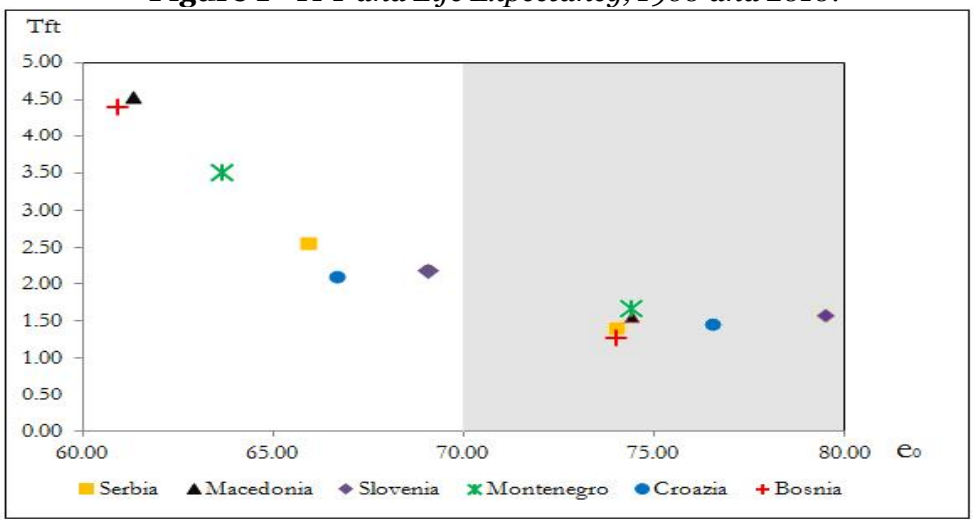
[3] Some Serbian authors (Hadživuković, *Demografska trazicija: društveni okviri i posledice*, Matica Srpska, Novi Sad, 1991; Radović, Lj., *Smrtnost stanovništva: Crna Gora 1878-1978,* Ekonomski fakultet, Institut za društveno ekonomska istraživanja Obod, Podgorica, 1984) have studied different phases of the demographic transition processes of this region and have observed the evolution of mortality as well as fertility levels that led them to estimate how the mortality started to decline, firstly, in the North-West regions in the middle of the 19th century and, later, involved even the rest of the region at the end of the 19th century, while the fertility contraction – the issue regarding which the available data allowed to determine a more accurate time period – began in Slovenia and Vojvodina in the period 1891-1895, later on between 1906 and 1910 in Croatia and Central Serbia, then, in 1926-1930 in Montenegro and, finally, in Macedonia and Bosnia and Herzegovina in the period 1931-1934.

Even though a comparative territorial analysis has not been easy to carry out, due to difficulties related to limited data availability and the existence of fragmented databases, it has been possible to calculate TFT and E_0, for the fifty-years-distanced period (1960 and 2010) in six countries – excluding Kosovo – by using official statistical data provided by respective statistical offices (see Figure 1).

The results we obtained show how a clear dichotomy between the demographic regimes of the North-West countries (Croatia, Slovenia and Serbia) and South ones (Bosnia and Herzegovina, Montenegro and Macedonia) was present in 1960 and supported in those years by different levels of economic development: in fact, in the first group, the TFT had already fallen below the replacement level (Croatia and Slovenia) or was about to fall below the threshold (Serbia) while the life expectancy was higher than 65 years; on the contrary, in the second group, the TFT was higher than 3,5 children per woman and the life expectancy wasn't reaching 65 years of age.

Today, half a century later, the picture changed profoundly. All considered countries, currently located in a post-transitional phase, are recording TFT around 1,5 children per woman and the biggest differences appear to be limited to the conditions of survival in terms of life expectancy at birth that goes from 74,1 years of age in Serbia to 79,5 in Slovenia.

Figure 1 - *TFT and Life Expectancy, 1960 and 2010.*



A quick glance at migration movement, triggered by the Jugoslav implosion, confirms what has already been stressed out in the previous pages and helps us to complete, at least in part, the type of analysis that is being carried out.

The migration balances have been calculated by using the data on the natural movement and the size of the population in the time period 1981-2010.

Table 2 shows that among seven examined areas only Croatia had a positive migration balance, with a value of +79, between 1981 and 1990.

During the years of great political and economic instability (1991-2000), every area recorded negative balances that resulted particularly significant in the

case of Serbia (M_b=-145) and Macedonia (M_b=-168). Certainly, a similar calculus could not be done for the migration balances of Bosnia and Herzegovina and Kosovo since the official data do not cover the entire period, however it is legitimate to assume – considering estimations of some international organization such as UNHCR – that these two areas were the one to report the most intensive outflows.

Finally, in the last decade (2001-2010) all the countries, except Montenegro (M_b=-19) and Kosovo (M_b=-418), reported positive migratory balances that could largely be attributed to return migration.

Table 2

Migration Balance, 1981-2010 (in thousands).

Area	1981-1990	1991-2000	2001-2010
Bosnia-Herz.	-32	n.a.	+28
Croatia	+79	-64	+73
Macedonia	-120	-168	+17
Montenegro	-27	-4	-19
Serbia	-16	-145	+88
Kosovo	-98	n.a.	-418
Slovenia	+10	-8	+51

Source: own elaboration of official data (Bosnia and Herzegovina Institute of Statistics; Republic of Croatia – Central Bureau of Statistics; Statistical Office of Kosovo; Statistical Office of FYR of Macedonia; Statistical Office of Montenegro; Statistical Office of Serbia and Statistical Office of Slovenia).

3. In the Issue of Demographic Aging

If there were no paper space-limitations it would have been possible to describe more thoroughly the phenomenon of the population aging – seen as the increase in the percentage of the elderly population – that is progressively in act in the Jugoslav states as an ineluctable consequence of the demographic transition processes (Di Comite, Bonerba, Girone, 2007).

Leaving, therefore, for another study-occasion the analysis of the paragraph's subject, in this second part of our work we will limit to determine the intensity of the aging process by using a specific dissimilarity index which by considering two different time periods or territories indicates the entity of existing gaps between two cases. This index assumes values that range between 0 and 1: expressing it in terms of age pyramids, it is equal to 0 when two pyramids are identical and is equivalent to 1 when two pyramids do not match in any point (e.g. one pyramid of only males versus one of only females). The advantage of this index is that of being quite simple yet particularly adequate for the type of analysis that we are carrying out.

$$\Theta = \frac{1}{2} \sum_{s} \sum_{x} \left| p_{\alpha(s,x)} - p_{\omega(s,x)} \right| \quad (1)$$

Table 3, created by using 1981 census data and 2010 official estimates, contains dissimilarity indexes for each country that point out how the most intensive age-structure transformations have affected the populations of Bosnia and Herzegovina and Macedonia. Vice versa, the least significant structural changes have occurred in Croatia and Serbia.

Table 3

Dissimilarity Index, 1981-2010.

Area	1981-2010
Croaţia	0,111
Serbia	0,123
Montenegro	0,143
Slovenia	0,145
Macedonia	0,161
Bosnia and Herz.	0,184

Source: own elaboration of official data (Bosnia and Herzegovina Institute of Statistics; Republic of Croatia – Central Bureau of Statistics; Statistical Office of FYR of Macedonia; Statistical Office of Montenegro; Statistical Office of Serbia and Statistical Office of Slovenia).

In other words, these results highlight the well-known relationship that exists between the advancing of the demographic transition processes and the age structure evolution. In the sense that, except for the case of Slovenia, in the areas where the demographic transition was concluded during the '60 (Croatia and Serbia) the structural changes during the decades 1981-2010 have been less significant than those, which proved to be much more emphasized, observed in countries that have completed their transition at the end of the '80 (Bosnia and Herzegovina, Macedonia, Montenegro).

The aforesaid logic, however, does not seem to apply fully to Slovenia which has actually pioneered the post-transitional phase and nevertheless continues to show structural changes of major intensity than those experienced by the Serbian and Croatian population. Indubitably, age structure transformations in Serbia and Croatia appear to be less significant due to their larger demographic size of their, nevertheless it does not make less valid the argument about the specificity of the Slovenian demographic development in comparison to the rest of the area.

Moving forward to the analysis of main age structure transformations in the area under exam, essentially they concern two processes: the decline in the portion of young people from 0 to 14 years – the so-called aging from the bottom of the age pyramid – and, at the same time, the increase in the elderly population age 60 years and over in the total population – the so-called aging from the top of the age pyramid. Considering, in particular, the variation of the elderly population over 60 years old we have proceeded with the calculus of the aging indexes for the period 1981-2010 that revealed how the proportion of persons over-sixty almost doubled, passing from 11,8% in 1981 to 20,4% in 2010 (see

Table 4). The eldest population, with aging index over 23,0%, is the Croatian and Serbian one, while the Macedonian and Montenegrin population, whose elderly population does not exceed 18,0%, result to be the youngest one. The female component appears everywhere to be significantly more older and the extreme case is one of elderly Croatian women that constitute 26,35 of the total Croatian female population.

Finally, it should also be noted that the gap between two genders has been growing over the years which is clearly evident in the Macedonian case where the gap between two genders in 1981 was below 1,0% and rose up to 4% in 2010.

Table 4

Aging Index, 1981-2010.

Countries	1981			2010		
	M	F	MF	M	F	MF
Serbia	12,29	15,09	13,71	20,81	25,67	23,31
Croatia	12,14	17,61	14,96	19,72	26,34	23,14
Slovenia	11,22	16,82	14,1	18,53	25,35	21,97
Bosnia-Herz.	6,91	9,63	8,27	17,89	21,72	19,84
Montenegro	9,11	12,26	10,69	15,42	19,55	17,51
Macedonia	8,93	9,62	9,27	14,67	18,29	16,48
Total	*10,10*	*13,51*	*11,83*	*17,84*	*22,82*	*20,38*

Source: own elaboration of official data (Bosnia and Herzegovina Institute of Statistics; Republic of Croatia – Central Bureau of Statistics; Statistical Office of FYR of Macedonia; Statistical Office of Montenegro; Statistical Office of Serbia and Statistical Office of Slovenia).

4. Concluding Remarks

By observing the intensity of structural transformations in every single Former Jugoslav country, that is linked to their respective demographic transition processes, it was possible to confirm the traditional differences existing between regions which are economically and demographically more advanced (Croatia, Serbia and Slovenia) and those economically less prosperous and, in demographic terms, are relatively more "traditional" (Bosnia and Herzegovina, Macedonia and Montenegro).

The analysis that we carried out reveals also that the economic and political crisis of the '90 did not produce effects able to alter s natural pulsations of the populations and, thus, the demographic order in the area of Former Yugoslavia established prior to its dissolution.

This work is still in progress: in fact, once the final 2011/2013 census data are published it will be possible to review and complete the analysis of the age structure of the Bosnian and Kosovo population.

Finally, it should be noted that the area of Former Yugoslavia is still a place of latent political "conflicts" and fragile inter-ethnic relations that, in a certain measure, could influence the conduct and outcomes of the Censuses as has recently happened in Macedonia and Kosovo.

In light of this, whenever the official data of the Former Jugoslav countries are being analyzed, as well as international statistics based on them, one should always bear in mind that the different quality of population statistics may vary in dependence on the geographical area under exam and the political context in which they are inserted.

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