

## A STUDY REGARDING ROMANIA'S DEMOGRAPHICS

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**Abstract:** *In the writing of this article, we started from the idea that, in recent years, they have constantly mentioned that Romania's population has decreased a lot and that population aging is very accentuated. To analyse the evolution of the population in our country, we started with three indicators that influence demographic evolution, namely: natural growth of the population, infant mortality, and population migration. The authors of this article have come to the conclusion that only in the last year (2021), demographic aging has greatly increased, the elderly population of 65+ years (3,835 thousand people) exceeded by 621 thousand people the young population in the age group 0-14 years, which currently represents 3,214 thousand people in Romania's population, and that the average age of the Romanian population reached 42.0 years. Following the analysis of the statistics data, the authors of this article believe that demographic aging in Romania is mainly a consequence of the negative natural population increase caused by the emigration of the young population capable of procreation.*

**Key words:** *population, evolution, decrease, demographic ageing*

### INTRODUCTION

In this article, we analyse, based on statistical data, the situation regarding the evolution of the resident population in Romania. We make a comparison with other states of the world and with other countries in the European Union to highlight the place Romania occupies in demographic evolution because the perspective of population growth, population structure, a reserve of labour and many other statistical categories are relevant to the economic future of our country and not only. [5,6,7]

Statistical data show that, in the last years, the resident population of Romania has continuously decreased. The accentuated decrease is determined, primarily, by the natural increase of the population that, in Romania, has been, for 30 years negative, an aspect that has led to the accentuated aging of the population, especially in the rural areas of Romania (the age category of the 65+ year old population, compared to the young population of 0-14 years, is constantly increasing). [3,4,8]

In 2020, life expectancy at birth reached 76.11 years, increasing by 0.14 years compared to the previous year, women having an average life of 7.21 years more than men. Due to the differentiated level of mortality on registered residents and in 2020, the average life of the population in the urban environment was 3.03 years superior to the one in the rural area [12].

For an easier understanding of the study undertaken by the authors of this article, we have structured and presented the main provisions of the methodology used by the National Institute of Statistics and by Eurostat. Thus, the data regarding demographic phenomena were obtained by processing the information included in the statistical bulletins issued by the NIS and Eurostat.

## MATERIALS AND METHODS

The methodology used in the research consists of collecting statistical data, processing them, interpreting them graphically, and analysing and synthesising information on the evolution of agriculture from the literature in the field.

## RESEARCH RESULTS

In 2020, the population of the world was estimated at 7.8 billion inhabitants. The countries with the largest populations are China (1,439 billion inhabitants), India (1,380 billion inhabitants), the United States (331 million inhabitants), Indonesia (274 million inhabitants) and Pakistan (221 million inhabitants). [15]

The countries with the largest population increase in absolute figures in 2020 compared to 2019 were India, China, Nigeria, Pakistan and Indonesia. Every second, 4.2 people are born and 1.8 people die.

Romania ranked seventh in the European Union in terms of resident population at the beginning of 2020. The country with the largest population in the EU is Germany (83.166 million inhabitants), and the country with the smallest population is Malta (514,600 inhabitants). Until 2005, when the first former communist countries entered the EU, Germany was the Member State with the worst decrease and aging of the population. [3].

In Romania, the population decreases dramatically. The main reason for the decrease of the population is the decrease of the number of new-borns – Romania has reached an annual number of new-borns similar to that of 1876-1886, when the total population of the country was between 4.4 and 5.7 million people, respectively. [1,2]

On January 1, 2021, the resident population (*including all the people, Romanian, foreign or without citizenship who have had their usual residence in Romania for a period of at least 12 months*) was 19,186,000 people, decreasing by 142.600 people compared to January 1, 2020. The resident population in the urban area was 10,286,000 people, 1.6% less than on January 1, 2020. The female population on January 1, 2021, was 9,795,000 people, 0.7% less than at the same date of the previous year. [14]

The main cause of this decrease is the *negative natural increase*. In 2020, the natural increase of the resident population continued to be negative (-120,300 people), its negative values being also registered at territorial level, in all the regions of the country. It continued to be negative in 2021, the number of deceased people exceeding the number of new-borns with 120,273 people.

The urban population, as well as the female population, in 2021, represent the majority (53.6% and 51.0%, respectively).

The population demographic aging index represents the number of elderly people (65+ years of age) per 100 young people (under 15 years of age).

In Romania, *demographic aging* is an ongoing phenomenon (*rising to 123.9 elderly people per 100 young people under 15 years of age*), the gap between the 65-year-old population and the young population of 0-14 years reaching 715,000 people (3,707,000 compared to 2,992,000 people), increasing compared to 630,000 people on January 1, 2020.

On January 1, 2022, the highest share of the total population was that of the age group 50-54 years (8.9%). Among male people, the share of this age group was 9.1%, and among female people, 8.7%. The share of the group 0-4 years of age was 4.6%, younger than that of 5-9 years (4.8%), 10-14 years (5.1%) and 15-19 years (5.1%) groups.

*The ratio of demographic dependence* is the ratio between the number of people under 15 and over 64 years of age (who rely on others) and the working population (15-64

years of age) per 100 people. We find that this indicator *has increased in Romania from 53.0 to 53.6 young and elderly per 100 adults*. [15]

Overall, the natural increase of the population in Romania has kept negative (-6,988). For example, in September 2021, the number of deceased people was 1.4 times higher than that of the new-borns. [13]

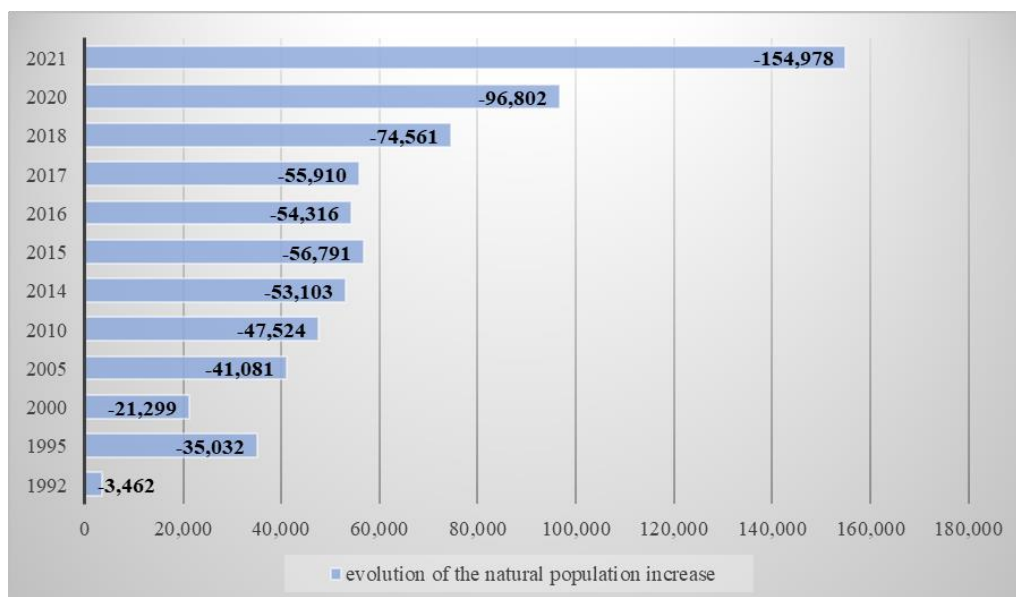
Statistical data show that the average age continued to increase, reaching the level of 42.2 years on January 1, 2020. An acceleration of the demographic aging process can be noted, highlighted by keeping the share of people in the age group 0-14 years at the same time with the increase of the share of the elder population (65+ years), a phenomenon highlighted by the demographic aging index. It increased from 81.0 (on January 1, 2005) to 120.8 elderly people per 100 young people (on January 1, 2020). [15]

Infant mortality rate is defined as the ratio between the number of deaths under one year and the number of live-born in the reference year, and the resulting rate is expressed per 1,000 live-born.

**Table 1.****Natural evolution of the population**

Year/month	live-born	Deceased	Natural increase	Deceased under one year
<b>2020</b>				
January	17,649	24,097	-6,448	89
February	15,749	22,216	-6,467	113
March	15,775	22,939	-7,164	82
April	15,672	21,980	-6,308	91
May	16,783	21,051	-4,268	83
June	17,007	21,067	-4,060	85
July	18,514	22,480	-3,966	101
August	17,324	23,350	-6,026	102
September	18,718	21,842	-3,124	90
October	17,603	27,689	-10,086	102
November	15,754	35,131	-19,377	90
December	15,301	34,809	-19,508	79
<b>2021</b>				
January	13,852	28,390	-14,538	86
February	11,816	23,720	-11,904	83
March	13,606	29,899	-16,293	91
April	12,664	29,518	-16,854	82
May	13,524	24,527	-11,003	60
June	14,877	21,337	-6,460	75
July	16,452	21,028	-4,576	74
August	18,332	20,788	-2,456	87
September	17,749	24,737	-6,988	92
October	15,613	44,595	-28,982	97
November	14,819	38,653	-23,834	78
December	16,550	27,640	-11,090	96

Source: NSI release no. 31 / 10 February, 2022 [9, 10, 11]



**Figure. 1 Evolution of the natural population increase**

Source: NSI, [1] [14],

Apart from the natural evolution of the population, however, there is also the phenomenon of emigration, which is increasing, thus contributing to the diminution of the resident population of Romania.

The balance of long-term temporary international migration was negative (-28,825 people). Romania continues to be an emigration country, the phenomenon of emigration being the second main cause of the population decrease of the country. The balance of international migration in 2020 was negative, the number of emigrants exceeding the number of immigrants with almost 29,000 people.

During 2020, men emigrated to a larger proportion than women (54.1%). Among immigrants, men were the majority (60.5%). [14]

## CONCLUSION

It is estimated that the population of the globe will reach 9.700,000,000 inhabitants in 2050 and 10.900,000,000 inhabitants in 2100.

The biggest increases in the population between 2020 and 2050 will take place in India, Nigeria, Pakistan, Congo, Ethiopia, Republic of Tanzania, Egypt, Indonesia, the United States, Angola, Uganda and Niger. Around 2027, it is estimated that India will overcome China, becoming the most populated country in the world.

In Romania, the resident population is continuously decreasing and, at the same time, the population with their domicile in Romania decreases at the same rate as a result of the aging of the population.

In this situation, we are witnessing a completion of the labour force in Romania from these countries, because more and more companies are recruiting foreign labour from Asian countries that, in many cases, become residents in Romania.

It is estimated that the number of young residents, of pre-school and school age, will continue to have a downward trend and reaching, in 2030, 3,120,000 people, and, in 2060, to only 2,150,000 people, compared to 3,490,000 at present (2020/2021 school year).

Being concerned about the demographic evolutions of the future, the European Commission has adopted the Communiqué titled "The demographic future of Europe –

turning a challenge into opportunity" emphasising the following main political orientations:

- promoting demographic revival through better conditions for families and improving the reconciliation of professional life with the family;
- promoting employment through more jobs and the extension and increase of the quality of life;
- a more productive and more dynamic European Union to increase the productivity and economic performance by investing in education and research;
- receiving and integrating migrants in the EU;
- ensuring the sustainability of public finances to guarantee adequate pensions, social aid, medical assistance and long-term care services.

As for migration, the European Commission has presented a European agenda of migration that draws immediate measures to respond to the influx of migrants and asylum seekers and provide for a series of policy options in terms of long-term migration to the EU. The agenda recognizes that a reaction capacity is required to humanitarian challenges, but aims to increase the number of returns of illegal migrants, while continuing to provide the right to request asylum.

The agenda sets four levels of action of EU migration policy, namely:

- a new policy on legal migration – maintaining the EU as an attractive destination for migrants, in particular by re-prioritising migrants' integration policies, by managing migration through dialogue and partnerships with third countries and by modernizing the EU Blue Book system in the case of people with higher education from outside the EU;
- reducing incentives for illegal migration – returning migrants;
- border management – supporting the capacity of third countries to manage their borders;
- solid asylum policy – to ensure a complete and coherent implementation of the common European asylum system.

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