

THE PHENOMENON OF DEMOGRAPHIC AGEING AT THE NATIONAL LEVEL AND THE BIG CITIES OF ROMANIA

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ABSTRACT: *A particular case of the evolution of population aging at a global level is represented by the developments in Central and Eastern Europe where a brutal decline in fertility is recorded as a result of the economic and political changes that followed the fall of the communist regimes.*

Romania is part of this general picture, facing demographic changes that have medium and long-term implications. The country's population decreased between 1990 and 2024, by approximately one million people and continues to decline constantly. This trend is determined on the one hand by low fertility, but also by high external migration.

In the long term, a negative factor on the demographic evolution in Romania is the emigration of the female population of childbearing age, and in the short and medium term, the large influx of young workers contributes to the aging of the workforce, reducing the size of the active population and the number of contributors to social assistance budgets and thus increasing the pressure on social security expenditures.

The paper aims to analyse the evolution, size and structure of the demographic phenomenon in metropolitan areas in Romania.

Keywords: *metropolitan area, population aging, aging factors*

JEL Classification: *H70, H83, J10, J11,*

1. INTRODUCTION

Romania has experienced significant changes in the population structure in recent decades. The specific component of Romania, which had and continues to have the greatest negative impact on social and economic levels, was due to political decisions during the communist period that strongly influenced the evolution of demographic phenomena, especially the birth rate.

The transformations that occurred after 1989 in the political system, in the economy and in social life produced changes in the demographic behaviour of the population. Starting from 1990, the population of Romania has decreased constantly, from 22,810,035 inhabitants at the 1992 census, to 19,053,815 inhabitants at the 2021 census. This decrease was due mostly to the negative natural increase of the population, as a result of the decrease in fertility and the low birth rate per 1,000 inhabitants. The birth rate decreased from 13.6‰ in 1990 to 6.8‰ in

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2024, while the death rate increased from 10.6‰ (1990) to 11.2‰ (2024)⁶. From the analysis of statistical data, it can be said that compared to 1990, in January 2024, the share of the young population (0-14 years old) decreased from 23.7% to 16.1% and the share of the elderly (65 years old and over) increased from 10.3% to 19.6%⁷.

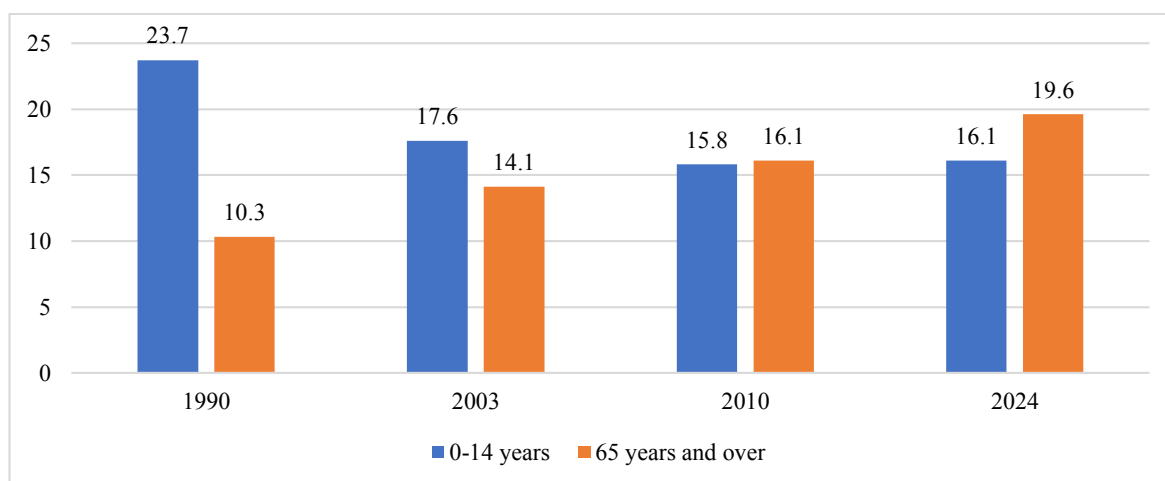
On July 1, 2024, the population of Romania was 19,055,961 thousand inhabitants. The female population, 9,796,206 thousand people, represented 51.4% of the country's population, and the male population, 9,271,370 thousand people, respectively, 48.6%.

Intensive emigration, the decrease in birth rate and the increase in mortality have led to a natural population deficit, which is even older than 25 years ago. The population over 65 years old represents 19.6% of the total population on July 1, 2024.

The deterioration of Romania's demography in the 1990s and in the early years of the 21st century is determined by multiple causes, being the direct or indirect product of the entire political, economic and social context of the transition. The economic factor has its role, but the contribution of other factors, of a non-economic nature, with independent, objective action or shaped by the new economic and social realities of Romanian society, cannot be omitted or underestimated.

The population of Romania has "aged" at an accelerated pace after 1990, taking into account the pace of the process and its mechanisms, it can be stated that in just a few years the population of Romania will be demographically older than that of developed countries. Romania is part of a demographically sick, aging Europe, with a population that no longer ensures its own replacement, through voluntary subfertility and which is not far from the onset of generalized demographic decline.

Figure 1 Evolution of the share of the population aged 0-14 compared to that of over 65 in Romania, during the period 1990-2024



Source: Own calculations based on TEMPO-online Database, <http://statistici.insse.ro:8077/tempo-online/#/pages/tables/insse-table>

During the period 1990–2024, the population of Romania decreased by 4,143,819 thousand people (from 23,211,395 thousand people on 1 January 1990, to 19,067,576 thousand

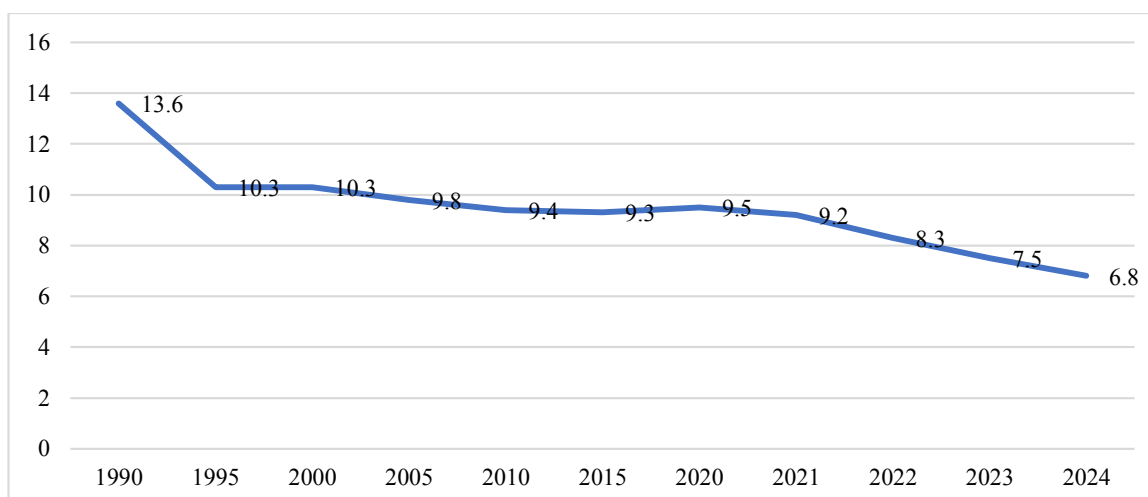
⁶ According to INSSE, TEMPO-online Database, <http://statistici.insse.ro:8077/tempo-online/#/pages/tables/insse-table>

⁷ Own calculations on the TEMPO-online Database, <http://statistici.insse.ro:8077/tempo-online/#/pages/tables/insse-table>

people on 1 January 2024)⁸. Also, in Romania, the demographic aging process has intensified in the last decade. While in 2024, the total population was about 17.9% smaller than in 1990, the share of the population aged 65 and over increased from 10.3% to 19.6%, in the same period, corroborated with the decrease in the population aged 0-14 from 23.7% to 16.1% (Figure 1). The decline in the number and share of the young population (at the base of the pyramid) and the corresponding increase in the elderly population constitute the most striking shift in the structure of the Romanian population in the last 25 years. Demographic aging, complemented by the low birth rate, will produce some of the most severe effects on the future size and structure of the labor force, on the economic dependency ratio and schooling, as well as on the budget and the social security system. The deterioration of demographic phenomena in Romania is characterized by a decrease in the number of live births, an increase in mortality and the registration of a negative natural increase.

The decline in the birth rate plays an important role in the decline of the Romanian population. This negative trend was especially accentuated in the period 1990-1995, with a slight stagnation in the period 1995-2020, in recent years it has been especially accentuated after 2021, reaching a dramatic value of 6.8‰ live births per 1000 inhabitants in 2024 (Figure 2).

Figure 2 Evolution of the birth rate in the period 1990-2024



Source: INSSE, TEMPO-online Database, <http://statistici.insse.ro:8077/tempo-online/#/pages/tables/insse-table>

The general fertility rate is reduced from 56.2 (live births per 1000 women) in 1990, to 39.3 (live births per 1000 women) in 2024.

The dynamics of Romania's demographic indicators in the last decade is the effect of two processes of a different nature. On the one hand, it is the sudden reaction of the population to a series of previous constraints, which was directly reflected in: i) the severe decrease in the birth rate after 25 years of evolution imposed by force of law, ii) the explosion of external migration in 1990-1991, on the other hand, it is an effect of economic and social changes.

⁸ According to INSSE, TEMPO-online Database, <http://statistici.insse.ro:8077/tempo-online/#/pages/tables/insse-table>

The general demographic evolution of Romania is also found at the level of its 8 major regions, but the analysis of statistical data also highlights differences, sometimes significant, due to the particularities of the regions.

Thus, in 2024, the North-East development region (with the counties: Bacău, Botoșani, Iași, Neamț, Suceava, Vaslui) had the largest number of inhabitants, with a share of 16.9% in the total population of the country, and the West development region (counties of Arad, Caraș-Severin, Hunedoara, Timiș) was at the other extreme with a share of 8.8% in the country's population⁹. The Bucharest-Ilfov development region is the most urbanized region, the urban population representing over 90% of the total population of the region.

2. THE PHENOMENON OF DEMOGRAPHIC AGING BY AREA OF RESIDENCE

In Romania, the administrative-territorial structure includes a regional level with the 41 counties and the municipality of Bucharest, corresponding to the EU NUTS 3 statistical level, and a local level with 320 cities, of which 103 municipalities and 2862 communes.

On 1 July 2024, 9,896,535 thousand people lived in urban areas, representing over half of the country's population (51.9%).

Of the 3 municipalities and cities, more than 86% have a population of under 50 thousand inhabitants (32.5% of the urban population). The population of cities with over 100 thousand inhabitants, although decreasing, represents 56.0% of the urban population. Bucharest (1,721,784 inhabitants), the capital of the country, has 17.3% of the urban population and 9.1% of the country's population.

According to the latest release of the National Institute of Statistics from 2025, the cities with over 200,000 inhabitants are: Bucharest (2,123,457 inhabitants), Iași (379,010 inhabitants), Cluj Napoca (325,353 inhabitants), Brașov (317,899 inhabitants), Timișoara (296,869 inhabitants), Constanța (295,695 inhabitants), Galați (294,905 inhabitants), Craiova (280,834 inhabitants), Oradea (213,549 inhabitants) and Ploiești (207,886 inhabitants)¹⁰.

According to demographic size, the current system of cities in Romania includes the following categories:

1. Bucharest, with 2,123,457 inhabitants, is a capital city with complex functions;
2. cities with a population of between 200,000 and 400,000 inhabitants: Iași, Cluj Napoca, Brașov, Timișoara, Constanța, Galați, Craiova, Oradea and Ploiești – all of which also have a regional metropolitan function for Romania;
3. cities with a population of between 100,000 and 200,000 inhabitants: Bacău, Brăila, Arad, Pitești, Sibiu, Vaslui, Târgu Mureș, Baia Mare, Buzău, Suceava, Râmnicu Vâlcea, Botoșani, Satu Mare, Piatra-Neamț;
4. cities with a population between 50,000 and 100,000: Drobeta-Turnu Severin, Bistrița, Târgu Jiu, Focșani, Târgoviște, Tulcea, Slatina, Reșița, Alba Iulia, Călărași, Zalău, Hunedoara, Bârlad, Roman, Deva, Giurgiu, Sfântu Gheorghe, Mediaș, Turda – are cities of balance with county and inter-county influence;
5. most cities are small and very small cities with local influence in the territory.

Approximately 9,171,223 thousand people live in rural areas, representing 48.1% of the country's population. The average size of a commune is 3,397 inhabitants. Communes with a

⁹ Own calculations on the TEMPO-online Database, <http://statistici.insse.ro:8077/tempo-online/#/pages/tables/insse-table>

¹⁰ <https://insse.ro/cms/>, Population by residence on 1 January 2025, at the ATU level

population between 1000 and 5000 inhabitants represent 81.7% of the total number of communes, and their population 68.3% of the rural population.

Studies developed by various bodies, governmental or not, indicate that the majority of Romanians will live in large cities by 2050. This means that large cities will represent the vital space for the majority of Romanians. The quality of their lives will directly depend on the quality and structure of large congested areas called cities: from the restrictions imposed by these areas to the way of life and the opportunities offered for a pleasant life. In a way, large cities constitute societies condensed in a relatively small geographical space. The relationships between various segments of society depend greatly on the physical structure of the city.

People, institutions and businesses in large cities are linked to their partners in large cities around the world. In a way, globalization emerges from such a network of interconnected “global” cities.

Among the problems facing Romanian cities can be listed:

- inherited problems, including: i) large-scale economic activities and low productivity, technologically backward and with a reduced capacity for adaptation, ii) limited orientation of economic activities, iii) unskilled or poorly skilled workforce, iv) centralized public services (facilities) in terms of financing and operation, v) economically inefficient and technically ineffective public services (utilities), in a deplorable state, vi) centralized, ineffective public administration, etc.;

- problems due to the transition process, including: i) the requirements of new economic agents, ii) increased demand for utilities in the context of the slow and uneven improvement of public services, iii) the dramatic situation of local public finances, iv) environmental deterioration, v) lack of experience in the field of urban planning, vi) the absence of an adequate legal framework at the local level;

- social, economic and environmental problems;
- problems concerning the legal and institutional framework;
- problems concerning the physical framework;
- problems related to human, material, financial and technological resources;
- problems regarding urban form.

On urban development under current conditions, a series of pressures appear that can be grouped into i) external pressures, which come from the processes that accompany the globalization of the economy, the establishment and expansion of the European Union, the increasing importance of the knowledge-based economy, the emphasis on competition between regions, the phenomena of international migration and

ii) internal pressures, resulting from processes related to transition, decentralization, regionalization policies, social and economic imbalances and distortions, competition between cities, environmental problems.

The consequences of these pressures are translated into relationships that unite and separate the city from the surrounding area: i) distortions in the demand and supply of land for development, ii) imbalances in economic development, iii) degradation of housing and living conditions, iii) lack of physical accessibility and equipment adequate to new requirements, iv) low level and lack of diversity of services, v) social disruption, decreased living standards and vi) degradation of environmental conditions.

Specialists believe that in order to solve these problems, a development approach at the metropolitan level is necessary. This aims to take over and solve the multiple pressures arising from the change in the economic system, development planning and implementation, distortions and varied needs both in the urban environment and in the adjacent rural areas, in order to structure a development pole in a coherent network at a territorial scale.

Analyzing the evolution of the share of the population aged 0-14 compared to that of over 65 by residence area 2024 compared to 1990 (Table no. 1), we find that the largest

differences were recorded in urban areas: a decrease of -9.3% in the share of the population aged 0-14 in total, corroborated with a +12.8% increase in the share of the population aged 65 and over. In rural areas, these values were much lower: a decrease of -4.3% in the share of the population aged 0-14 in total, corroborated with a +4.8% increase in the share of the population aged 65 and over. This led, at the national level, to: a decrease of -7.6% in the share of the population aged 0-14 in total, corroborated with a +9.3% increase in the share of the population aged 65 and over.

Table no. 1 Evolution of the share of the population aged 0-14 compared to that of over 65 by areas of residence 2024 compared to 1990 - %

	1990	2024	Difference 2024 compared to 1990
TOTAL			
0-14 years	23.7	16.1	-7.6
65 and over	10.3	19.6	9.3
URBAN			
0-14 years	24.8	15.5	-9.3
65 and over	7.7	20.5	12.8
RURAL			
0-14 years	20.6	16.4	-4.3
65 and over	14.7	19.5	4.8

Source: Own calculations based on the TEMPO-online Database, <http://statistici.insse.ro:8077/tempo-online/#/pages/tables/insse-table>

The analysis of Table no. 1 leads us to the conclusion that the urban environment will have a much faster population aging than the rural environment. At the national level, as a general assessment of the characteristics of the resident population, we mention: its continuous reduction over the past thirty years and the change in its structure across important age groups. If the decrease in the resident population, by over 4.2 million people over the past thirty years, is well known to public opinion, the changes in its distribution across important age groups have long been overlooked.

The demographic phenomena manifested after 1989 have led to an increase in the phenomenon of the aging of the resident population. Thus, during this period, the number of live births has continuously decreased, the registered international migration is characterized by the highest annual flows in the country's history, and life expectancy has increased. Under these conditions, major imbalances have been generated between the three important age groups and the phenomenon of aging of the resident population has intensified.

The causes that led to the aging of the resident population are multiple, of which we specify only a few: the continuous decrease in the birth rate (if in 1989 the number of live births was 369.5 thousand, it decreased in 2022 to 182.1 thousand); the continuous decrease in the share of the young population in the resident population; international migration, generally from the young population; the increase in life expectancy, etc.

There are significant differences between counties in relation to the average age of the resident population. According to the data recorded in the last census, the average age of the population at county level varies between 46.9 years in Teleorman County and 39.0 years in Iași County. It should be noted that the average age of women in Teleorman County is 47.9 years, which is 2.1 years higher than the average age of men in this county. These data show us that in counties where the average age is high, it is difficult to anticipate a recovery of the

resident population in a short or medium period of time. Moreover, in counties where the average age is high, we estimate that in the coming period we will witness a decrease year by year in the number of births and, implicitly, we will witness, in the following years, an increase in imbalances in the distribution of the resident population across the three major age groups.

3. METROPOLITAN DEVELOPMENT IN ROMANIA AND DEMOGRAPHIC AGING IN LARGE CITIES

According to the data, there are officially 22 metropolitan areas in Romania. They were established and have the following composition:

1. Bucharest Metropolitan Area - year of establishment 2016. Composition: Bucharest Municipality, Ilfov County - total population: 2.2 million inhabitants;

2. Alba Iulia Metropolitan Area - year of establishment: 2007. Composition: Alba Iulia and Sebeș Municipalities, Teiuș City; Municipalities: Vințu de Jos, Sântimbru, Ciugud, Ighiu, Galda de Jos, Cricău, Berghin, Meteș - total population: 124,626 inhabitants;

3. Bacau Metropolitan Area - year of establishment: 2007. Composition: Bacau Municipality, Buhuși City, Communes: Berești-Bistrița, Buhoci, Faraoani, Filipești, Gioseni, Hemeiuș, Itești, Izvoru Berheciului, Letea Veche, Luizi-Călugăra, Măgura, Mărgineni, Gârleni, Odobești, Prăjești, Sărata, Săucești, Secuieni, Tamași, Blăgești, Horgești and Traian - total population: 241,619 inhabitants;

4. Baia Mare Metropolitan Area - year of establishment: 2006. Composition: Baia Mare Municipality, Cities: Baia Sprie, Cavnic, Seini, Șomcuta Mare and Tăuții Măgherauș; Municipalities: Cernești, Cicărlău, Coaș, Coltău, Copalnic Mănăștur, Dumbrăvița, Groși, Mireșu Mare, Recea, Remetea Chioarului, Satulung, Săcălășeni and Valea Chioarului - total population: 215,932 inhabitants;

5. Botoșani Metropolitan Area - year of establishment: 2012. Composition: Botoșani Municipality, Bucecea City, Municipalities: Vlădeni, Mihai Eminescu, Roma, Răchiți, Stăuceni, Bălușeni and Curtești - total population: 143,193 inhabitants;

6. Brasov Metropolitan Area - year of establishment: 2006. Composition: Brasov Municipality, Brasov County Council, Săcele and Codlea Municipalities, Cities: Râșnov, Ghimbav, Predeal and Zărnești, Communes: Sânpetru, Hărman, Prejmer, Târlungeni, Bod, Hălchiu, Cristian, Crizbav, Feldioara, Vulcan and Budila - total population: 410,808 inhabitants;

7. Cluj Napoca Metropolitan Area - year of establishment: 2008. Composition: Cluj Napoca Municipality, Municipalities: Aiton, Apahida, Baci, Bontida, Borsa, Jucu, Căianu, Chinteni, Ciurila, Cojocna, Feleacu, Florești, Gîrbău, Petreștii de Jos, Tureni, Vultureni, Sânpaul, Săvădisla and Gilău - total population: 418,153 inhabitants;

8. Constanța Metropolitan Area - year of establishment: 2007. Composition: Constanța Municipality, Constanța County Council, Cities: Eforie, Murfatlar, Năvodari, Ovidiu and Techirghiol, Municipalities: 23 August, Agigea, Corbu, Costinești, Cumpăna, Lumina, Mihai Kogălniceanu, Poarta Alba, Tuzla and Valu lui Traian - total population: 434,265 inhabitants;

9. Craiova Metropolitan Area - year of establishment: 2009. Composition: Craiova Municipality, Cities: Filiași and Segarcea, Communes: Almaj, Brădești, Breasta, Bucovăț, Calopăr, Cârcea, Coșoveni, Coțofenii din Față, Ghercești, Ișalnița, Malu Mare, Mischii, Murgași, Pielești, Predești, Șimnicu de Sus, Teasc, Terpezita, Țuglui, Vârvoru de Jos and Vela - total population: 356,544 inhabitants;

10. Deva - Hunedoara Metropolitan Area - year of establishment: 2008. Composition: Deva and Hunedoara Municipalities, Hunedoara County Council, Cities: Simeria and Călan, Communes: Băcia, Cârjiți and Pestișu Mic - total population: 149,198 inhabitants;

11. Iași Metropolitan Area - year of establishment: 2004. Composition: Iași Municipality, Iași County Council, Municipalities: Aroneanu, Bîrnova, Ciurea, Holboca, Letcani, Mirosłava, Popricani, Rediu, Schitu Duca, Tomești, Ungheni, Valea Lupului and Victoria, Movileni, Comarna, Prisăcani, Țuțora, Mogoșești, Dobrovăț - total population: 403,572 inhabitants;

12. Oradea Metropolitan Area - year of establishment: 2005. Composition: Oradea Municipality, Municipalities: Biharia, Borș, Cetariu, Girișu de Criș, Ineu, Nojorid, Oșorhei, Paleu, Sînmartin, Sîntandrei and Toboliu - total population: 245,537 inhabitants;

13. Pitești Metropolitan Area - year of establishment: 2012. Composition: Argeș County Council, Pitești Municipality, Ștefănești City, Communes: Albota, Bascov, Băbana, Budeasa, Mărăcineni, Micești and Moșoaia - total population: 206,082 inhabitants;

14. Ploiești Metropolitan Area - year of establishment: 2009. Composition: Ploiești Municipality, Prahova County Council, Cities: Băicoi, Boldești Scăieni, Bușteni and Plopeni, Communes: Ariceștii-Rahativani, Bărcănești, Berceni, Blejoi, Brazi, Bucov, Dumbrăvești, Păulești, Târgșorul Vechi and Valea Călugărească - total population: 336,203 inhabitants;

15. Resita Metropolitan Area - year of establishment: 2013. Composition: Resita Municipality, Bocsă City, Municipalities: Ocna de Fier, Dognecea, Goruia, Târnova, Văliug, Brebu Nou, Lupac and Carașova - total population: 100,957 inhabitants;

16. Roman Metropolitan Area - year of establishment: 2009. Composition: Roman Municipality, Municipalities: Gherăești, Ruginoasa, Botești, Ion Creangă, Văleni, Poienari, Icușești, Moldoveni, Bahna, Dulcești, Horia, Sagna, Făurei, Pâncești, Boghicea, Bozieni, Doljești, Gădinti, Oniceni, Secuieni, Valea Ursului, Tămășeni, Bîra and Stănița - total population: 129,507 inhabitants;

17. Satu Mare Metropolitan Area - year of establishment: 2013. Composition: Satu Mare and Carei Municipalities, Cities: Arduș and Tășnad, Communes: Agriș, Apa, Beltiug, Berveni, Căpleni, Craidorolț, Culciu, Doba, Dorolț, Foieni, Gherța Mică, Lazuri, Medieșu Aurit, Micula, Moftin, Odoreu, Orașu Nou, Păulești, Terebești, Turț, Valea Vinului and Viile Satu Mare - total population: 217,403 inhabitants;

18. Suceava Metropolitan Area - year of establishment: 2011. Composition: Suceava Municipality, Salcea City, Municipalities: Adâncata, Bosanci, Ipotești, Mitocu Dragomirnei, Moara, Pătrăuți, Verești, Siminicea, Stroiști, Dumbrăveni, Udești, Hânțești and Dărmănești - total population: 167,095 inhabitants;

19. Timișoara Metropolitan Area - year of establishment: 2008. Composition: Timișoara Municipality, Timiș County, Municipalities: Becicherecu Mic, Bucovăț, Dudeștii Noi, Dumbrăvița, Ghiroda, Giarmata, Giroc, Moșnița nouă, Orțișoara, Pișchia, Remetea Mare, Săcălaz, Sânmihailu Român and Șag - total population: 387,604 inhabitants;

20. Târgu Mureș Metropolitan Area - year of establishment: 2006. Composition: Târgu-Mureș Municipality, Ungheni City, Communes: Acățari, Ceuașu de Câmpie, Corunca, Crăciunești, Cristești, Ernei, Gheorghe Doja, Livezeni, Pănet, Sâncraiu de Mureș, Sîngeorgiu de Mureș and Sînpaul - total population: 204,158 inhabitants;

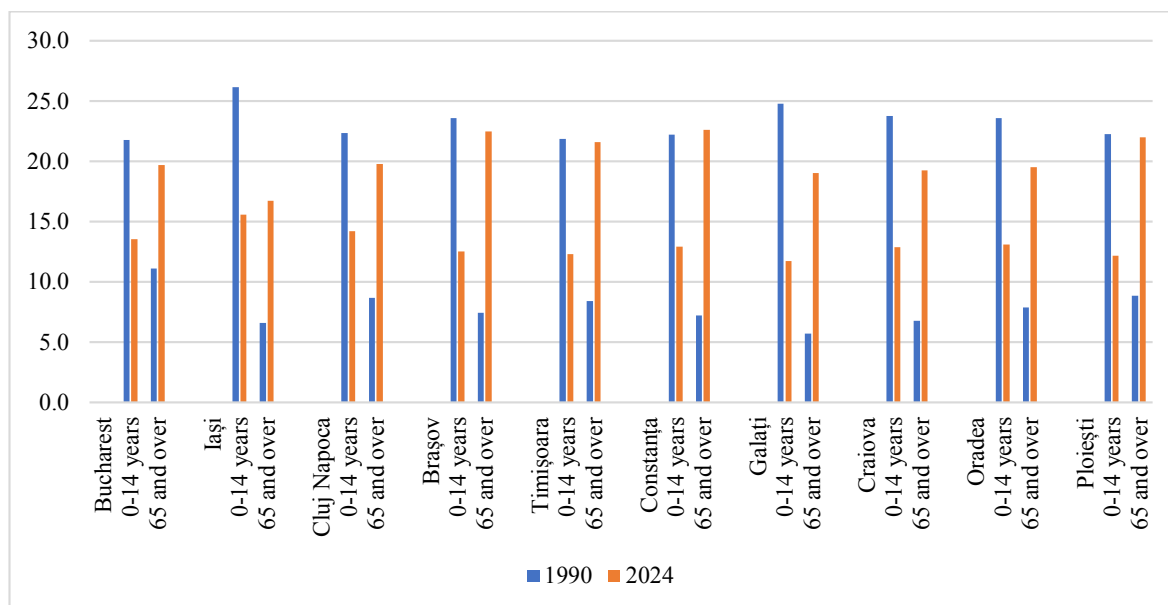
21. Vaslui Metropolitan Area - year of establishment: 2015. Composition: Vaslui Municipality, Vaslui County Council, Communes: Bălteni, Delești, Laza, Lipovăț, Muntenii de Jos, Muntenii de Sus, Pușcasi, Ștefan cel Mare, Văleni and Zăpodeni - total population: 86,943 inhabitants;

22. Zalău Metropolitan Area - year of establishment: 2015. Composition: Zalău Municipality, Cities: Cehu Silvaniei, Jibou, Șimleu Silvaniei, Communes: Agrij, Crasna, Creaca, Crișeni, Dobrin, Hida, Meseșeni de Jos, Mirșid, Pericei, Sălățiș, Sărmășag, Vârșolț, Hereclean and Bocșa - total population: 133,044 inhabitants.

Next, we will analyze demographic aging and, in particular, the evolution of the population by age group in the 10 cities in Romania whose population exceeds 200,000

inhabitants, namely: Bucharest (2,123,457 inhabitants), Iași (379,010 inhabitants), Cluj Napoca (325,353 inhabitants), Brașov (317,899 inhabitants), Timișoara (296,869 inhabitants), Constanța (295,695 inhabitants), Galați (294,905 inhabitants), Craiova (280,834 inhabitants), Oradea (213,549 inhabitants) and Ploiești (207,886 inhabitants).

Figure 3 Evolution of the share of the population aged 0-14 compared to that of over 65 in Romanian cities with over 200,000 inhabitants, 2024 compared to 1990



Source: Own calculations based on TEMPO-online Database, <http://statistici.insse.ro:8077/tempo-online/#/pages/tables/insse-table>

Among the 10 large cities, the highest share of the population over 65 years old (in 2024) was found in: Constanța (22.6%), Brașov (22.5%), Ploiești (22.0%) and Timișoara (21.6%), and the lowest share of the population 0-14 years old (in 2024) was found in: Galați (11.6%).

The highest increase in the share of the population 65 years old and over (2024 compared to 1990) was recorded in Constanța, from 7.2% to 22.6% (+15.4%), and the lowest increase in Bucharest, from 11.1% to 19.7% (+8.6%) – (Figure 3). At the same time, the largest decrease in the share of the population aged 0-14 (2024 compared to 1990) was recorded in Galați, from 24.8.2% to 11.7% (-13.1%), and the smallest decrease in Bucharest, from 21.8% to 13.6% (-8.2%) and Cluj Napoca from 22.3% to 14.2% (-8.2%).

4. CONCLUSIONS

In the absence of a policy that encourages fertility growth, Romania's population aging will increase in the next half century. In order for the decrease in mortality not to generate an increase in the share of the elderly, fertility needs to be sufficiently high (over 3 children/woman), a level that current advanced populations can no longer support either from a global demographic point of view (it would generate an unsustainable population growth) or from an individual perspective, of individuals or couples, for whom such a progeny is far beyond current conceptions, values and lifestyles.

A major consequence of population aging is the increase in the cost of elderly health, which puts more financial pressure on the sustainability of the pension system, health and social assistance services. Public health spending also plays an important role in maintaining the

health of the elderly, as well as in the general perception of the population on the health system. Labor productivity is significantly influenced by the demographic aging process and the health conditions of the population. The aging of the population, including the economically active population, correlated with the need for labor, requires a discussion on how to bring into the workforce those human resources formed by the elderly who have the physical and mental capacity necessary to carry out activities in the sectors of the national economy. In the Romanian public space, discussions have long been taking place about the reform of the pension system, the so-called "special pensions" (non-contributory, based on transfers/subsidies from the state budget for their financing), and about raising the retirement age. Obtaining the financing tranches from the National Recovery and Resilience Program (PNRR) is conditioned, among other things, by the reform of special/non-contributory pensions. Recently, the legal framework was outlined so that people of retirement age can opt to continue their professional activity, but without cumulating the pension with the salary obtained in the public sector.

Demographic aging means not only a decrease in fertility, but also an increase in life expectancy by reducing mortality in all age groups. In this sense, sociologist Traian Rotariu said that population aging is not necessarily a negative phenomenon, but can be considered a consequence of human progress: social welfare, economic growth, the development of science and technology, along with increased access of the population to quality health services.

In conclusion, it can be said that, even at the level of Romania's major cities, one of the main causes of population decline is the decrease in birth rates and the increase in mortality. The main causes of the decline in birth rates are considered to be socio-economic. Low income levels, insufficient job opportunities and the difficulty of finding housing are most often cited as reasons why people do not have children. However, the decline in birth rates cannot be fully explained without also taking into account the cultural factor, changes in values and mentalities.

Mortality is the expression of the health status of the population and the state of medical services. Insufficient and unhealthy nutrition, stress, poor health education, poor concern for disease prevention, reduced treatment options, along with environmental pollutants are the main causes of mortality. Regarding infant mortality, Romania continues to be among the European countries with high infant mortality.

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