



## **FAMILY HEALTH AND NATALITY AT THE BEGINNING OF XXI<sup>st</sup> CENTURY FROM THE ANTHROPOLOGIST'S PERSPECTIVE**

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Birth rate as a demographic phenomenon is biologically determined and shaped by the socio-cultural and economic conditions specific to each historical period. Most European states, including Romania, are affected by the accentuated phenomenon of population aging and by changes in the family model that cause the birth rate to drop. Specific to our country, the external migration of the young population also contributes to the low birth rate. In Romania, the average age at marriage of husbands and the average age of mothers at first birth have increased constantly, the fertility rate registering a value below the minimum generational replacement threshold. Demographic aging combined with the reduced birth rate will reflect, in the future, on the structure of the labor force, on the economic dependency index, as well as on the budget and the social insurance system.

*Key words:* birth rate, natural increase, migration, population aging.

### **INTRODUCTION**

Nativity (birth rate) is the demographic phenomenon of the frequency of live births in a population. It is a complex phenomenon with biological, cultural, social, economic and political implications.

An anthropological approach to natality requires the analysis of this phenomenon from a biological perspective alongside the socio-cultural context that is permanently shaping the biological resource according to development of human society over time.

Besides globalization, the demographic transition is one of the biggest changes 21<sup>st</sup> century society went through. Birth rate decline has been one of the most obvious trends global demographics has registered in industrially developed century, especially in the 20<sup>st</sup> century, carrying-on as well in the 21<sup>st</sup> century, increasingly affecting developing countries.

European countries have made significant advances in medicine and technology in last hundreds of years, thus leading to a decline in the

mortality rate. On the other hand, cultural and social changes have generated a decline in birth rate. The simultaneous decline of these rates over several decades, although it has resulted in a major change in the demographic profile, it is not yet obstructing for the economic and cultural growth. In less developed countries, the application of medical knowledge soon led to a swift drop in the mortality rate, though without much influence on natality, as life quality did not improve. A country's development is strongly linked to its society's literacy level because it allows the overall mentality to evolve towards better values.

The demographic structure of a country correlates with its level of development. Industrial development accelerates the urbanization process, as it involves training the personnel in order to secure local labor force.

When a country reaches an economic, social, cultural, educational and medical balance, there is the possibility of a plateau phenomenon between the numbers of births relative to the fertile population.

According to a study<sup>1</sup> for the European Parliament (2013) the decrease in the birth rate is determined by: the change of personal values

influenced by the socio-economic evolution of the post-industrial period and the desire of young people to succeed professionally, state pension systems that ensure the economic independence of the elderly of their children, the massive involvement of women in the labor market and modern methods of contraception.

In Eastern European countries, social, economic and political changes caused by the collapse of the socialist regime have led to sharp declines in birth rates in the late twentieth and early twenty-first centuries. Because of this, most European countries, including Romania, are affected by an accentuated phenomenon of population aging. According to data published by the National Institute of Statistics (INS), the resident population of our country has been declining for several years, in the context of a negative natural increase. The changes in the ratio of population's age categories are concerning, population's aging becoming dominant (Fig. 1).

### BIRTH RATE, MORTALITY AND NATURAL GROWTH OF THE POPULATION

Regarding the dynamics of the Romanian demographic profile in the 21st century, the main influencing factors are: birth rate, mortality and migration.

In Romania, the decrease in the birth rate was interrupted by a brutal pro-natalist policy (Decree no. 770/1966 on abortion), which, with some variations, continues until 1990. After the '90s, the birth rate diminishes sharply, following the general trend of the European countries on reducing the number of births (Fig. 2).

The share of births is significantly higher in urban areas in the first decade of the 21st century, which can be explained by the internal migration from rural to urban areas – especially of the young population in the last decades of the late century – caused by the high workforce demand implied by industrialization (between 1966 and 2019, urban population increases from 38.2% up to 54.0%).

Between 2018 and 2021, a new collapse in the number of births is registered, especially in urban areas.

The factors that influence the birth rate, respectively its decline are various. Apart from those mentioned in the study for the European Parliament in 2013, in Romania, the phenomenon of emigration, mostly of childbearing age people, is an important cause of declining birth rates.

The urbanization and the development of the post-industrial society lead to changes in personal values that produce disruptions in the family model. The traditional child-centered family is being replaced by an individualistic family model, where professional achievement and personal freedom are prioritized. As a result, families with 1 and 2 children have become dominant since the middle of the 20th century.

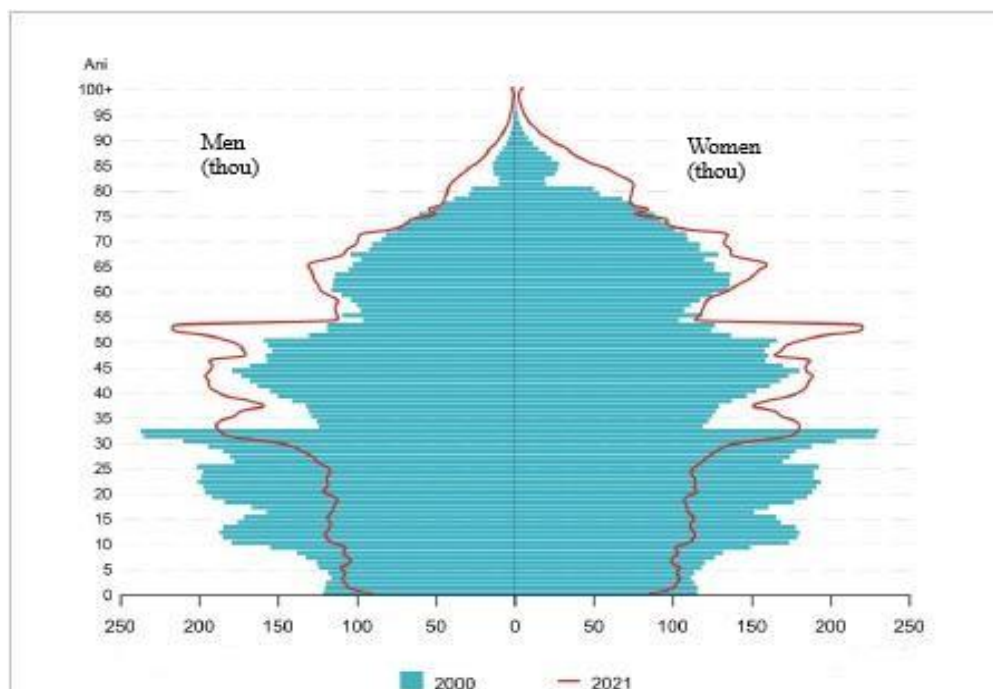


Figure 1. Population by sex and age, on January 1, 2000 and 2021.

Source: INS, Social Tendencies, 2019, <https://insse.ro/cms/ro>

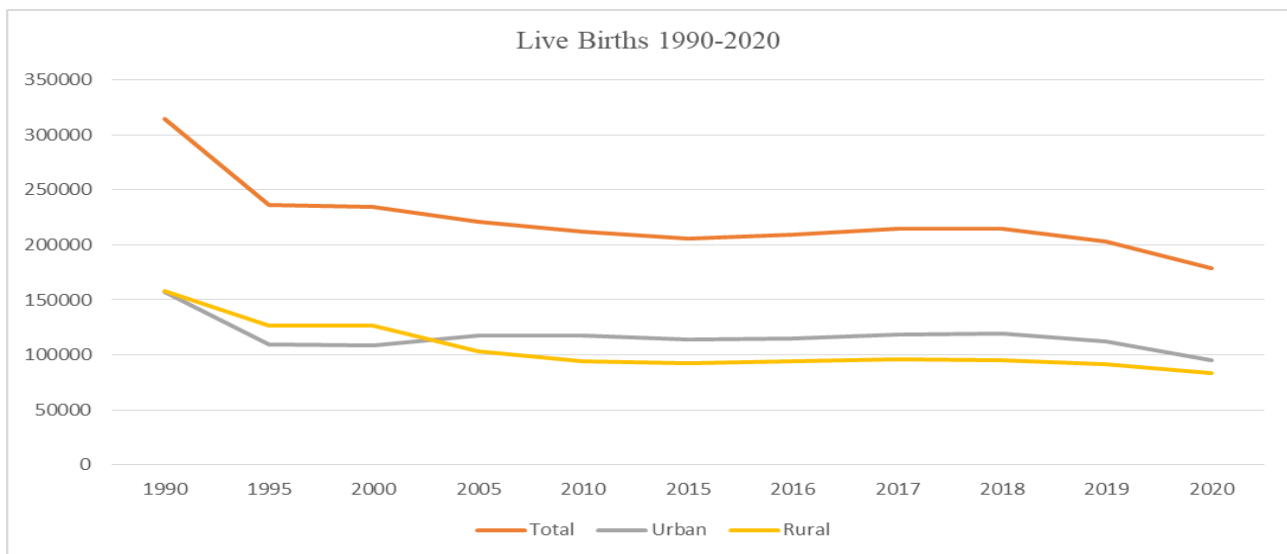


Figure 2. Number of births in Romania.

Source: INS, <https://insse.ro/cms/ro>

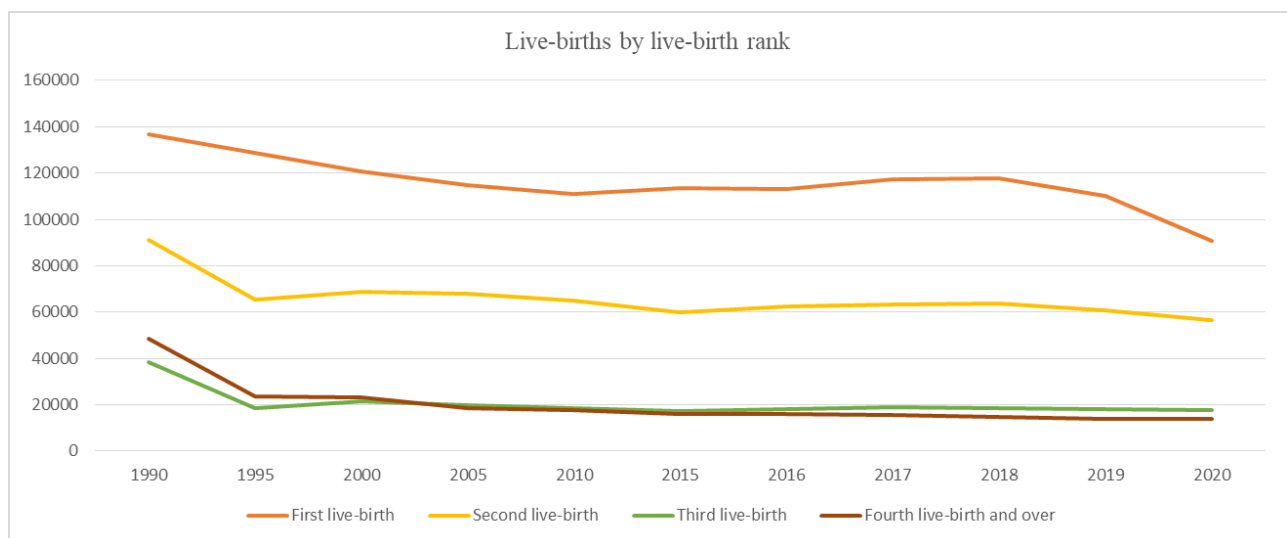


Figure 3. Rank of the live-births 1990–2020.

Source: INS, <https://insse.ro/cms/ro>

In the first decades of the 21st century, there are no significant changes in the family structure until 2018, when a decrease in the number of children of rank 1 and a slight decrease in those of rank 2 is registered (Fig. 3). This coincides with the decline of birth rate in the urban areas, 1 child families being more common there.

The birth rate is strictly conditioned by fertility – both indicators are markers of the economic status of a country at a given time. The fertility interval in women is delimited by menarche and menopause, the period between 15–49 years being generally considered as “fertile” in demographic studies.

Fertility rate values per 1000 women decreased from 56.2 in 1990 to 39.7 in 2000. Then they increased until 2017 (46.4), following another fall, reaching 43.0 live births / 1000 fertile women, in 2019.

Since 1990, the fertility rate as well as the quota of women of childbearing age has dropped from 11.3 million in 1990 to 8.8 million in 2021 (a decrease of about 2.5 million women) (Fig. 4).

After 2000, the fertility rate in urban areas tends to equal the one registered in rural areas, the latter decreasing almost constantly (Fig. 5).

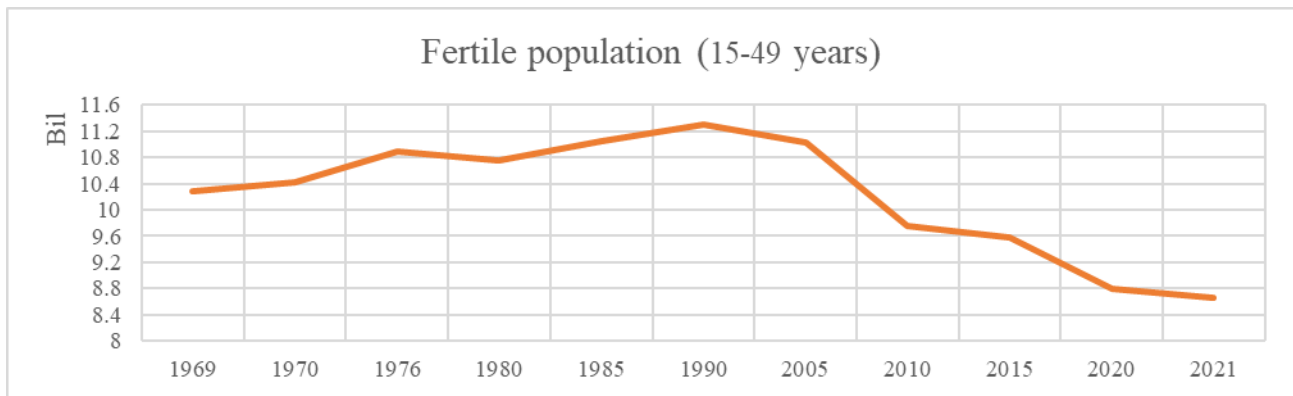


Figure 4. Fertile age population (15-49 y.o.).  
Source: INS, <https://insse.ro/cms/ro>

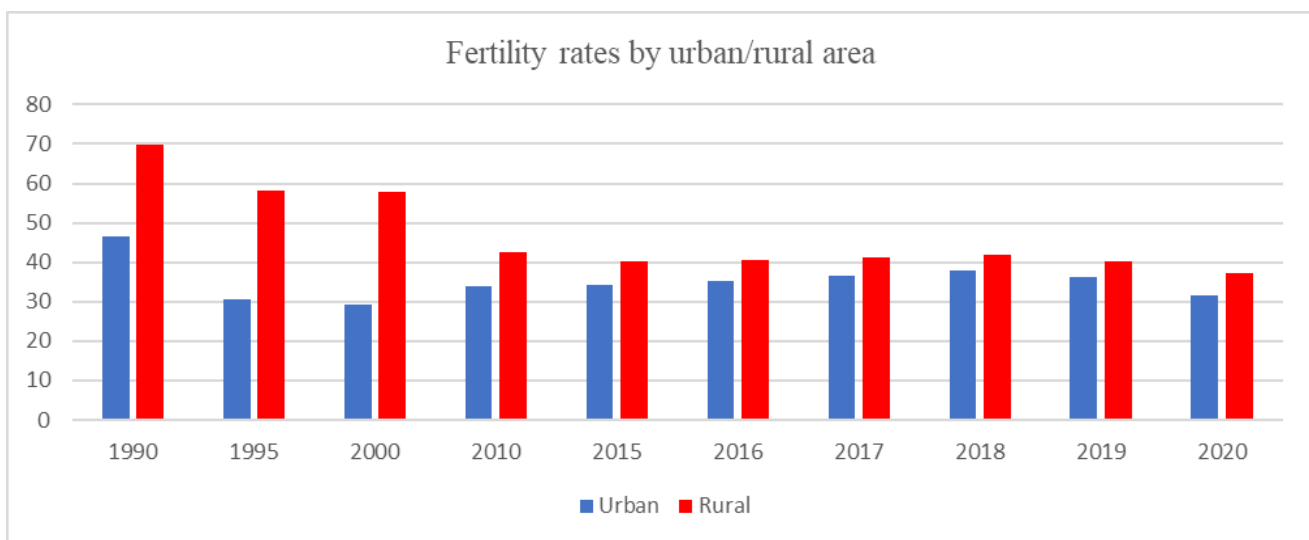


Figure 5. General rate of fertility per residence 1990-2020  
Source: INS, <https://insse.ro/cms/ro>

Fertility between the ages of 15 and 19 remains high, placing us on the first place in Europe, alongside Bulgaria, in terms of the number of births of teenage mothers. From 2019, fertility rate reaches values similar to the 35–39 years category (category in which the values of the fertility rate have constantly increased until 2020). If between the ages of 15 and 19 the birth of a child can pose serious medical problems, both for the mother and the fetus, as well as socio-economic problems (dropping out of school, financial insecurity, precarious conditions for childrearing), over the age of 35, the mothers also face medical problems, especially regarding the newborn's pathology<sup>2</sup>.

The fertility rate in the 20–24 age group decreases between 1990–2010, keeping relatively constant values until 2018, when a slight decrease is observed. After 2004, we find the highest

fertility rates in the 25–29 age group, replacing the 20–24 age segment which has always ranked first and which, from the biological point of view, is the proper period for procreation.

After 1994, the fertility rate for the 30–34 age group has been constantly increasing till 2016, when it reached the same values as the 20–24 age category. Since then, both of them have been growing in parallel. The increase in fertility rate between 30–34 years is the result of the influence of the socio-economic conditions (professional and material achievement) and of women's adaptation to the requirements of the current post-industrial society.

Over 40 years, the pace of fertility remains relatively low and constant throughout the analyzed period (Fig. 6), thus reducing the number of geriatric pregnancies with pathological risk.

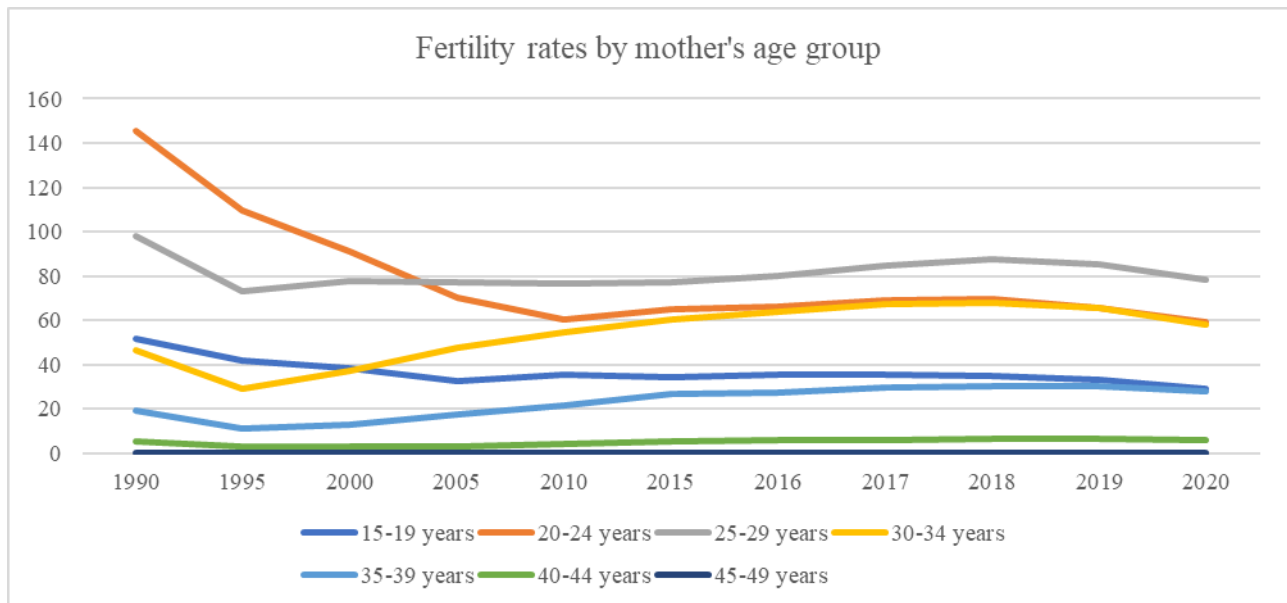


Figure 6. General fertility rates 1990–2020.

Source: INS, <https://insse.ro/cms/ro>

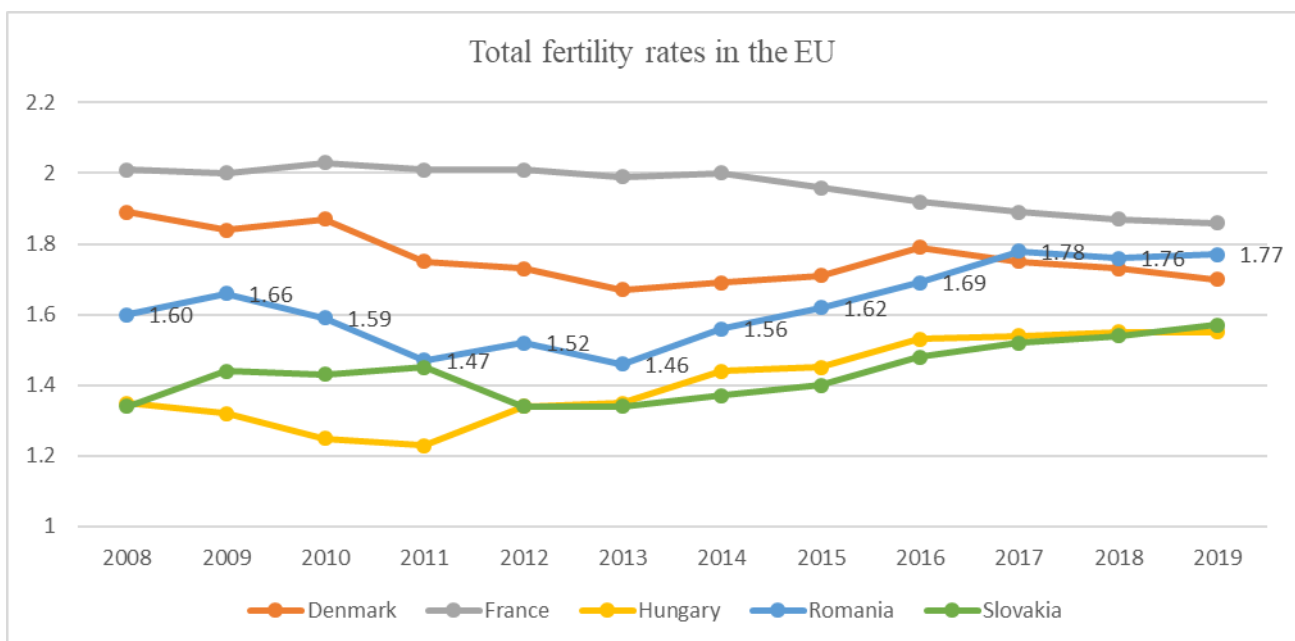


Figure 7. Total fertility rates in the EU.

Source: Eurostat, 2022, <http://ec.europa.eu/eurostat/data/database>

Although still registering a low value, below the minimum threshold of generational replacement, the fertility rate in Romania ranked us on the second place in the European Union in 2019, immediately after France, a country with successful pro-natalist social policies (Fig. 7).

The distribution of newborns by mother's age shifts from the 20–24 years group to the 25–29 years group between 2005–2018.

The mother's average age at her first birth is increasing throughout the study period, the growth being higher in urban areas (6.6 years) than in rural areas (4.8 years) (Fig. 8). Because the timing of the first birth is delayed, any subsequent pregnancies are pushed towards the end of the fertility period, so many of them cease to occur.

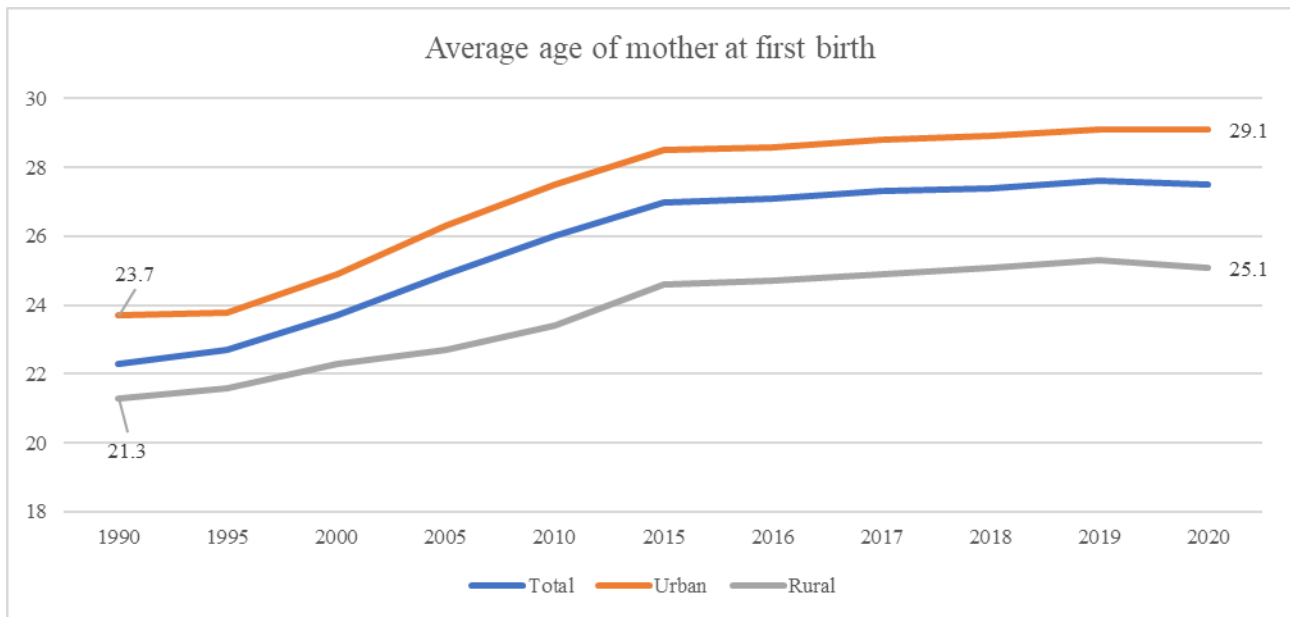


Figure 8. Average age at first birth by residence.

Source: INS, <https://insse.ro/cms/ro>

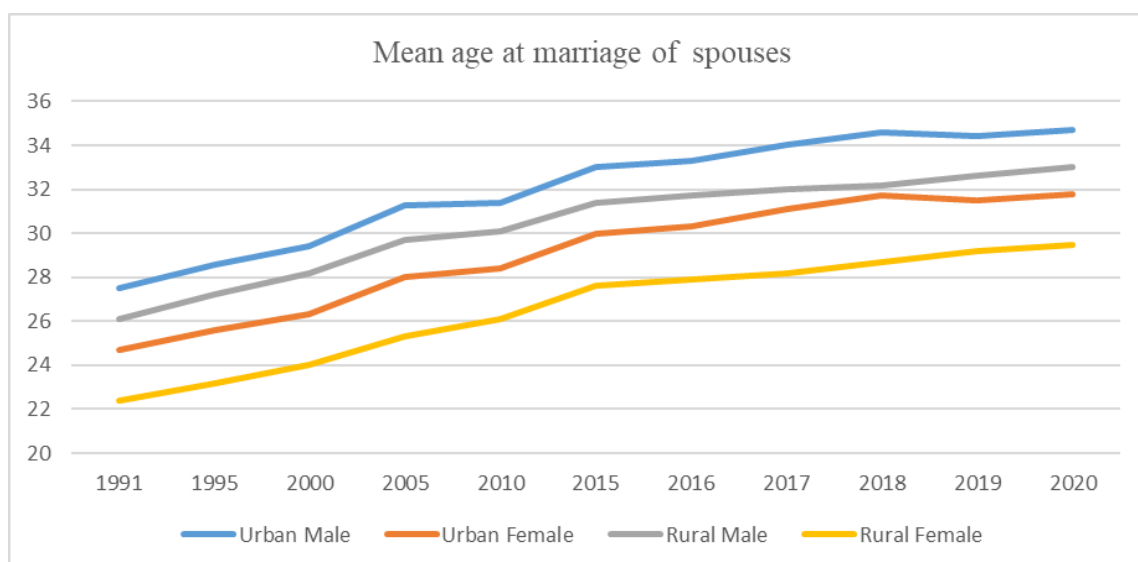


Figure 9. Average age of spouses when they marry.

Source: INS, <https://insse.ro/cms/ro>

Changes in marital behaviour affect both family and social relationships. The family-society relationship becomes more complex, each influencing the other. The socio-cultural structures in Romania are much more rigid than those in Western countries, however, the number of children born out of wedlock is increasing, meaning that a child's birth is a personal decision of the parents.

Both spouses' average age at marriage increased steadily in both rural and urban areas, averaging 5.4 years in urban areas and 4.9 years in rural areas between 2000 and 2020 (Fig. 9).

The increase of the spouses' average age at marriage in rural areas could be explained by the upsurging migration with Romania's entry into the European Union.

Advances in the medical field, easier access to pre/postnatal care and the reimbursement of medical services by the health insurance system, all have resulted in a steady decline in infant mortality. However, in rural areas infant mortality remains higher than in urban areas (Fig. 10).

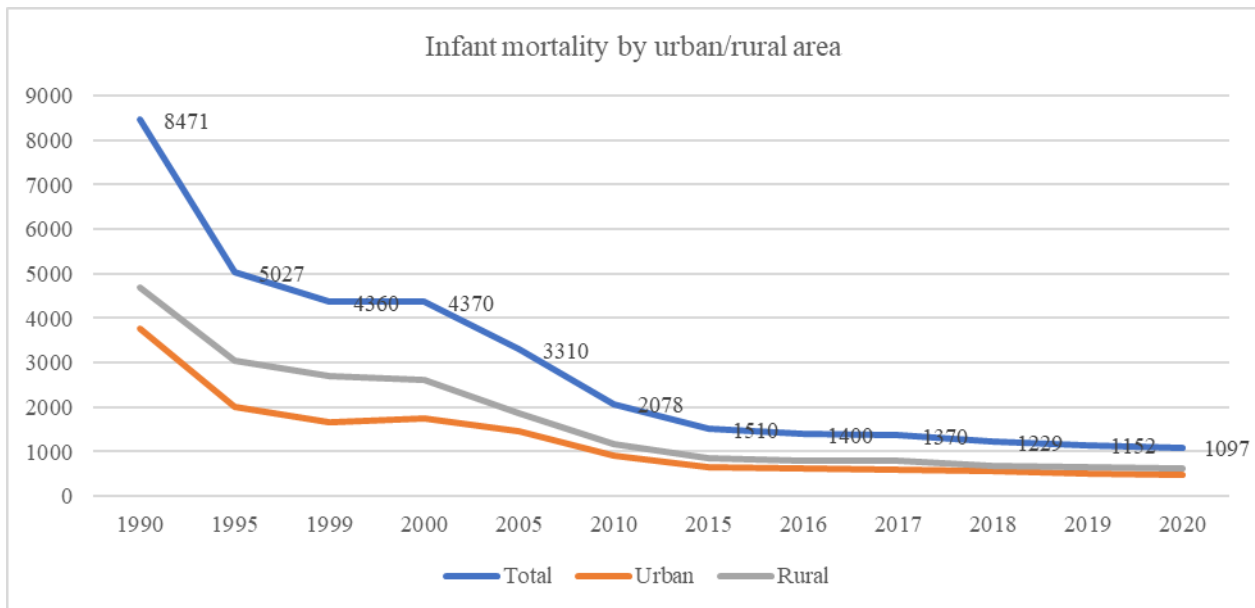


Figure 10. Infant mortality.  
Source: INS, <https://insse.ro/cms/ro>

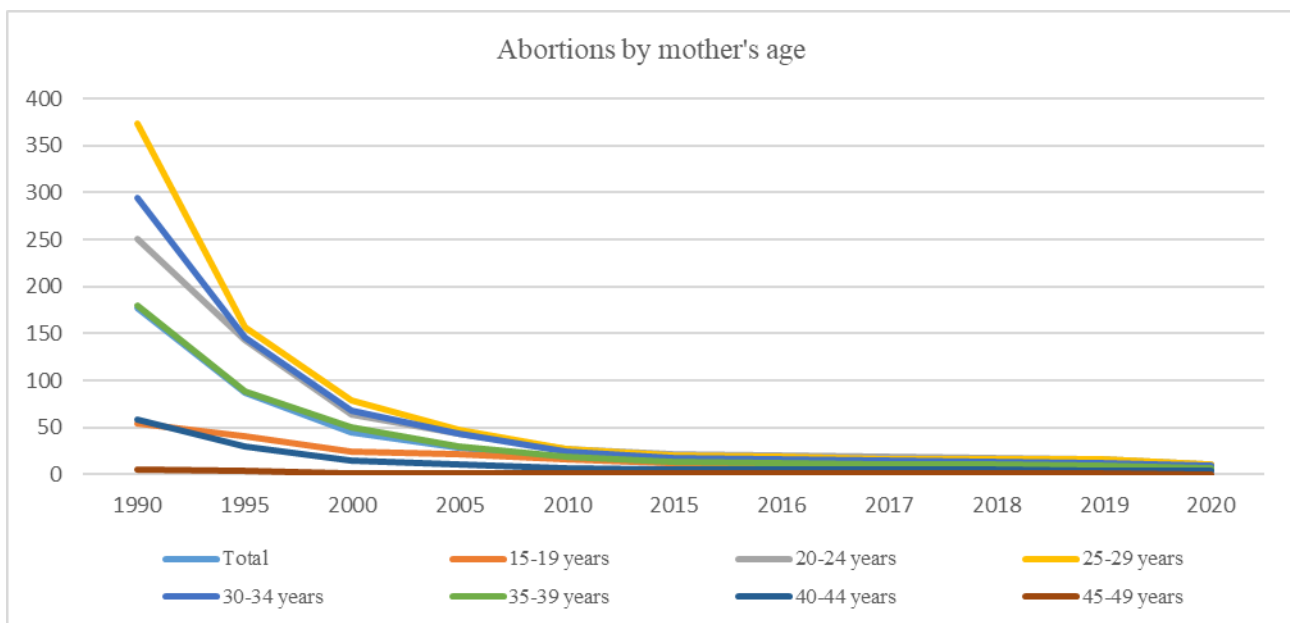


Figure 11. The number of abortions per 1000 live births.  
Source: INS, <https://insse.ro/cms/ro>

Measures to reduce infant mortality, especially perinatal mortality, ensure the survival of the newborn, compensating to a small extent for the low birth rate, as it is slightly decreasing the overall mortality, therefore discreetly influencing the pace of the natural growth.

The number of abortions per 1000 live births has steadily diminished in both rural and urban areas but also by age groups. The major cutback is found in the 45–49 age group (Fig. 11). This decrease in the number of abortions is mostly the

effect of much easier access to modern contraceptive methods.

Starting with 1990, the natural growth rate in Romania has negative values, decreasing constantly.

Due to internal migration, the urban population (54.0) exceeds the rural population (46.0). This materializes in a higher natural growth in the urban areas. In 2019, though, a decrease of the natural growth in these areas has been registered, compared to the rural environment (Fig. 12).

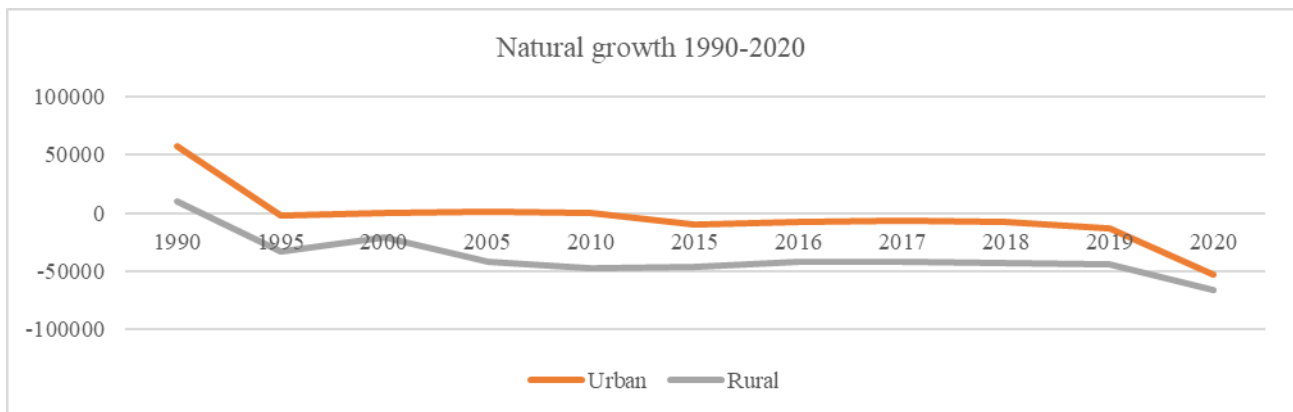


Figure 12. Natural growth of the Romanian population.

Source: INS, <https://insse.ro/cms/ro>, <http://ec.europa.eu/eurostat/data/database>

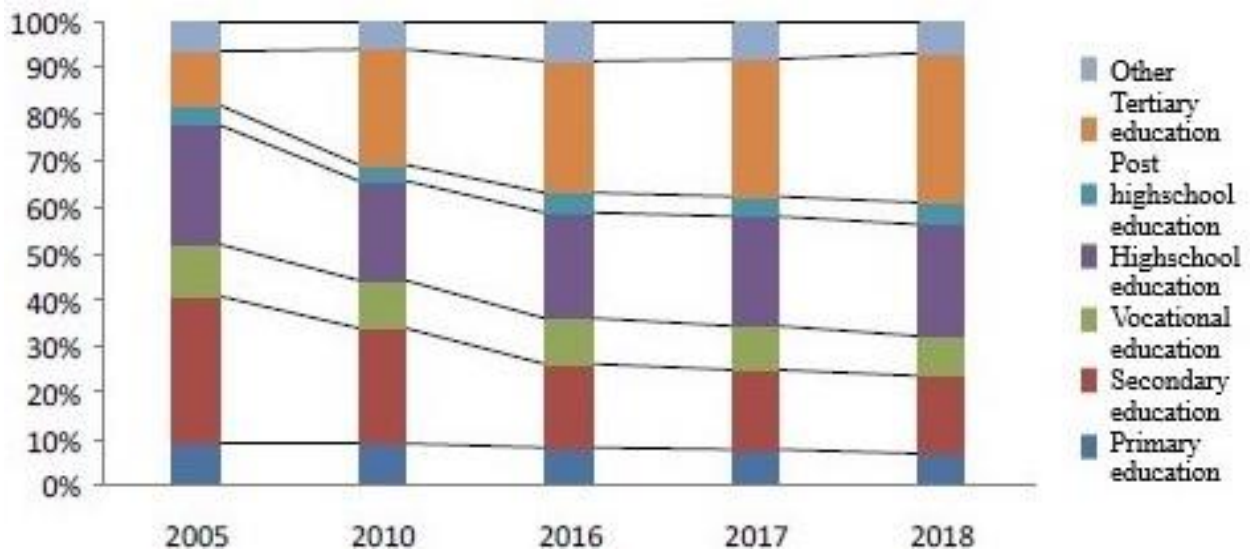


Figure 13. Distribution of live births by mother's level of education.

Source: INS, Social Tendencies 2019, <https://insse.ro/cms/ro>

It is important to mention that during the COVID-19 pandemic, the birth rate in Romania did not increase. According to the INS, in September 2021 there were at least 7,000 fewer births compared to the same period of 2020. Same trend of short-term depression of births aligned with the early months of the COVID-19 pandemic, can be found in many EU-countries (France, Belgium and Austria) but especially in Italy, Portugal and Spain.

In Romania, the external migration has a great impact on natality. The dominant age for migration is between 25–29 years, both for men and women, a period that overlaps the fertile age, depressing the number of births. Mostly women of childbearing age (15–49 years old) left the country. The cultural patterns that once endorsed high birth

rates are being replaced with the modernization of society and with the change in the way 21st century women relate to family and society. Access to education, the desire for professional and economic independence, family planning methods, high costs of children's rearing and education are factors that lead to pushing the mother's age at first birth to over 30, reducing the number of children or even leading them to not have children.

Migration has undesirable effects on the workforce, accelerates the aging of the population by changing age structures, decreasing fertility, changing the family composition or causing regional depopulation. Migration among men is higher (59.6) than among women (44.4), except for the period of economic crisis (2009–2011) when the percentage was reversed<sup>3</sup>.



Demographic aging, together with a low birth rate, will have the harshest effects on the future workforce and its structure, on the index of economic dependence and schooling, on the state budget and the social security system.

If currently over 21% of the population is represented by young people and children, in a few decades the demographic picture will look completely different: retirees will represent 60% of the country's population, the number of adults and children will be falling off and the age pyramid will significantly narrow its base.

Romania's demographic trends are:

- decline in the number of births;
- rise in the mother's age at the birth of her first child;
- dominant nuclear families with 1–2 children;
- population aging;
- deficient intergenerational exchange;
- excessive external migration.

The share of the elderly in the total population surges as the generation born during the post-war demographic explosion reaches retirement age. This will increase the dependency burden sustained by active people in order to cover the social costs inferred by the aging population and other related services – pensions, health care services, placement centers or private healthcare<sup>4</sup>.

Family health requires a multidisciplinary approach, involving specialists in various fields (medicine, anthropology, demography, economics, politics, etc.). The scenario according to which the decline in the birth rate will affect economic and social development in the future could be avoided through public policies and legislative measures aimed to support families and children, but also through education.

Legislative economic and social measures concerning the family with children are diverse in Europe and cover several aspects (economic development, cultural context, etc.). Family policies have been shown to have a positive effect on stimulating birth rates.

In Romania, there are several policies that support families with children. The right to sick leave and maternity / paternity allowance is regulated<sup>5</sup> and other financial benefits are provided (child raising allowance up to 2 years or 3 years in the case of a disabled child). Also, an insertion incentive to return to work earlier is regulated by the Romanian legislation<sup>6</sup>.

Financial support is also provided to low-income families to support the upbringing and care

of children (family support allowance)<sup>7</sup>. The state child allowance is a right granted to children under the age of 18 or until completing their studies.

There are also some measures to encourage local birth rates. An example is the Materna voucher which provides financial support to pregnant women over the age of 18, with permanent residence in Bucharest. This bonus is used to pay for medicine, medical services, clothes and baby furniture.

A real birth rate adjustment can be achieved through programs, measures, strategies that primarily support the mother, family / couple and through the relevant analysis of the novel socio-cultural behaviors.

In the 21st century, women have undertaken more and more social obligations, having to allocate time to both family and profession.

Since 2004, in Romania, the birth rate has changed according to residence (more children born in urban areas as shown in Fig. 2). It is worth mentioning that the number of mothers with secondary education has decreased and the number of employed women with higher education who became mothers has grown (Fig. 13).

The increasing involvement of women in the labor market has, of course, led to the investment of a longer period of time in their own education process.

The decision of a couple to have children is determined not only by individual, social and economic factors, but also by social policies. According to the latest Eurostat data, many countries rank below the European birth rate, therefore, the need to launch a debate on this topic emerged in the European Parliament. The Commission was urged to encourage Member States' governments to invest higher percentages of public funds in birth and family support policies, especially by promoting work-life balance for parents<sup>8</sup>. Gender balance in the use of parental leave is a measure that can lead to reconsidering the decision to conceive one or more children.

## CONCLUSIONS

- The declining birth rate can be explained by the decision to postpone the moment when women start a family and become mothers. Thus, the fertile period is considerably reduced due to the new socio-cultural models that lead to this decision. The fertility rate in the age group

30–34 years is constantly increasing after 1990. The upswing of the mother's age at the birth of her first child entails the drop of the number of children of a family, thus influencing the decrease of the birth rate. With age, the drop in fertility is a strictly biological phenomenon, the natural consequence being the alteration of the genetic material<sup>9</sup> (both in the case of women and men) and, implicitly, of the conception product<sup>10</sup>. The discrepancy between the biological field and the new socio-cultural values justifies, partly, the decline in the birth rate registered in the European area.

- In order to produce the expected effects, the new birth rate programmes and policies should also focus on target groups, to meet different needs. Individuals in the population manifest different degrees of education, values and necessities, thus finding themselves in different situations that benefit them or not. Therefore, for some couples, the decision to conceive a child may be influenced by different factors. There are parents for whom the need to spend a long and quality time with the child is a natural behavior, so they will appreciate the ease of obtaining extended leave or flexible work schedule. For people without a stable income and who do not own real estate, financial incentives or facilities to obtain housing can help with this decision. People with an exhausting work environment or single-parent families will resonate with the projects in which they are supported to take their children to nurseries and kindergartens in decent financial conditions. Projects are effective if they target different segments of the population.
- Stimulating the birth rate by adopting financial policies and measures occurs in the medium and/or long term, though there are many factors that influence it. It is difficult for a campaign or a particular piece of legislation to be able to

lead to the desired effect on its own in a short time, taking into account all the factors involved.

- We consider it appropriate to implement and sustain long-term support measures for children and young people to have access to quality education and advanced medical services. The increase in the number of professionally competent individuals with a high active life expectancy could remove, in the future, the economic decline caused by the decreasing birth rates phenomenon.

## REFERENCES

1. Ron Davies. Library Briefing Library of the European Parliament. 21/05/2013. 130519REV2. p. 2-3.
2. Heazell AEP, Newman L, Lean SC, Jones RL. Pregnancy outcome in mothers over the age of 35. *Curr Opin Obstet Gynecol.* 2018 Dec;30(6):337-343. doi: 10.1097/GCO.0000000000000494.
3. <https://insse.ro/cms/>
4. [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Archive:Structura\\_%C8%99i\\_%C3%AEmb%C4%83tr%C3%A2nirea\\_popula%C8%9Biei&oldid=502947](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Archive:Structura_%C8%99i_%C3%AEmb%C4%83tr%C3%A2nirea_popula%C8%9Biei&oldid=502947)
5. <https://ec.europa.eu/social/main.jsp?catId=1126&langId=ro&intPageId=4746>
6. <https://ec.europa.eu/social/main.jsp?catId=1126&langId=ro&intPageId=4748>
7. <https://ec.europa.eu/social/main.jsp?catId=1126&langId=ro&intPageId=4749>
8. <https://eur-lex.europa.eu/legal-content/RO/TXT/?qid=1494929657775&uri=CELEX:52017PC0253>
9. Balasch J, Gratacós E. Delayed Childbearing: Effects on Fertility and the Outcome of Pregnancy. *Fetal Diagn Ther* 2011;29:263–273. <https://doi.org/10.1159/000323142>
10. Mikwar M, MacFarlane AJ, Marchetti F. Mechanisms of oocyte aneuploidy associated with advanced maternal age. *Mutat Res Rev Mutat Res.* 2020; 785:108320. doi: 10.1016/j.mrrev.2020.108320
11. INS, *Tendențe Sociale*, 2019, 2021
12. <http://ec.europa.eu/eurostat/data/database>