

DEPOPULATION AND ITS SOCIO-ECONOMIC CONSEQUENCES. ROMANIA CASE STUDY*

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Abstract

Depopulation is a characteristic phenomenon for the Central and Eastern European space that gained in amplitude especially after 1990 in the context of political-ideological changes that affected the states of this region and that also led to changes in demographic behavior. These consisted, on the one hand, in the abolition of pro-natalist policies from the communist period and, on the other hand, in the intensification of emigration flows in connection with the economic and social discrepancies and the free movement of persons. In this context, the paper analyzes the evolution of Romania's population in a global and European context, the factors that determined its sharp population decline, as well as its economic and social consequences. Also, the demographic characteristics of Romania and future trends regarding the peculiarities and dynamics of the Romanian population are highlighted.

Keywords: depopulation, migrations, inactive population, Romania.

1. Introduction

Major political changes induce profound changes at the level of all economic and social components, with major consequences also in terms of demographics. This is the case of Central and Eastern Europe, which in the 1980s went from communist-type political systems, inspired by Soviet-Stalinism, to democratic systems based on liberalism and competitive economics. De-urbanization, deindustrialization, and tertiarization, along with the increasing impact of globalizing flows, are the phenomena that accompanied the economic reforms of the 1990s–2000s and generated major changes in social behavior, and also in demographics. Social gaps widened as unemployment and difficult retraining of the labor force grew, which accentuated poverty, favored emigration for work, and decreased the birth rate, contributing to depopulation.

A forecast published by the United Nations Organization (2021) places Romania in fourth place among the countries with the largest forecasted population decline in the world, in the period 2020–2100, while the first place is occupied by the Republic of Moldova, the other state belonging to the Romanian ethnic block. Also, forecasts for Romania based on the average evolution of fertility indicate a sharp decrease in the population in the next eight decades by 43.23%, the country reaching 10,700,000 inhabitants, compared to 19,053,815 at the 2021 census, 20,121,641 to that from 2011, and 23.2 million inhabitants in 1989 (National Institute of Statistics, 2018). On the other hand, in the Republic of Moldova, the same forecasts indicated a dramatic decrease in the population by 53.84%, from 4,021,000 inhabitants in 2020, to only 1,856,000 inhabitants in 2100.

In this context, the paper aims to highlight and analyze the factors that contributed to the sharp decrease in the population, as well as the social impact of depopulation and the demographic and social risks arising from this phenomenon.

2. Methodology

The methodological approach is based on a comparative analysis of the depopulation phenomenon, of the factors that determined this process, and also of the social and economic consequences that the phenomenon of depopulation determines, using official statistical data that highlight the demographic trends in Romania, in the regional and international context. Based on the references and previous research of the authors, the fields and intensity of the impact of depopulation and the short-, medium-, and long-term consequences that this process has in economic and social terms were evaluated.

The results obtained were correlated with the legislative framework in Romania and other European states regarding the retirement age, which allowed the development of forecasts and the advancement of proposals regarding the optimization of the ratio between active people, those employed on the labor market, and those inactive.

3. References and database

A current subject of wide interest throughout Europe, the phenomenon of depopulation has been the subject of many studies, being approached from different perspectives, both causally and in terms of the consequences it causes. That is why, in our study, we propose a selective approach to the international and Romanian literature focused on depopulation both from a theoretical-methodological point of view and from the perspective of cause-effect relationships.

The changes in traditional demographic behavior in the context of increasing globalizing flows and the transition to global consumer culture were analyzed by Rodriguez-Soler, Uribe-Toril and Valenciano (2020), Walaszek and Wilk (2022), Hospers and Reverda (2015) from the perspective of the effective management of demographic decline in Europe, or by Fradejas-García, Molina and Lubbers (2023) regarding the impact of migrant entrepreneurship on local economies. A particular case in this regard is the demographic decline of rural communities, more vulnerable to the phenomenon of depopulation in the context of limited occupational diversification. Studies in this sense were carried out by Bánski (2019) on rural areas in Central and Eastern Europe, by Paniagua (2023) on the viability of developing ‘smart villages’ as cores for the revitalization of depopulated rural areas, by Márton (2022) regarding the control of depopulation as a result of migration, as well as the depopulation of rural communities and the abandonment of agricultural land, a characteristic phenomenon for Romania as well.

The evolution of demographic behavior in the Central and Eastern European area, which bears the imprint of the legacy of communist-type political systems, occupies a distinct place in the scientific literature that studies the phenomenon of depopulation and its consequences. Thus, Andrei and Branda (2015) analyze the consequences of pro-natalist policies in communist Romania on subsequent demographic evolution, and Mitrică *et al.* (2019) highlight the main changes in the dynamics and demographic structure of the rural population. A similar analysis is made by Nikitović (2022) regarding the regional particularities of depopulation in Serbia, while Nancu, Guran-Nica and Persu (2010), and Nancu, Persu and Damian (2011) focus their analysis on the evolution and territorial distribution of the Romanian rural population, respectively on the demographic aging affecting rural communities in contemporary Romania. In turn, Mitrică *et al.* (2019 and 2020) analyze regional disparities regarding immigration and social and technological development in Romania, and Crețan *et al.* (2017) highlight the relationship between foreign direct investment and social and demographic risks.

Also, the analysis of demographic peculiarities on a local scale is the subject of studies such as those developed by Kazimierczak and Szafrńska (2019) on the city of Łódź; Stoica *et al.* (2020) on the differences and particularities of the development potential of small cities in Romania; Drăghici *et al.* (2022) on the specificity of demographic dynamics in a fragile ecosystem (case study on the Danube Delta); Persu (2017) on demographic changes in the rural areas of the Southern Carpathians.

Problems deriving from service coverage as a result of internal migrations and the depopulation of some spaces were highlighted by Begu *et al.* (2022), who analyze the consequences of the phenomenon of migration in Romania; by O'Brien *et al.* (2022) on the impact of internal migrations on rural areas in the Romanian Banat; by Tabac and Gagauz (2020) regarding migration between Romania and the Republic of Moldova, or by Petrescu-Mag, Petrescu and Azadi (2022) regarding the social transformations in the Romanian rural space. A distinct problem is the analysis of rural-urban relations against the background of depopulation and migratory flows and, in particular, the evolution of peri-urban spaces (Grigorescu *et al.*, 2022; Wiśniewski *et al.*, 2024).

The elaboration of this study was based on the data provided by the United Nations Organization, the European Commission through Eurostat, respectively by the National Institute of Statistics of Romania, through the statistical yearbooks and the population censuses of Romania from 2011 and 2021.

4. The evolution of Romania's population in the global and European context

According to the above-mentioned report (United Nations, 2022), two compact areas of demographic decline¹ were taking shape worldwide: East and Southeast Asia, where the leading place was occupied by China, followed by Japan, Thailand, Republic of Korea, and Sri Lanka, respectively the Eastern half of Europe (including here the two South Caucasian states with a majority Christian population – Armenia and Georgia). If in the first case, the essential role was played by policies to stop demographic growth (China, Thailand, Sri Lanka) or Western-type demographic behavior (Japan, Republic of Korea), the population decline in the second case was mainly based on the abolition of pro-natalist policies from the communist period and the transition to Western-type demographic behavior, associated in many cases with emigration flows. At the opposite pole, there was a compact area of states in tropical Africa, which concentrated 28 of the top 30 states with the largest estimated population increases in the next eight decades, to which were added, as exceptions, Iraq and the Palestinian territories (Figure 1).

The political-ideological discontinuity of 1989, associated with the economic developments that succeeded it, generated profound changes in the demographic evolution of the states located East of the former 'Iron Curtain'. This was superimposed on the overall demographic behavior specific to states with a strongly developed economy, as well as on the phenomenon of increasing globalizing flows, which preceded the collapse of political-ideological barriers (Permanyer and Smits, 2020). The political-ideological discrepancies were thus replaced by economic discrepancies, a fact that outlined, on the one hand, *states of immigration*, corresponding to the 'old European Union', respectively Western, Southern and Northern

1 There were also a few island exceptions in the top 30 states with sharp population declines predicted for 2020-2100: three in Latin America (Cuba, Jamaica, Trinidad-Tobago) and one in Western Europe (Portugal).

Europe, and *states of emigration*, generally corresponding to the new members of the Central-Eastern part of the Continent, which belonged to the Communist Bloc before 1989.

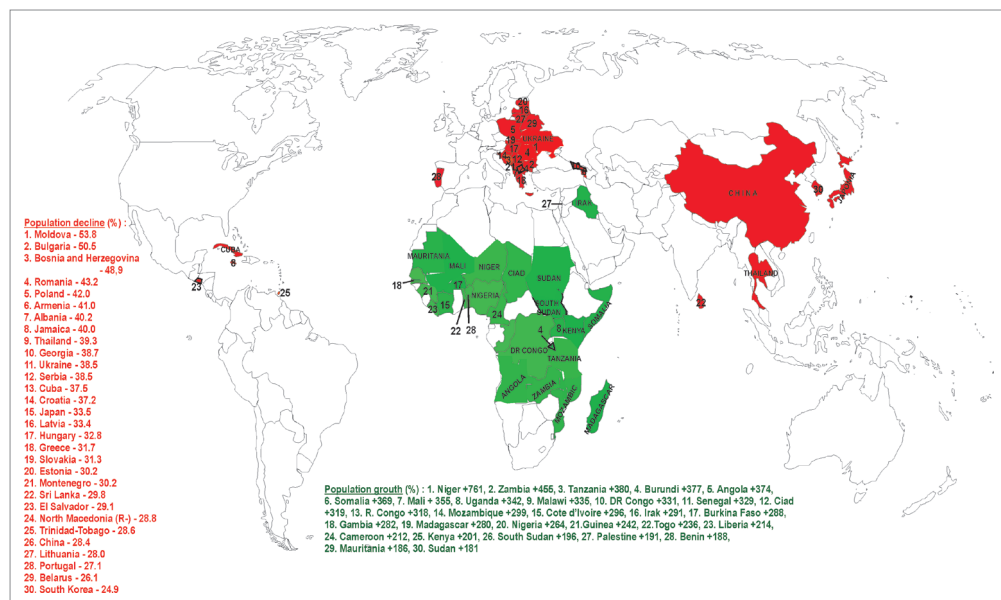


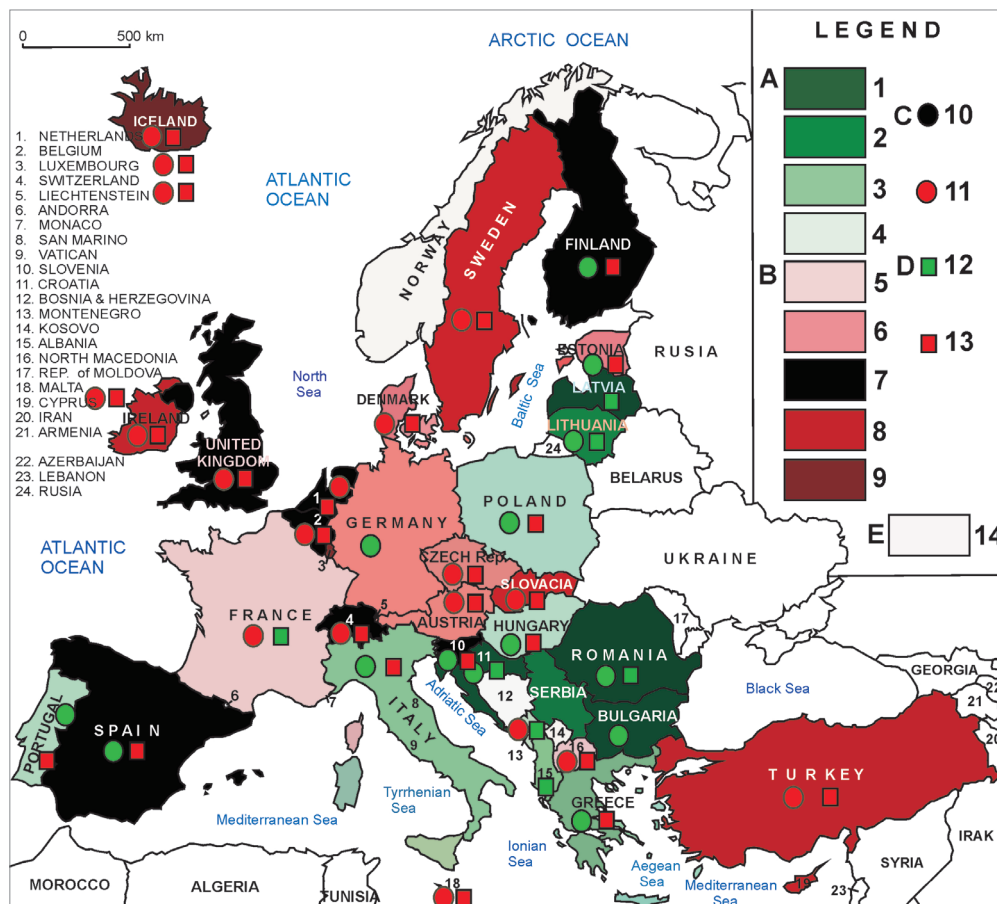
Figure 1: The first 30 countries with estimated demographic increases and decreases for the period 2020–2100

Source: United Nations (2021), processed by the authors

The economic antecedents associated with different economic and demographic policies from one state to another have modulated this evolution over time (Wietzke, 2020), so that, almost two decades after the moment of 1989, some states in Western Europe (France, the United Kingdom, Ireland, Belgium, Holland, etc.) registered demographic increases due to natural increase, and some states in Central-Eastern Europe (Czech Republic, Hungary, Poland) had demographic increases due to migratory increase. On the other hand, at the level of the Continent, ‘immigration areas’ (Germany, France, Spain, the United Kingdom, Benelux), and at the opposite pole, ‘emigration areas’, the most representative of which is the one made up of Romania and the Balkan states, were defined. From this point of view, we considered the demographic situation of 2019 to be representative. In that period the population mobility was based on economic and social differences, in the absence of the constraints imposed by the pandemic and the conflict in Ukraine. The forecast for 2019-2100 was developed in the context of the new world order imposed as a result of the events of the period 2019-2023.

From the data analysis for the year 2019, the highest values of demographic growth at the European level were in Malta (3.8%), Iceland (2.4%), Luxembourg (1.97%), Ireland and Turkey (1.5% each), Cyprus (1.4%), Slovakia (1.3%), respectively Sweden (1.1%). Thus, from the point of view of geographical proximity, two areas of demographic growth are defined: one in the South and Southeast of the Continent (in the Mediterranean

basin), represented by Turkey, Cyprus, and Malta, and the second in its Northwest (where Iceland, Ireland, and Sweden stand out) (Figure 2).



- A. Population declines: 1) -0.7%; 2) -0.5%; 3) -0.3 ... -0.2%; 4) -0.1 ... 0%;
- B. Population growth: 5) 0 ... 0.3%; 6) 0.3 ... 0.5%; 7) 0.6 ... 0.9%; 8) 1.0 ... 1.5%; 9) over 1.5%;
- C. The natural balance of the population: 10) Natural deficit; 11) Natural increase;
- D. Migration balance of the population: 12) Migration deficit; 13) Migration growth;
- E. 14) Missing data.

Figure 2: Types of demographic evolution in Europe (2019)

Source: United Nations (2022), processed by the authors

In the first situation, demographic increases are based on migratory flows from the Middle East and North Africa, due to the conflict zones here and refugee flows (Stoeckmer *et al.*, 2019), and in the second case, they are mainly due to the labor shortage in the host countries. Added to this is the traditional demographic behavior based on stimulating the birth rate. Thus, Turkey, an Islamic state whose European territory is only 3.09% of the total, contributes with a natural increase 5.7 times higher than France, the state with the

highest natural increase in the European Union. States such as Spain, Germany or Finland base their demographic growth exclusively on migratory growth, while in other situations, such as the case of Romania, there are drastic population declines through the accumulation of a negative natural balance with an equally negative migratory balance.

Based on the ratio between the natural balance and the migratory balance, six models of demographic evolution can be identified at the level of the European Union (EU) and European Free Trade Association (EFTA) states:

1. States with demographic increases based on natural and migratory balance, both positive: Belgium, Czech Republic, Denmark, Ireland, Cyprus, Luxembourg, Malta, Netherlands, Austria, Slovakia, Sweden, United Kingdom, Iceland, Liechtenstein, Switzerland, Republic of North Macedonia, and Turkey;
2. State with demographic increases based exclusively on natural growth: France;
3. States with demographic increases based exclusively on migratory growth: Germany, Estonia, Spain, Slovenia, and Finland;
4. States with demographic declines due exclusively to the natural balance, having a positive migratory balance: Greece, Italy, Hungary, Poland, and Portugal;
5. State with demographic declines due exclusively to the migratory balance, having a positive natural balance: Montenegro;
6. States with population declines due to both natural and migratory balance (both being negative): Bulgaria, Croatia, Latvia, Lithuania, Romania, and Albania.

Compared to these models, the average at the EU-28 level indicates a positive evolution, namely a demographic increase of 1,102,500 people in 2019, which represented 0.2% of the previous year's population. This increase was achieved exclusively based on migratory growth: 1,456,700 people, while the natural balance recorded a population decrease of 354,200 people. Among the non-EU states, only Iceland and Turkey had favorable demographic developments (population increases of 2.4% and 1.5% respectively), but relative to the overall demographic size, Turkey brought the highest demographic growth in 'extended' Europe: 1,193,400 people, with 917,200 people more than Spain, the state that registered the highest demographic growth in the EU² (Lutz *et al.*, 2019).

In this global European context, attention is drawn to the position of Romania, as the state with the most drastic drop in population in absolute terms (129,000 people), a phenomenon due to a combination of natural and migratory negative balance. Romania is part of a sample of three European states (along with Bulgaria and Latvia) where the population decrease is the most pronounced: - 0.7% of the total population (in 2019 compared to 2018).

On a regional scale, Romania is part of a larger area of states characterized by a negative demographic trend, along with Bulgaria, Serbia, Hungary, Albania, Croatia, and Greece³.

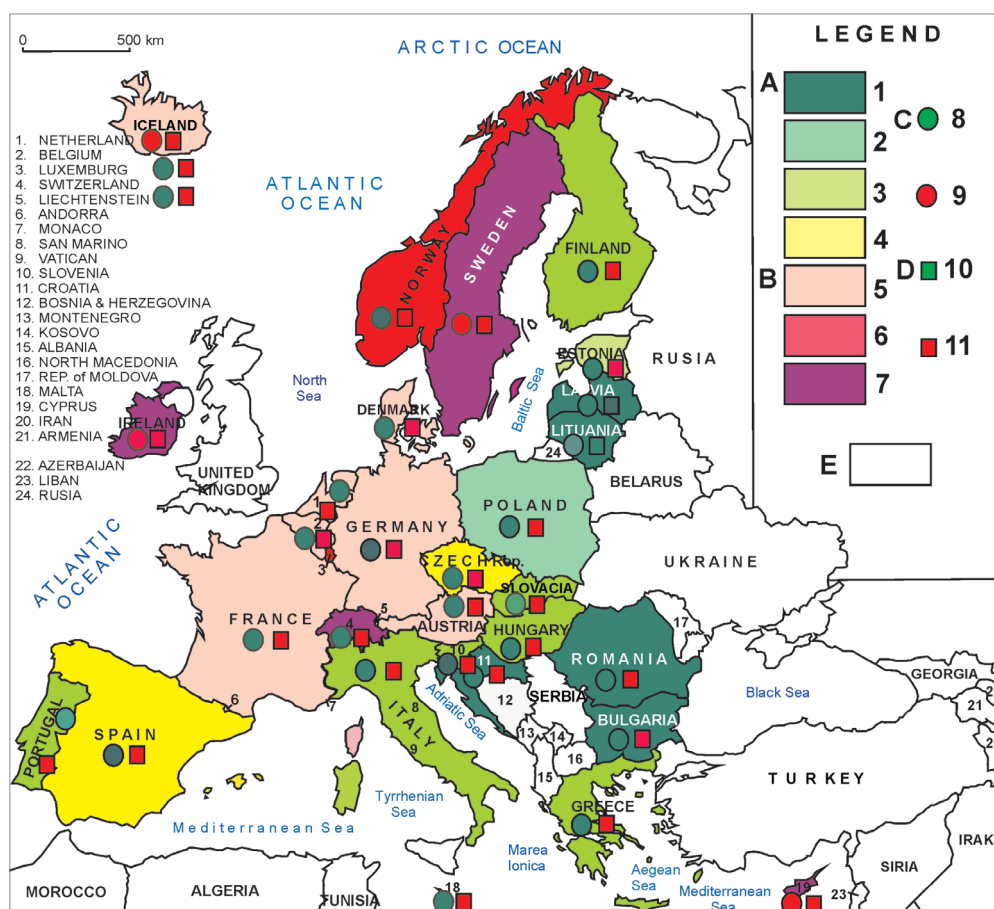
Demographic forecasts for the period 2019-2100 developed by Eurostat for the EU and EFTA states (Figure 3) indicate an overall decrease in the EU population by 30,750,000

2 The United Kingdom of Great Britain and Northern Ireland was excluded from the analysis.

3 Data on the Russian Federation, Ukraine, Belarus and the Republic of Moldova are missing from the analysis.

people, based exclusively on the natural balance. Of the 31 states analyzed, 27 have a negative natural balance and only two (Latvia and Lithuania) register demographic declines both based on the natural balance and through population emigration. The geopolitical risk (the proximity of the Russia-Ukraine conflict area) is in both situations the main argument favoring emigration flows.

The largest annual population increases at the EU level are forecast for Sweden, Ireland, Cyprus, and Malta, which are achieved through the accumulation of natural and migratory growth. Luxembourg is added to these, and at the EFTA level, Switzerland. In both situations, the increase in migration compensates for the natural population deficit.



- A. Population declines: 1) -0.6 ... -0.4%; 2) -0.4 ... -0.3%; 3) -0.3 ... -0.1%; 4) -0.1 ... 0%;
 B. Population growth: 5) 0 ... 0.2%; 6) 0.2 ... 0.3%; 7) 0.3 ... 0.5%;
 C. Natural balance of the population: 8) Natural deficit; 9) Natural increase;
 D. Migration balance of the population: 10) Migration deficit; 11) Migration growth;
 E. Missing data.

Figure 3: Types of demographic evolution in Europe (2019–2100)

Source: United Nations (2022), processed by the authors

Therefore, for the interval between 2019 and 2100, the demographic evolution models based on the ratio between the natural and the migratory balance were reduced to four:

1. States with demographic increases achieved both on the basis of natural growth and on the basis of migration: Ireland, Cyprus, Sweden, and Iceland;
2. States with demographic increases based only on migratory growth, with a negative natural balance: Belgium, Denmark, Germany, France, Luxembourg, Malta, the Netherlands, Austria, Liechtenstein, Norway, and Switzerland;
3. States with demographic declines based only on the natural balance, with positive migratory growth: Bulgaria, Czech Republic, Estonia, Greece, Spain, Croatia, Italy, Hungary, Poland, Portugal, Romania, Slovenia, Slovakia, and Finland;
4. States with demographic declines based on the accumulation of the natural and migratory balance, both negative: Latvia and Lithuania.

One differentiates, on the one hand, the Central-Eastern half of the Continent (except Cyprus), characterized by demographic declines (with maximum values in Romania, Bulgaria, Croatia, Latvia, and Lithuania), and on the other hand, the Central-Western half (except Portugal), with population increases (values maximum in Sweden, Ireland, and Switzerland) (Figure 3). The general directions of the projected migratory flows still maintain East-West and South-North trends, favored by economic discrepancies and refugee flows.

The projected annual demographic evolution once again places Romania in the category of states with the largest population declines (between -0.4 and -0.6%), the migratory increase (1,725 people) being much reduced compared to the natural deficit (-84,650 people). This is one of the most representative European countries in terms of depopulation and the social risks (Lupu, 2019) that this phenomenon can generate.

5. The consequences of demographic evolution on the labor market

In the interval between the last two censuses (2011–2022), Romania's population decreased by 1,067,800 people. Out of a total of 19,053,000 inhabitants, only 8,185,000 were active persons (42.96%), the rest being inactive (of which pensioners and beneficiaries of social assistance 39.5%; pupils and students 32.0%). If the number of unemployed people is also taken into account (496,100 people, 2.6% of the total population), the result is a contingent of assets of only 7,689,000 people, i.e. only 40.3% of the total population, which must support through the social insurance system for the remaining 59.7% of the population, given the continuation of the demographic aging trend.

The demographic aging index depreciated by almost 20 percentage points, increasing to 121.2 elderly people per 100 young people (Population and Housing Census, 2021) compared to 101.8 (PHC, 2011). Although the number of young people (under 15) decreased by 115,700, their share in the total population registered a slight increase (16.1% compared to 15.9% in 2011), while the share of the population aged 65 and over

registered an increase of almost 500,000 people, respectively by 3.5 percentage points (from 16.1% at PHC-2011 to 19.6% at PHC-2021). Thus, the demographic dependency ratio increased within a decade from 47.0 (PHC-2011) to 55.5 young and elderly persons per 100 adults.

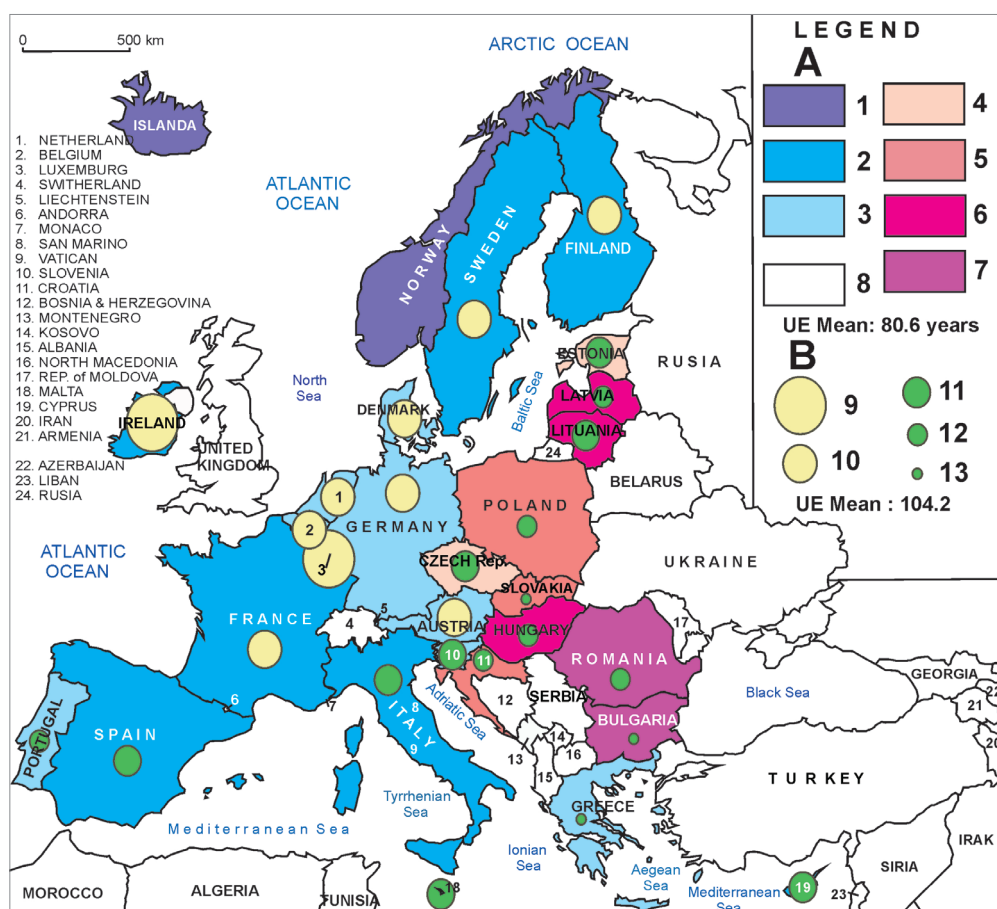
From a territorial point of view, the demographic declines affect the majority of administrative-territorial units (38 out of 41), being characteristic for both rural and urban environments, even for the capital and the main regional metropolises of the country. Some administrative-territorial units (ATUs) in the peri-urban areas of big cities have a somewhat different dynamic, where a pronounced dynamic is registered both in terms of demographics and in terms of the built stock. The phenomenon of exurbation is mainly due to the lower price of land in the outskirts, but the new peripheral residential districts, although they are functionally linked to the urban nuclei, are characterized by a poorly developed communication infrastructure, which makes it difficult for center-periphery traffic flows, especially at peak times.

5.1. Life expectancy and working-age population

Life expectancy in Romania (74.2 years) is the second lowest in the EU (80.6 years – EU-27 average), this country being followed only by Bulgaria (73.6 years). At the opposite pole, at a great distance, were Nordic states such as Norway (83.3 years) or Iceland (83.1 years). From this point of view, a new ‘Iron Curtain’ has been set up on the continent, a consequence of the economic discrepancies that separate the EFTA states and the ‘old EU’ (1957-2003), from the newly joined ones from the ex-communist space (2004–2013).

Life expectancy is quite well correlated both with the average length of working life and with the gross domestic product/inhabitant expressed in the purchasing power standard (PPS), which differentiates the former Communist Bloc states and the Mediterranean Europe states with the lowest values, below the EU average (Figure 4).

Although life expectancy at birth in Romania increased from 71.2 years in 2000 to 75.6 years in 2019, the Coronavirus pandemic left a strong mark on the health status of Romanians, reversing this evolutionary trend and leading to a decrease in life expectancy of 1.4 years, while the average decrease in life expectancy in the EU during the pandemic was 0.7 years. This is, on the one hand, the consequence of the deficiencies of the health system and, on the other hand, of a certain social behavior, grafted on poverty, which imprints certain cultural peculiarities. These are reflected in high alcohol consumption, excessive smoking, an unhealthy diet, reduced physical activity, and reduced incidence of preventive medicine. These risk factors are more prevalent in men than in women. This explains why in Romania, the gender difference in life expectancy was in favor of women, they live almost eight years longer than men (78.4 years compared to 70.5) being among the biggest gaps in the EU (in the year 2020). This is also reflected in the gender difference in terms of the average length of working life, Romania being among the states with the largest differences (7.6 years), together with Italy (9.1 years) and Malta (8, 4 years). At the



- A. Life expectancy (years): above the EU average: 1) 83–84 years; 2) 82–83 years; 3) 80.6–82 years; below the EU average: 4) 79–78 years; 5) 78–76 years; 6) 76–75 years; 7) 75–73 years; 8) No data.
- B. GDP/place – SPC: above the EU average: 9) above 200; 10) 104.2–200; below the EU average: 11) 104.2–80; 12) 80–70; 13) 70–50.

Figure 4: Life expectancy correlated with GDP/place (expressed in Spatial Population Concentration/SPC)

Source: Eurostat (2023), processed by the authors

opposite pole are the Baltic States: Lithuania (-1.3 years)⁴, Estonia (0.1 years), Latvia (0.8 years), followed by Finland (1.1 years).

Romania has a working-age population (15–64 years) of 65% of the total population, comparable to that of the surrounding states and to the European average (64% in 2021, down from 67% in the 1985–2011 interval) (World Bank, 2022). However, major discrepancies appear regarding the active population aged 15–64, which registers only 46% of the total population of the respective age segment, placing Romania in the penultimate place

⁴ Lithuania is the only country in the EU where women work more than men.

in the EU, just ahead of Italy (the European average being 64%). The causes are related, on the one hand, to emigration abroad for a better-paid job and, on the other hand, to early retirement, without reaching an age limit or a minimum level of years of contribution to the retirement fund. To these is added an important contingent of pensioners with a special regime, who left the labor market between the ages of 40 and 50, well below the standard retirement age (OECD/ European Observatory on Health Systems and Policies, 2021).

Thus, among the able-to-work people in Romania, less than one in two are actually working, and the average length of working life in Romania is only 31.3 years, the lowest in the EU, while the European average is 36.0 years (Economedia.ro, 2022) (Table 1). Of the people employed on the labor market, only 53% are salaried, and of these, only 78% pay taxes and duties, the rest being unofficial ('black') employees.

Table 1: Average length of working life in the EU

Positive Externalities (+)		UE average: 36.0 years	Negative Externalities (-)	
Netherlands	42.5 years		Romania	31.3 years
Sweden	42.3 years		Italy	31.6 years
Denmark	40.3 years		Greece	32.9 years

Source: Economedia.ro (2022)

5.2. Retirement age and its trends in relation to labor market developments

In Romania, the law on the public pension system (Law no. 360/2023) provides a standard retirement age of 63 years for women and 65 years for men, the minimum contribution period being 15 years, and the full contribution period, 35 years, for both women and men. The standard retirement age has increased for men from 64 to 65 between January 2011 and January 2015, and for women, it has increased and will continue to increase from 59 to 63 between January 2011 and January 2030 (NHPP, 2024). Accordingly, the full contribution period increased/increases from 28 to 35 years for women (between January 2011 and January 2030) and from 33 to 35 years for men (between January 2011 and January 2015), as a provision intended to ensure gender equality regarding retirement conditions, a situation also reflected by the equality of the retirement age in most EU states (Table 2).

For the activities carried out in specific/special working conditions, the Romanian legislation grants a series of benefits consisting in the reduction of the standard retirement age, an additional period in the seniority of work, respectively the increase of the monthly scores achieved by the employee in the respective periods (Law no. 263/2010 and Law no. 223/2015).

In the case of soldiers, policemen, and civil servants with special status in the penitentiary administration system, in the field of national defense, public order, and national security, the standard retirement age is 58 years and 4 months (for those retired in May 2024), increasing with 2 years and 1 month compared to those retired in January 2016 (according

to the annex of Law no. 223/2015). The same normative act provides for the increase of the retirement age limit for these professional categories to 60 years for those who will retire starting from January 1, 2030.

However, the retirement age in Romania is comparable to that of most European states, resulting in one of the shortest pension payment periods: 5.5 years for men and 17.4 years for women, also one of the largest such gaps in Europe (Table 3).

Table 3: Retirement age correlated with life expectancy in Romania

Life expectancy (years & months)		Retirement age (years & months)		Pension payment period (years & months)	
Men	Women	Men	Women	Men	Women
70 & 5	78 & 4	65	61 » 63	5 & 5	17 & 4

Source: National Institute of Statistics (2021)

The demographic aging of all European countries as a result of the increasingly low birth rate has imposed legislative provisions aimed both at stimulating the birth rate and measures aimed at raising the retirement age. Equalization of the retirement age is also being considered, as a measure to combat gender discrimination. In Austria, for example, the retirement age for women is to be equal to that of men at 65 by 2033, and in Croatia, by 2028 there will be an equal age for women and men, set at 67. In Denmark, the retirement age has increased to 67 in 2022, and after 2030 it is expected to increase by a maximum of one year every five years, depending on the increase in life expectancy. A similar situation is in Germany, where the retirement age is to be gradually raised to 67 by 2029; in Estonia, it is to be gradually increased to 65 years by 2026, after which it will be linked to average life expectancy, in the United Kingdom it is to be increased to 67 years by 2028 and to 68 years by 2046, and in Ireland it is to gradually increase to 68 years by 2028. Similar situations are provided by the legislation in Bulgaria, Latvia, Lithuania, Spain, Sweden, Malta, in the Netherlands (where it is correlated with life expectancy), and also in the Republic of Moldova or Serbia, countries aspiring to join the EU. In France, the new pension law, which stipulates an increase in the retirement age from 62 to 64 years, has generated widespread protests at the national level.

In Romania, the retirement age is above the EU average, while the life expectancy of 72 years is 7 years below the EU average. By 2035, the equalization of the retirement age between men and women is foreseen, and those who have reached the age of 65 can optionally remain on the labor market until the age of 70 and receive a pension bonus, given that the unemployment rate among young people under 20 years has reached 22.7% in this country.

In other European countries, the transition of active people among pensioners is linked to the period of contribution to the national social insurance system. In Italy, for retirement, the employee must pay contributions for at least 20 years; those who have paid for at least 38 years can retire at 64, and those who have paid contributions for at least 41 years

Table 2: Retirement age and life expectancy at birth in Europe

States	Retirement age (years & months)		Reference Year	Life expectancy at birth (years, 2023)
	Men	Women		
Albania	65	61	2020	DNA
Austria	65	60	2018	81.6
Belarus	62 & 5 – 63	57 & 5 – 58	2021/2022	DNA
Bosnia and Herzegovina	65	65	2011	DNA
Bulgaria	65 & 4	61 & 8	2021	75.8
Croatia	65	62	2018	78.6
Cyprus	65	65	2018	82.5
Czech (Rep.)	63 & 4 – 62 & 10	58 & 8 / 62 & 8 – 58 / 62 (depending on the no. of children)	2015/2018	80.0
Denmark	67	67	2022	81.9
Estonia	63 & 9	63 & 9	2019	78.8
Finland	65	65	2008	81.7
France	62 – 67	62 – 67	2022	83.1
Germany	65 & 7	65 & 7	2015	81.2
Greece	67	67	2015	81.6
Hungary	65	65	2022	76.9
Iceland	67	67	2018	82.6
Ireland	66	66	2018	DNA
Italy	67	67	2019	83.8
Latvia	64 & 6	64 & 6	2023	75.9
Liechtenstein	65	65	2018	84.8
Lithuania	64 & 6	64 & 6	2023	77.2
Luxemburg	65	65	2018	83.4
Malta	62	62	2015	83.6
Moldova (Rep. of)	63	59	2020	DNA
Montenegro	66	64	2022	DNA
Netherlands	66 & 4 – 67 & 9	66 & 4 – 67 & 9	2019/2022	82.0
North Macedonia (Rep. of)	64	62	2011	DNA
Norway	67	67	2018	83.1
Poland	65	60	2016	82.4
Portugal	66 & 4	66 & 4	2018	78.6
Romania	65	61 & 9	2019	76.6
Serbia	65	61 & 6	2017	DNA
Slovakia	64	64	2021	78.1
Slovenia	65	65	2018	82.0
Spain	65 & 3	65 & 3	2015	84.0
Sweden	65	65	2020	83.4
Switzerland	65	64	2022	84.2
Ukraine	60	60	2022	DNA
United Kingdom	66	66	2021	DNA

Note: DNA = data not available

Source: European Commission (2009) and United Nations (2022)

and 10 months (women), respectively 42 years and 10 months (men) can retire regardless of age. In Norway, the general retirement age is 67, but due to sufficient contributions to the pension fund, it is possible to retire as early as age 62; the later a person retires, the higher the government pension. In France, the minimum contribution period is 43 years, and in Hungary, women with 40 years of insurance can retire at any age.

The comparison between pre- and post-pandemic data highlights, according to the European Commission (2021), the biggest decreases in life expectancy in Bulgaria (-3.7 years), Slovakia (-3.0 years), and Romania (-2.7 years).

Although in the period between the last two censuses, demographic aging has intensified in Romania; the share of people under 65 in this country continues to be below the EU average (19% compared to 20.8% EU average in 2021).

5.3. Replacement migrations on the labor market

The deficit in the European labor market has generated replacement migration in the labor market. If for the states West of the former 'Iron Curtain' this phenomenon took off after the Second World War, in the new European democracies, the generalization of globalizing flows, starting from the last decade of the 20th century, generated extensive mutations in the ethnic structure of the workforce.

It is obvious the intensification of the contribution of the able-to-work population especially from Asia (mainly from China and the Indian Subcontinent) and from Africa to the Central European EU member countries, in order to compensate for the labor shortage generated by the strong migratory flows from Central and Eastern Europe to the West of the Continent from the years 1990-2000. This led to a change in the model of demographic evolution for most of these states (the demographic deficit being realized in most cases exclusively on the basis of the natural balance) and, on the other hand, to an increasingly obvious cosmopolitanization of the population of these states, visible more in large cities and peri-urban and metropolitan areas.

Currently, in Romania, there are about 130,000 Asian workers who work in industry, agriculture, construction, and especially in services (mainly in catering and courier services).

6. Conclusions

The 2021 census data confirm the sharp demographic decline of Romania's population, which began in 1990 against the backdrop of the abolition of pro-natalist legislation and the liberalization of the movement of people. The demographic decline in Romania is a combination of the natural balance and the migratory balance, both negative, and it places this country in one of the leading places both at the European and global levels.

The demographic decline, associated with the increase in life expectancy (although Romania's population has one of the lowest life expectancies in the EU), has increased the pressure on the pension and social insurance system, a characteristic phenomenon in most

European states. Romania has the shortest average length of working life in the EU, resulting from the large share of people able to work, but inactive (or working without legal forms), but also the shortest duration of pension payments (especially in the case of men), correlated with life expectancy.

In the absence of a coherent legislative framework to stimulate the birth rate and a socio-economic context to limit emigration flows, the deficit in the labor market tends to be filled by emigrants from Asia (especially from the Indian subcontinent and from China), a cheap labor force compared to the domestic one for most employers in Romania. This phenomenon tends to influence the ethnic structure in favor of increasing the share of new ethnic minorities, from this point of view, Romania aligning itself with the trends shown in states with liberal economies and advanced democracies.

The proposed solutions for limiting the demographic decline and optimizing the ratio between active and inactive people, without which the pension system and other social systems in Romania risk collapsing, would fall into five categories:

1. Improving the public health system;
2. Ensuring well-paid jobs in the country;
3. The development of coherent policies for the integration of emigrants and their families, in order to limit their departure to the states of Western Europe, under the conditions of Romania's accession to the Schengen area;
4. Reforming the national pension system by stimulating the extension of active life;
5. Reforming the pension system, especially by removing discrepancies in relation to other categories of pensioners (elimination of provisions that lead to positive discrimination).

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