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Some Demographic Changes in the Population of Montenegro with the Projection of Future Demographic Development

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Abstract

Dramatic demographic changes through which in recent decade's passes Montenegrin society, the consequences arising from the new realities require a serious socio-political engagement. Process of population aging, that began the seventies of the 20th century, represents a significant problem. The process of demographic change was accompanied by an internal migration to major urban centers, primarily Podgorica and Montenegrin coast, leading to emptying the interior of Montenegro. Unfortunately, this development of the population structure of Montenegro opens a series of questions and challenges that would the creators of the future you should put high on the scale of its priorities. In this text we will point out on change of total number of citizens of Montenegro according to the base and chain indexes of 1921-2011 and population in Montenegro 2016–2091 (cohort model projections).

Keywords: Montenegro, demographic changes, demographic development.

Introduction

For almost twenty years now, Central and Eastern Europe have been undergoing the transition from "state-socialist" societies with planned economies to "free" societies with market-oriented economies. The re-organization of social institutions during this transition period, although has not come to an end yet, it had been accompanied with dramatic changes of people's lives. Following the collapse of "communism", they found themselves unprepared for the changes about to happen. Not only did they have to adjust their beliefs and their expectations about almost every single aspect of life; they also found themselves ill prepared for succeeding in a new, unfamiliar society, with qualifications suddenly worth little. Many were exposed to hardship previously unknown to most of them [e.g. unemployment, poverty, social exclusion, limited access to health care depending on financial circumstances] (Hoff, 2014).

The population trends in the Montenegro reflect the country's trends in fertility and mortality and in internal and international migration. These components underlie the changes in the size of our population, its geographic distribution, its age and sex composition, and its racial and ethnic composition. They also influence changes in the country's housing and household composition. The trends examined in this text represent some demographic changes in the population of Montenegro with the projection of future demographic development. We believe that a continued

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discussion about these issues between social scientists and policy makers will be crucial to leverage the benefits of changing population compositions. Design of the structure of the population is beyond the scope of this article, but this is an obvious topic for future research. Namely, life expectancy is increasing almost universally, and the health status of the older population is improving. The importance of investments in education is well known, and education levels are increasing in the great majority of countries. Although the results presented refer to Montenegro, they could be of interest for other regions around the world, including both developed and developing countries.

Analysis of the Montenegro's Demographic Changes

Throughout the twentieth century Montenegro was typical immigration area. Low economic development and vast destruction during the wars in this century are the main cause of the mass emigration. The most common destination for migrants from Montenegro was mainly Serbia, but also other areas of the former Yugoslavia. However, since the mid-sixties, and especially after 1990, Western Europe and some overseas countries are becoming increasingly a destination of Montenegrin emigrants. Montenegro was also the immigration area. In fact, it was more than one type of immigration: colonists, marital, economic. Unfortunately, in the last decade of the twentieth century, the most important are forced migration caused by wars in the former Yugoslavia. With respect to immigration, there were varying intensity; but as a rule, the smaller scale than emigration from Montenegro (Milanović, Radojević, & Škatarić, 2010).

Table 1. Change of total number of citizens of Montenegro according to the base and chain indexes, 1921-2011.

Year	Base index 1921=100	Chain index
1921	100	-
1931	115.64	115.64
1941	135.54	117.21
1948	121.19	89.41
1953	134.87	111.29
1961	151.60	112.40
1971	170.10	112.21
1981	187.68	110.33
1991	197.54	105.26
2003	199.19	100.83
2011	199.15	99.98

Sources: Despotović, Joksimović, and Jovanović. (2015) and Statistical Office of Montenegro (2015).

According to Despotović et al. (2015) indicating that the conducted census is total population of Montenegro recorded a change in growth. On the basis of the calculated base index which took the year 1921 as the base year, the highest growth was in 2003 (99.19 %) in comparison to 1921. Chain indexes show that in the post-war period, the highest growth was in 1953 compared to the previous census from 1948, as well as in 1961 in the comparison to the census from 1953. In the subsequent period, it began to stagnate, i.e. it began to decline. These changes are immanent in societies that are rapidly industrialized and urbanized.

Internal migration of population in Montenegro was very intense in the last two decades too, mainly dominated by population movements from the North to the Central and Southern parts of the country and from rural to urban areas. Reasons for internal migration are the search for better business and life conditions and for employment, esp. in tourism and constructing. As a combined effect of internal and international migration, the population in some municipalities of the Northern region has been continuously declining since 1991, while the capital city Podgorica and municipalities of the South had a constant influx of inhabitants. As a result, the net migration rate for the whole Northern region constantly remained largely negative (-15.5 % as compared to -1.6 % at national level for 1991-2003). From the municipalities which feature an above average (over 10 %) or a very high proportion of the population abroad (over 20 %), most are located in the

Northern region. This mostly rural, ex-industrial region lags clearly behind the two other ones as shown by all socio-economic indicators. As high unemployment is a major driving force of poverty and social exclusion, the region also faces biggest problems with poverty (highest share of population living below the poverty line – EUR 162/month – of 19.2 % and high proportion of cases of multi-deprivation) (Yoon, Kim, & Lee, 2014).

Montenegro's Demographic Changes as a Socioeconomic Predictor

Demographic change is one of the most important determinants of the future economic and social landscape. Many researchers have looked into how changes in the size and the composition of an economy's population influence macroeconomic outcomes. The channels through which demographic changes affect an economy typically include savings and investment behaviors, labor market decisions, and aggregate demand and supply responses. In the medium to long run, both changes in the labor supply and changes in productivity-either viewed as exogenous or caused by demographic changes-could significantly alter an economy's aggregate supply and thereby economic growth, since demographic changes affect the amount and combination by which its factor inputs are utilized. In the short run, demographic transitions are likely to affect aggregate demand, since the amount of consumption and investment would depend critically on structural changes in the population's age-earnings profiles (Grečić, & Kaluđerović, 2012).

Basic assumptions for projections: specific age fertility rate and specific age death rate were assumed to be constant during next century. Absolute specific age net migrations were assumed to be negative and fixed until 2026 (while relative specific age net migration (net migration rate) decreased constantly due to increasing specific age population), and then are equal to zero. Negative net migration rates were evidenced in Montenegro in periods of economic and political instability, particularly at the end on XX century. It is natural to assume that such migration trends will continue as long as instability exists, with declining trends strongly correlated with increasing stability (Baćović, 2007).

Table 2. Population in Montenegro 2016 - 2091 (Cohort Model Projections).

Year	Montenegro's Population	Annual Growth Rate %	Average Annual Increase	Annual Births Increase	Annual Deaths	Annual Natural	CBR	CDR
2016	708.612	0.37	2.566	9.859	7.053	2.806	13.9	10.0
2021	718.257	0.27	1.929	9.596	7.427	2.169	13.4	10.3
2026	725.267	0.19	1.402	9.503	7.861	1.642	13.1	10.8
2031	730.965	0.16	1.140	9.528	8.388	1.140	13.0	11.5
2036	733.803	0.08	568	9.535	8.967	568	13.0	12.2
2041	733.901	0.00	20	9.446	9.427	20	12.9	12.8
2046	731.688	-0.06	-443	9.302	9.745	-443	12.7	13.3
2051	727.901	-0.10	-757	9.183	9.940	-757	12.6	13.7
2056	723.092	-0.13	-962	9.121	10.082	-962	12.6	13.9
2061	717.507	-0.15	-1.117	9.082	10.199	-1.117	12.7	14.2
2066	711.542	-0.17	-1.193	9.023	10.216	-1.193	12.7	14.4
2071	705.556	-0.17	-1.197	8.934	10.132	-1.197	12.7	14.4
2076	699,822	-0.16	-1.147	8.838	9.985	-1.147	12.6	14.3
2081	694.194	-0.16	-1.126	8.758	9.883	-1.126	12.6	14.2
2086	688.438	-0.17	-1.151	8.694	9.845	-1.151	12.6	14.3
2091	682.590	-0.17	-1.170	8.632	9.802	-1.170	12.6	14.4

Source: Baćović (2007).

Zero rates of net migration rely on the optimistic scenario of economic and institutional development in Montenegro in next two decades, despite the fact that demographic components will be more of an obstacle than the source of such trends. If, instead of assuming zero a specific net

migration rate starting in 2026, we assume negative rates to continue, the demographic structure of a population will shift so that unproductive groups dominate even more. At the beginning of 21st century, Montenegro is approaching a post-transition demographic era, characterized by almost an equal crude birth rate and crude death rate, and both slightly higher than 10 per thousand people. The post-transition period should end in the fifth decade, when the "future declining" period starts with a constant decline in population, low fertility rates and aging (Baćović, 2007).

Montenegro's Demographic Changes as a Socioeconomic Predictor

In Montenegro experienced huge declines of the age dependency indices of young people. Growth of the age dependency index of old people was uneven in Montenegro. Large shares of the elderly in the working age category, and their outflow, especially the baby boomers (Stojilković, 2010), will be the most prominent upcoming economic trend in the Montenegro and will affect further growth of the age dependency index of old people. Vojković, Magdalenić, and Živanović, (2014) citing the research of Chawla, Betcherman, and Banerji (2007) suggest that, the Balkans, along with the rest of Eastern Europe, have suffered the effects of a "third demographic transition", which would be the trend of rapid population ageing occurring under the conditions of unprecedentedly slow and weak institutional development and that these would countries could avoid the severe economic consequences if they accelerate their economic transition and undertake long-term policies to combat the ageing of the population.

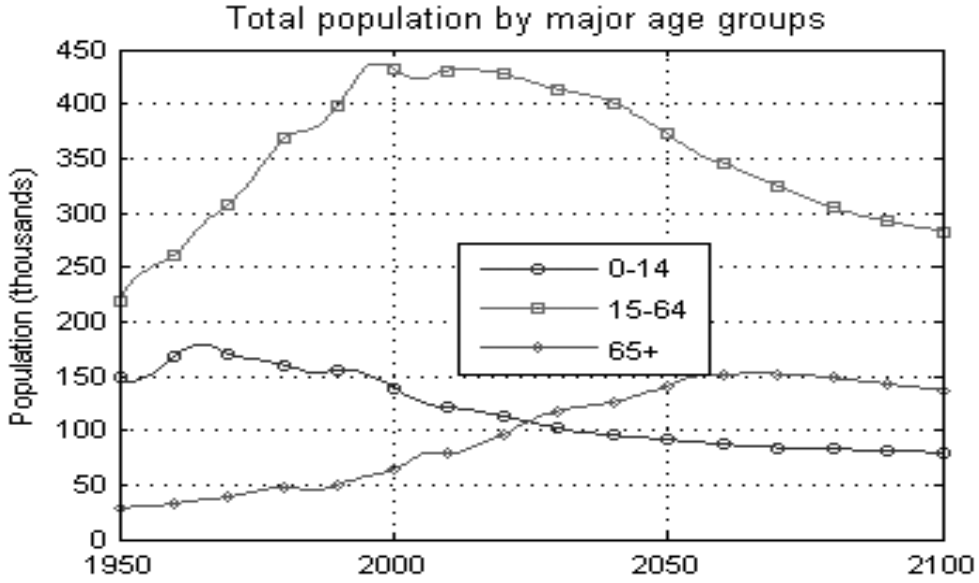

Figure 1. Total Population by Major Age Groups 1950 - 2100 in Montenegro.

Source: Vojković et al. (2014).

In order to avoid irreversible consequences of aging, it is essential to maintain the necessary access to information and awareness of the relationships between population aging and social, economic and natural development. In order to move from knowledge to concrete actions, providing objective scientific information about the specifics of the aging process specifics to decision-makers is of exquisite relevance (Stloukal, 2001).

Our research records based on similar studies Wertheimer - Baletić (2005) indicates that in its overall development policy of Montenegro is already faced with economic, social, health and other consequences of long – term unfavorable demographic processes that are underway and which worsen with time, so that Montenegro must continually adapt their economic, health and social policy of ongoing demographic changes and their implications for the lives of families, individuals and the whole community. Currents and current demographic phenomena and processes intensify not only economic but also a social crisis, a crisis of the family and the general crisis of life in Montenegro (Rajović, & Bulatović, 2015; Rajović, & Bulatović, 2016).

The adjustment of the age structure at the end of the transition takes many decades to complete. A key implication of this slow adjustment process is that population growth continues for many years after replacement fertility is reached if, as is often the case, the population is still relatively young when fertility reaches the replacement level. The tendency of population size to increase after a two-child family size has been reached is referred to as population momentum; it is the consequence of a young population age structure ["young" is defined relative to the age structure in the current life table] (Bongaarts, Buettner, Heilig, & Pelletier, 2008).

Urgent reversal, primarily to the knowledge of the real demographic situation and its economic, social, health and other consequences for the life of the people, the inevitable assumption of our overall development. Because the population is an important factor in the development are component the development of the production potential of the country, not just a consumer. The current demographic situation and future demographic processes that have determined the legality of long-term demographic inertia are becoming the limiting factor in the overall economic and social development.

Conclusion

The 2014 estimate of number of population and demographic indicators of Montenegro: number of inhabitants in Montenegro in mid - 2014 was 621.810; working age population or the population aged 15-64 years is 68 % of the total population; in Montenegro, on the basis of natural increase per 1000 inhabitants, the population increases annually by 2.4; the 1000 population per year made 5.7 marriages, which is the rate of marriages, and the divorce rate is 0.9; the rate of migration in Montenegro is 6.8 , which means that for each of 1.000 inhabitants 6.8 persons changes their place of residence within the borders of Montenegro and life expectancy at birth in 2014 was 76.4 years (Statistics, 2014).

According to Lukić et al. (2012), the current global responses to adverse demographic trends in the modern world can be applied to the Western Balkans in the forms of different measures. For example, states can apply measures to extend life expectancy, or measures that restrict access to birth control, or measures to increase immigration, or measures that seek to increase the fertility of positive incentives. European policy wants to support local authorities in areas affected by depopulation by helping the Structural Funds. Specifically, funds are helping small and medium enterprises, rural cooperatives, protect regional nature and culture, develop skills and support equal opportunities. Western Balkan countries want to integrate into the European Union. For them, union experiences initiate inventions of political and financial solutions to fight against depopulation.

Vojković et al. (2014) conclude by referring to studies by Chawla at al. (2007), Bloom, Canning, and Fink (2011), Mendryk and Dylon (2013) that, *"yes in the long run, the population ageing will undoubtedly present a threat to economic growth, because it leads to a decline of working-age population and ageing of the labour force. Ageing of the workforce can affect its productivity because older workforce cannot produce at the same level of output a younger one could, though the more recent findings on the issue are assorted. It is necessary to constantly supervise the situation and introduce relevant policies to combat the effects of population ageing. Handling the situation on the labour market requires reforms of the pension system, educational reforms, policies referring to employment of old workers, appropriate migrations management and structural adjustments of the global economic system".*

Conflict of Interest Statement

The authors declare that they do not have any conflict of interest.

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