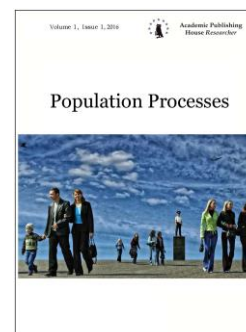


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## Population of Montenegro (2020 and Historical) and Montenegro Population Forecast (2020–2050)

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### Abstract

Our research indicates that a considerable differentiation of Montenegrin territory, as well as clear divisions, have been established in the essential features of its demographic development. Therefore, in the interests of overall progress, more balanced regional development and population distribution are necessary. Population projections are an important input to policy making at the local, regional, national and world levels. They become part of policy formulation and the decision – making process, which is why the forecaster’s principal aim should be to produce the most accurate forecasts possible. This text will try to show the Population of Montenegro (2020 and historical) and the Population Forecast of Montenegro (2020–2050). In this review we will be based on data United Nations, Department of Economic and Social Affairs, Population Division (2020).

**Keywords:** Montenegro, population, forecast.

### 1. Introduction

For the users of population projections it is very important to have at least some rough understanding about the uncertainty around the numbers they are using for their specific planning tasks. It makes a big difference for many applications whether planners can count on secure trends that will take a certain path with high probability or whether they have to make provisions for the contingency that the trends turn out to be quite different (see [Zeng et al., 2013](#); [Ramizer, 2015](#); [Lutz et al, 2017](#)).

As Keyfitz (1981) argued, “Demographers can no more be held responsible for inaccuracy in population forecasting 20 years ahead than geologists, meteorologists or economists when they fail to announce earthquakes, cold winters, or depressions 20 years ahead. What we can be held responsible for is warning one another and our public what the error of our estimates is likely to be.” Whilst future errors are not guaranteed to resemble those of the past, past errors can at least provide a ballpark guide to uncertainty where there is reasonable stability over time in error distributions ([Smith, Sincich, 1988](#)). In this review, we will limit ourselves to the Population of Montenegro (2020) and the Montenegro Population Forecast (2020–2050).

The current population of Montenegro is 628,105 as of December 2020, based on Worldometer ([www.Worldometers.info](http://www.Worldometers.info)) elaboration of the latest United Nations data. Montenegro 2020 population is estimated at 628,066 people at midyear according to UN data. Montenegro

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population is equivalent to 0.01 % of the [total world population](#). Montenegro ranks number 168 in the list of [countries \(and dependencies\) by population](#). The population density in Montenegro is 47 per km<sup>2</sup> (121 people per m<sup>2</sup>). The total land area is 13,450 km<sup>2</sup> (5,193 sq. miles) 67.6 % of the population is urban (424,767 people in 2020) the median age in Montenegro is 38.8 years.

## 2. Methodology

The core of the methodological method used in this research is an analytical and synthetic method. The analytical method considered the individual dimensions of the subject of the research, and the synthetic method of the whole, that is, the interconnections between objects and proposed measures deriving therefrom (see [Bulatović et al, 2018](#); [Nedaikhib, 2019](#); [Plotnikova, Zavorodnia, 2019](#))

## 3. Results and discussion

Montenegro is a Mediterranean country with a turbulent history. After World War II, from the Kingdom of Yugoslavia (1918–1945), post-war Yugoslavia (1945–1990) was reorganized as a federation of six socialist republics, including: Bosnia and Herzegovina, Croatia, Macedonia, Montenegro, Serbia, and Slovenia. At that time, industrialization caused migration from rural areas to cities, which caused the intensification of the process of urbanization and the abandonment of agricultural practices. After 1950, agricultural collectivization disappeared and farmers moved from subsistence to market – based production in the following decade (1960s). Then the steel and aluminum industry, as well as the energy sector, became extremely important as the state forced the development of transport infrastructure. The end of the 20th century was characterized by the failure of economic reform in relation to the open market, and a great decline in the economy occurred in all socialist republics of Yugoslavia. Then the state disintegrated ([Mijušković et al, 2020](#)). The Federal Republic of Yugoslavia was a state created on April 27, 1992, by a decision of the Assembly of the SFRY, as a joint state of the Republic of Serbia and the Republic of Montenegro. It existed until February 2003, when a state union called Serbia and Montenegro was created. In 2006, Serbia and Montenegro became independent states.

**Table 1.** Population of Montenegro (2020 and historical)

Year	Population	Yearly % Change	Yearly Change	Migrants (net)	Median Age	Fertility Rate	Density (P/Km <sup>2</sup> )	Urban Pop %	Urban Population	Country's Share of World Pop	World Population	Montenegro Global Rank
2020	628,066	0.01 %	79	-480	38.8	1.75	47	67.6 %	424,767	0.01 %	7,794,798,739	168
2019	627,987	0.03 %	178	-480	37.9	1.72	47	67.3 %	422,615	0.01 %	7,713,468,100	168
2018	627,809	0.04 %	246	-480	37.9	1.72	47	67.0 %	420,403	0.01 %	7,631,091,040	168
2017	627,563	0.05 %	299	-480	37.9	1.72	47	66.6 %	418,113	0.01 %	7,547,858,925	167
2016	627,264	0.05 %	308	-480	37.9	1.72	47	66.3 %	415,772	0.01 %	7,464,022,049	166
2015	626,956	0.09 %	536	-622	37.7	1.71	47	65.9 %	413,376	0.01 %	7,379,797,139	166
2010	624,275	0.25 %	1,577	-137	36.4	1.82	46	64.1 %	400,419	0.01 %	6,956,823,603	166
2005	616,391	0.09 %	566	-1,600	35.0	1.85	46	62.5 %	385,027	0.01 %	6,541,907,027	165
2000	613,559	-0.22 %	-1,372	-4,318	34.4	1.91	46	58.5 %	359,202	0.01 %	6,143,493,823	162
1995	620,418	0.18 %	1,083	-4,050	32.2	2.05	46	53.4 %	331,085	0.01 %	5,744,212,979	161
1990	615,002	0.03 %	197	-5,993	29.8	2.11	46	48.0 %	295,431	0.01 %	5,327,231,061	159
1985	614,016	1.12 %	6,652	-400	28.3	2.21	46	42.3 %	259,884	0.01 %	4,870,921,740	159
1980	580,754	0.94 %	5,298	-1,480	26.7	2.31	43	36.8 %	213,791	0.01 %	4,458,003,514	159
1975	554,262	1.30 %	6,913	-400	24.9	2.62	41	31.6 %	175,266	0.01 %	4,079,480,606	156
1970	519,696	-0.53 %	-2,824	-10,755	24.1	2.89	39	26.9 %	139,552	0.01 %	3,700,437,046	156

1965	<b>533,814</b>	1.84 %	9,280	-400	23.5	3.42	40	22.6 %	120,459	0.02 %	3,339,583,597	153
1960	<b>487,413</b>	1.89 %	8,724	-400	22.9	3.80	36	18.8 %	91,576	0.02 %	3,034,949,748	153
1955	<b>443,795</b>	2.37 %	9,811	2,000	22.2	4.35	33	15.5 %	68,854	0.02 %	2,773,019,936	153

Source: United Nations, Department of Economic and Social Affairs, Population Division (2020) – World Population ([www.Worlometer.info](http://www.Worlometer.info))

As they emphasize Mijanović et al (2017) Demographic movements in Montenegro are the result of natural and mechanical movements conditioned by various factors, but the crucial ones were: for the natural movement downward trend in the birth rate, which started in the 70's in the city and later in rural areas, and for the mechanical movement, industrialisation was crucial, industrialisation which from the 60's to the 80's was intense, causing mass migration from villages to the city, as well as economic conditions, which, unfortunately, have never been at such a level to keep the population within the Republic, so, besides interior, external migration from Montenegro was always present to a greater or lesser extent. This led to the ageing of population of Montenegro, whose population is at the stage of demographic ageing at the transition to deep demographic age, especially in the northern region, which is already at the stage of deep demographic age“.

Compared to 1955, the population of Montenegro increased from 443,795 inhabitants to 628,066 inhabitants in 2020, with an annual change of 2.37 % to 0.01 %. In the same period, the average age of the population ranged from 22.2 to 38.8 years, migrants (net) from 2,000 to – 480, and the fertility rate from 4.35 to 1.75. The population density increased from 47 inhabitants/km<sup>2</sup> in 1955 to 47 inhabitants/km<sup>2</sup> in 2020, and the urban population increased in the same period from 68,854 or 15.5 % to 624,767 inhabitants or 67.65 in the total population. The share of Montenegro in the world population decreased in the same period from 0.02 % to 0.01 %, while the global ranking of Montenegro ranged from 153 in 1955, to 168 in 2020 (Table 1) (see Rajović, Bulatović, 2016; Rajović, Bulatović, 2018; Bulatović et al, 2018; Bulatović, Rajović, 2018).

There are consequences that are more negative in Montenegro and they gained characteristics of deep processes and tendencies also expected in the future. “ Some of them are the following: emptying of mezzo and micro areas in back of the Coastal region, karst planes in the Middle and hilly and mountainous areas, and plains in the Northern region, which are of big importance in changed geopolitical relations in Montenegrin surrounding; due to intensive turning of agricultural areas into settlements, and the traffic infrastructure, each year a number of hectares of rich land are lost. Nobody realizes their obligation to replace these by cultivating some other un-productive areas; all over Montenegro abandoned gardens and fruit-gardens and large unmoved meadows could be found; agglomerate process in Coastal region along the coast especially from Igalo to Kamenari and the most attractive part in Budva Riviera (from Budva to Becici); also, metropolization of the capital Podgorica where 22,00% of the Montenegrin population lived in 2003; semi – urbanization results in towns with poor life conditions, without water supply or sewerage system and so on; illegal construction of various structures that damaged the landscape and ambient conditions in Montenegro” (Lješević, Doderović, 2020).

The World Bank started to produce independent population projections in 1978. These were always meant primarily for internal use in the Bank's development planning and were published as part of the series of World development reports. After 1984, the World Bank projections were revised approximately every two years and in most cases only one variant was published but with a long time horizon to 2150. Around 1995, the World Bank stopped publishing separate projections but presumably continued to use them for internal purposes for a number of years. The Washington – based Population Reference Bureau (PRB) publishes independent world population projections (population size only and a single scenario) every year as part of its annual World population data sheet. Since 2000 it has published projected population sizes for all countries and territories of the world for 2025 and 2050. In some cases the projections are identical to those of the UN and the US Census Bureau (USCB), but in some cases different country-specific information is used (Lutz, Samir, 2011).

**Table 2.** Montenegro Population Forecast

Year	Population	Yearly % Change	Yearly Change	Migrants (net)	Median Age	Fertility Rate	Density (P/K m <sup>2</sup> )	Urban Pop %	Urban Population	Country's Share of World Pop	World Population	Montenegro Global Rank
2020	<b>628,066</b>	0.04 %	222	-480	38.8	1.75	47	67.6 %	424,767	0.01 %	7,794,798,739	168
2025	<b>627,144</b>	-0.03 %	-184	-480	40.1	1.75	47	69.3 %	43 4,519	0.01 %	8,184,437,460	170
2030	<b>624,059</b>	-0.10 %	-617	-480	41.3	1.75	46	70.9 %	442,718	0.01 %	8,548,487,400	171
2035	<b>618,423</b>	-0.18 %	-1,127	-480	42.4	1.75	46	72.6 %	448,985	0.01 %	8,887,524,213	172
2040	<b>610,259</b>	-0.27 %	-1,633	-480	43.4	1.75	45	74.2 %	452,905	0.01 %	9,198,847,240	172
2045	<b>600,227</b>	-0.33 %	-2,006	-480	44.2	1.75	45	75.7 %	454,493	0.01 %	9,481,803,274	172
2050	<b>589,333</b>	-0.37 %	-2,179		44.8	1.75	44	77.1 %	454,345	0.01 %	9,735,033,990	172

Source: United Nations, Department of Economic and Social Affairs, Population Division (2020) – World Population ([www.Worldometer.info](http://www.Worldometer.info)).

According to [Table 2](#), the population forecast of Montenegro will be reduced from 628,066 (2020) to 589,333 inhabitants (2050), ie the annual change will range from 0.04 % to – 0.37 %. The average age will increase from 38.8 years to 44.8, and the fertility rate, according to the forecast in the same period, will not change and will amount to 1.75. The average population density will be reduced from 47 inhabitants/km<sup>2</sup> to 44 inhabitants/km<sup>2</sup>, while the total urban population of Montenegro according to ([www.Worldometer.info](http://www.Worldometer.info)) will be increased from 424,767 inhabitants or 67.6 % to 454,345 inhabitants or 77.1 %. The share of the state of Montenegro in the world population will remain at the same level of 0.01 %, and the global ranking will change from 168 in 2020 to 172 in 2050 (see [Rajović, Bulatović, 2016](#); [Bulatović, Rajović, 2018](#)).

Acknowledging the level of uncertainty associated with predicting future trends, a number of projection variants are produced, labeled as “low”, “medium” and “high”. In the 2010 revision of the world population prospects, the UN projections are based on a stochastic projections methodology. 100,000 trajectories of future fertility are drawn for each country and the median values determine the medium projection variant which has been used for all the analysis presented in this paper (see [Poot, Pawar, 2013](#)). Mortality is based on extrapolation of life expectancy increases up to the highly developed country “ceiling”, while projected levels of net migration are based on past levels and the likely policy stance of each country. Projected levels of net migration are generally kept constant up to 2050 after which it is assumed that net migration will decline. The implication of this is a downward trend in global population redistribution through migration, which seems incongruent with the long-term increase in population mobility generally and temporary migration specifically (see [Hugo, 2009](#); [Poot, Pawar, 2013](#)).

#### 4. Conclusion

Balkan countries face the same challenges of population ageing as the rest of the world. In most Balkan countries the trends in population ageing are similar to those in developed countries even though their socio-economic development (except Greece) is far below ([Aleksandrova, Velkova, 2003](#)). Montenegro is among the countries that face the most serious challenges related to the process of population ageing and this problem should be among the priorities of public policy (see [Rajović, Bulatović, 2016](#)). In some Balkan countries (Albania and Turkey) the trends in population ageing are similar to those in developing countries – they still have younger age structure, lower rate of increase of the proportion of people aged 65 years or over, lower life expectancy and significantly higher fertility rates ([Aleksandrova, Velkova, 2003](#)).



Our research records are based on similar research Nejašmić and Njegač (2001) indicates that a considerable differentiation of Montenegrin 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. Montenegro 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 (see Rajović, Bulatović, 2016).

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