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# The effect of crisis on demography and employment in CEE countries

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Europe faces the most challenging long-term demographic forecasts globally. Over the centuries, demographers have conducted extensive studies to uncover the drivers behind population trends, relying on theories such as demographic transitions and economic models. Europe is currently experiencing a pronounced migration trend coupled with declining birth rates and total fertility rates. Crises usually generate negative effects, as demonstrated by the greater than average decrease in birth rates and employment rates during the COVID period in Europe. Declining population trends have, and will continue to have, adverse effects on the labor market. To mitigate these detrimental impacts, the EU adopted important measures since 2009. Although the decline in the employment rate recovered quickly in the EU, demographic trends have not. In 2022, the European Commission also shifted its focus and introduced several initiatives aimed at improving demographic outcomes at EU level. Moreover, demography has emerged as an independent policy area, recognized as a key element of the triple transition and competitiveness. By contrast, Central and Eastern European (CEE) countries implemented active demographic policies much earlier, particularly after the 2008 economic crisis with registered success. However, in relative terms, crises have had a more significant impact on both demographics and the labor market in the CEE region. Labor market flexibility in the region does not sufficiently support demographic policies. This paper examines these trends and argues that a combined approach of enhancing labor market flexibility and supporting families is essential for alleviating the adverse demographic trends affecting Europe. It further argues that for CEE countries, due to their increased vulnerability, it is crucial to continue prioritizing demographic measures that support families and strengthen the labor market.

## KEYWORDS

Central and Eastern Europe, demography, supporting families, labor market, competitiveness, employment

## 1 Introduction

In European public thinking, migration has been predominantly seen as the solution to mitigate labor shortages over the past decades, while the idea of supporting demographic renewal by encouraging higher birth rates has not been emphasized (Pári et al., 2024, p. 4). The 2015 migration crisis and the Ukrainian war led to millions of migrants arriving in Europe, with some being absorbed into the labor market, but the demographic crisis persisted, and the two most pressing demographic challenges in EU Member States are considered to

be population aging (42%) and a shrinking working-age population and labor shortages (40%) (European Commission, 2023, p. 3).

In response, at European level, the 2019/1158/EU directive on work-life balance<sup>1</sup> was adopted aimed at making the labor market more flexible (D'Andrea, 2022, p. 14), and in 2022, the European Commission adopted a demographic report,<sup>2</sup> and developed a toolkit to support parents, aiming to increase labor market participation. Therefore, 2022 can be seen as a turning point, but it depends on EU Member States to take action, as European institutions have limited powers. In comparison, CEE countries started active demographic policies much earlier, following the 2008 crisis, to support parents and families (Barzó, 2024, p. 760), and these efforts have been continuous and are in the spotlight ever since. These policies have exerted positive effects on the labor market participation of parents (Gellérné Lukács and Mészáros, 2024, p. 14–19), although the long-term impact remains uncertain. However, the labor market has not been properly adjusted to family needs, with full-time jobs still being predominant and flexible working conditions fading after their uphill during and after the COVID (Molnár et al., 2024, p. 572).

## 2 Materials and methods

The central theme of the article is the impact of crisis on Europe's demography, especially CEE countries and Hungary with a special focus on the labor market. The article elaborates on these issues and argues that only the combined and supported implementation of both policies can lead to results that will alleviate the demographic decline.

This research aims to explore how the demographic situation in the EU can be improved and how adequate labor force availability can be ensured amidst these demographic challenges. The first section provides a mapping of the current situation, setting the scene by outlining the room for maneuver available to EU Member States in addressing demographic challenges, the policies they have implemented so far, their impacts, and potential directions for further action. Among demographic factors, special attention is given to birth rates, fertility rates, migration, and the effects of crises on these aspects. Subsequently, the labor market situation is examined, with a particular focus on the impact of crises on the labor markets of the EU and CEE countries. This is followed by a discussion assessing the challenges of demographic transition and the potential implications of a declining labor force on the EU labor market and competitiveness.

The research primarily adopts a desk-based methodology, relying on literature reviews and legal analysis, complemented by extensive statistical data analysis. This includes the use of self-generated graphs. The approach combines description and synthesis, incorporating a comparative perspective both temporally (contrasting periods affected and unaffected by crises) and geographically (comparing EU Member States with CEE countries).

## 3 Setting the scene: demography and labor market situation in the EU

### 3.1 Population and demographics

World population reached 1 billion in 1800, which has risen to 8 billion in the past two centuries (Pison, 2022). According to forecasts based on different scenarios, the UN estimates a 95% probability that world population is expected to continue growing for another half or more than half century, reaching a peak of around 10.3 billion people in the mid-2080s, up from 8.2 billion in 2024. After peaking, it is projected to start declining, gradually falling to 10.2 billion by the end of the century (United Nations Department of Economic and Social Affairs, Population Division, 2024). Figure 1 illustrates this change based on low, medium and high fertility variants.

On average, a woman today bears one child fewer, than they did three decades—approximately a generation—ago. Currently, the global fertility rate stands at 2.25 live births per woman. This rate was 3.31 in 1990. More than half of all countries globally have fertility below 2.1 births per woman (e.g., Europe, North America and part of Asia and Southern America), which is the level required for a population to maintain a constant size in the long run without migration. The world population by countries—based on the UN average annual rate of population change between 2015 and 2020—increased in most regions, but decreased in Eastern and Central Europe and Southern Europe—except for Spain—and in Georgia, Venezuela, Japan and Syria.<sup>3</sup> It is important, that “*globally, the number of women in the reproductive age range (roughly, between 15 and 49 years) is projected to grow through the late 2050s, when it will likely peak at around 2.2 billion, up from nearly 2.0 billion in 2024. Growth in the number of women of reproductive age is conducive to continuing population increase even when the number of births per woman falls below the replacement level.*” (United Nations Department of Economic and Social Affairs, Population Division, 2024, p. 3.)

Research on population trends in Europe is widespread and focus on various aspects of demographic change, including fertility rates, migration patterns, and socio-economic implications. Notably, the work of Matthijs et al. provides a comprehensive overview of population changes across Europe, the Middle East, and North Africa, emphasizing the demographic divide and its implications for policy and planning (Matthijs et al., 2016). Their analysis is crucial as it encapsulates a broad temporal scope, covering significant demographic shifts over the century. Another significant contribution comes from Lesthaeghe, who explores the demographic and cultural transformations in Western Europe, highlighting the underlying dimensions that have shaped these changes over the past century (Lesthaeghe, 1983). This work is particularly relevant as it situates demographic trends within a broader socio-cultural context, allowing for a nuanced understanding of how population dynamics are influenced by cultural factors.

The population of the European continent in 2022 was 745 million, representing 10% of the total world population. Seven decades earlier, this number was 550 million (22% of the world population) and there

1 Directive (EU) 2019/1158 of the European Parliament and of the Council of 20 June 2019 on work-life balance for parents and carers and repealing Council Directive 2010/18/EU, OJ L 188, 12.7.2019, p. 79–93.

2 EUROPEAN COMMISSION, Communication, Demographic change in Europe: a toolbox for action COM(2023) 577 final.

3 Due to the population growth rate data from the United Nations, DESA/ Population Division <https://population.un.org/wpp/> (Accessed: 07/01/2025).

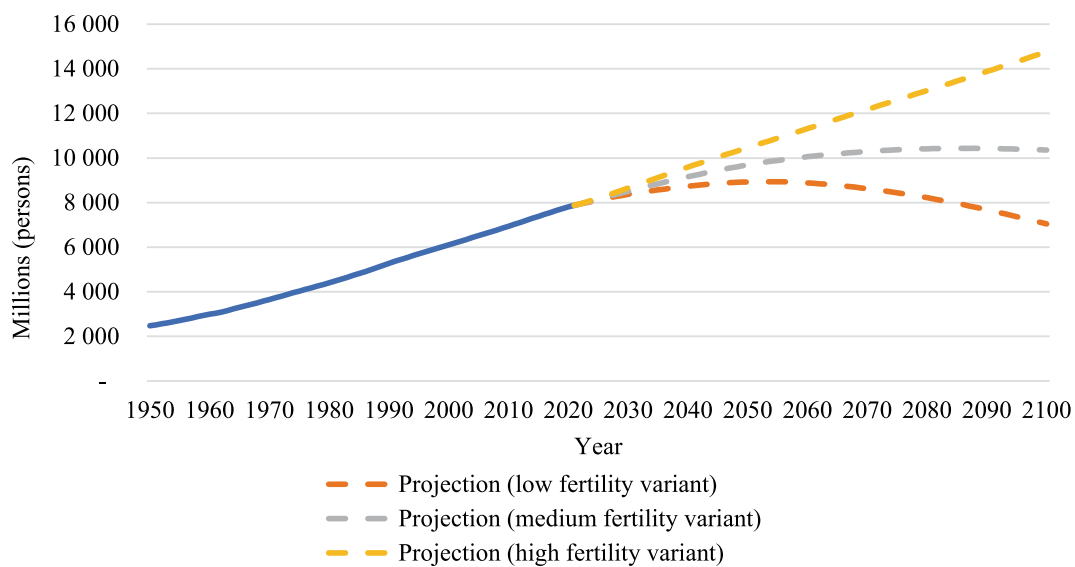


FIGURE 1

Total Population, as of 1 January (millions) and projections, 1950–2,100 Source: UN, Population Projections Database; graph edited by the authors.

was an increase of only 35%. This was the smallest increase among all the continents. By 2,100, Europe's population is projected to fall to 586 million people, reducing the continent's share of the world population from 10% to less than 6% (United Nations Department of Economic and Social Affairs, Population Division, 2024). Consequently, we face an aging and declining population in the "old continent." The EU27 population is projected to increase from 446.7 million in 2022 and peak at 453.3 million in 2026 (+1.5%), then gradually decrease to 447.9 million in 2050 and to 419.5 million in 2100.<sup>4</sup> In addition, the birth rate and fertility rate, which determine population growth, in the EU are well below the population replacement level. Countries with low fertility rates often rely on immigration to maintain population levels, but this solution is not universally applicable and can lead to social tensions and integration challenges (Parr, 2022). Europe's fertility rate fell from 2.77 in 1950 to 1.53 in 2021, and none of the EU Member States currently reaches the 2.1 level that is needed for population reproduction. As Figure 2 illustrates, on a baseline scenario, population trends will show a continued downward trajectory in the long term. However, the EU's population is still rising and is predicted to continue to do so for decades to come, despite the continuing decline in fertility. The increase in the next decades in population is not a result of organic domestic growth but of additional population inflow from international migration.

The countries of origin of immigrants arriving to Europe are diverse, and migration trends are constantly changing due to political, economic and social factors. The increase in the number of migrants arriving from African and Middle Eastern countries has been particularly notable in the last decade. For example, Italy has already seen a significant number of irregular border crossings since 2014, mainly from North Africa, especially Libya. This trend was further intensified during the migration crisis of 2015, when the number of

refugees increased dramatically, and the situation has continued to challenge the Italian government and European policy since then. Conflicts in the Middle East, such as the Syrian civil war, have also generated significant migration flows, leading to many people seeking refuge in Europe. Many of these refugees arrive via Turkey (Bridges and Mateut, 2014; Kalas, 2021).

Central and Eastern European countries, such as Hungary, are also affected by immigration processes, as many migrants pass through these countries to reach Western Europe. Migration policies and border protection are also central issues here, and local political discourse often revolves around national identity and security (Pogonyi, 2019).

### 3.2 Life expectancy and aging population

In 2021, life expectancy at birth in the EU was 82.9 years for women and 77.2 years for men.<sup>5</sup> Crude death rates fell to 9.9 per 1,000 deaths per person in 2001, 9.7 in 2004, and 11.9 in 2021.<sup>6</sup> The mortality rates were highest in Bulgaria (21.7 deaths per 1,000 population), Latvia (18.4), Romania (17.5), and Lithuania (17.0), and the lowest in Ireland (6.8), Luxembourg (7.0), and Cyprus and Malta (8.0) in 2021.

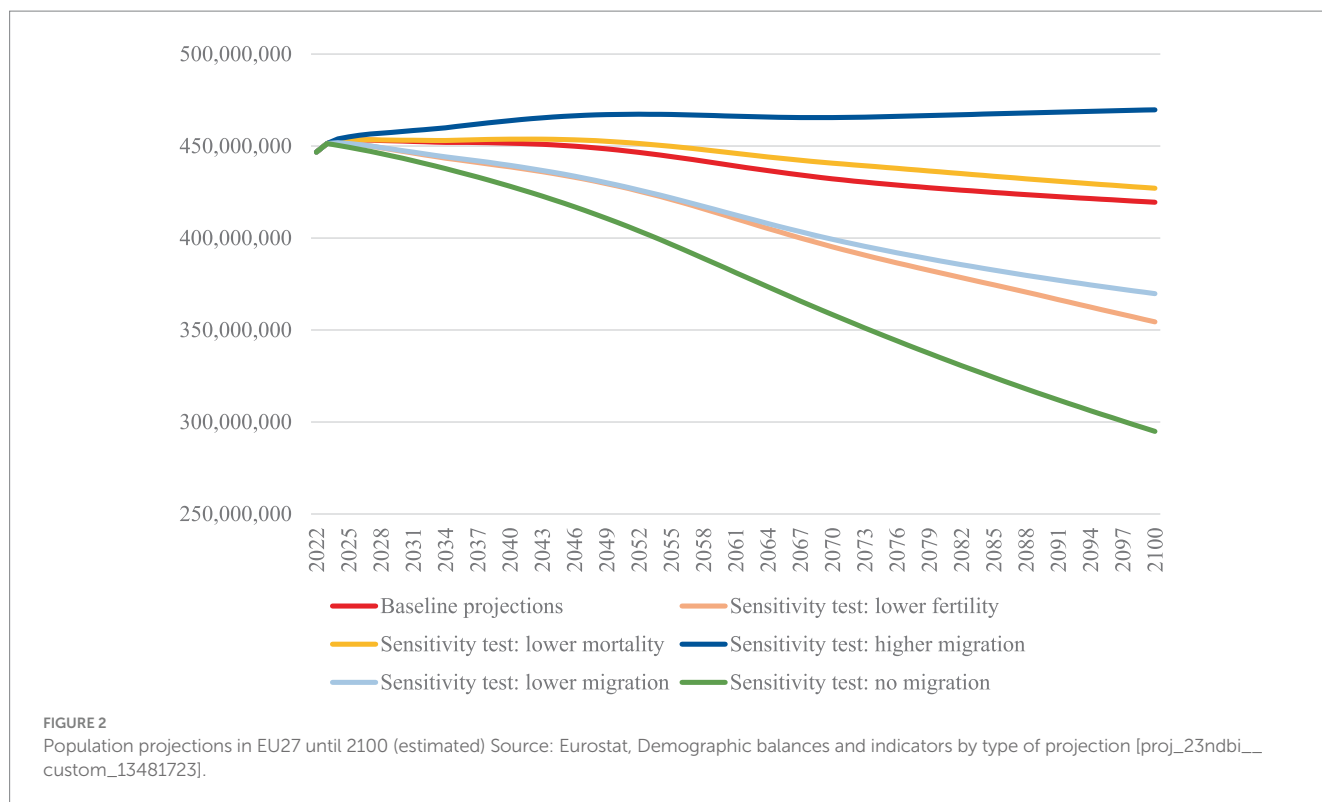
The total fertility rate does not reach the 2.1 value required for reproduction in any EU Member State.<sup>7</sup> In 2010, the value of the indicator in Ireland, France and Sweden approached or exceeded the

4 EUROSTAT (2023). Demography of Europe—2023 edition. Publications Office. ISBN 978–92–76–99580–7. <https://data.europa.eu/doi/10.2785/083>.

5 Eurostat (2024) Mortality and life expectancy statistics, March 2024, [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Mortality\\_and\\_life\\_expectancy\\_statistics](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Mortality_and_life_expectancy_statistics).

6 Eurostat (2023) Key figures on the EU in the world—2023 edition, Publications Office of the European Union, 2023, 19. <https://data.europa.eu/doi/10.2785/515035>.

7 Source: Eurostat. <https://ec.europa.eu/eurostat/databrowser/view/TPS00199/default/table?lang=en>.



value of 2, but after that it started to decrease: in Sweden, by 16%, in Ireland, by 13%, and in France, the fertility rate decreased by almost 10 percent compared to 2010, which is now 1.7–1.8. If we look at the propensity to have children of the native and immigrant population, we can find significant differences, because in France women with a migrant background are twice as willing to have children as native French women: in the case of the former, the total fertility rate per woman is on average 3.4, while for the latter it is 1.7.

Recent data indicate that birth rates across Europe have shown significant regional variability. The research of Campisi et al. investigated whether the deviation of the values characteristic of NUTS 3 regions differs from the national TFR (Campisi et al., 2020). A strong correlation was found indicating that deviations in fertility patterns are more influenced by spatial structure than by differences between neighboring regions. This suggests that regional effects on fertility are more significant than country borders, with macro-regional cohesion often playing a larger role. For instance, Brandenburg's NUTS 3 regions in eastern Germany have above-average fertility, while neighboring Lubuskie Voivodeship in western Poland has below-average fertility, despite the similar TFR levels of Germany and Poland. Thus, territorial factors, alongside economic and sociocultural influences, play a crucial role in fertility. Figure 3 illustrates the projections for the population pyramid for the EU27 for 2,100.

### 3.3 Immigration and internal mobility

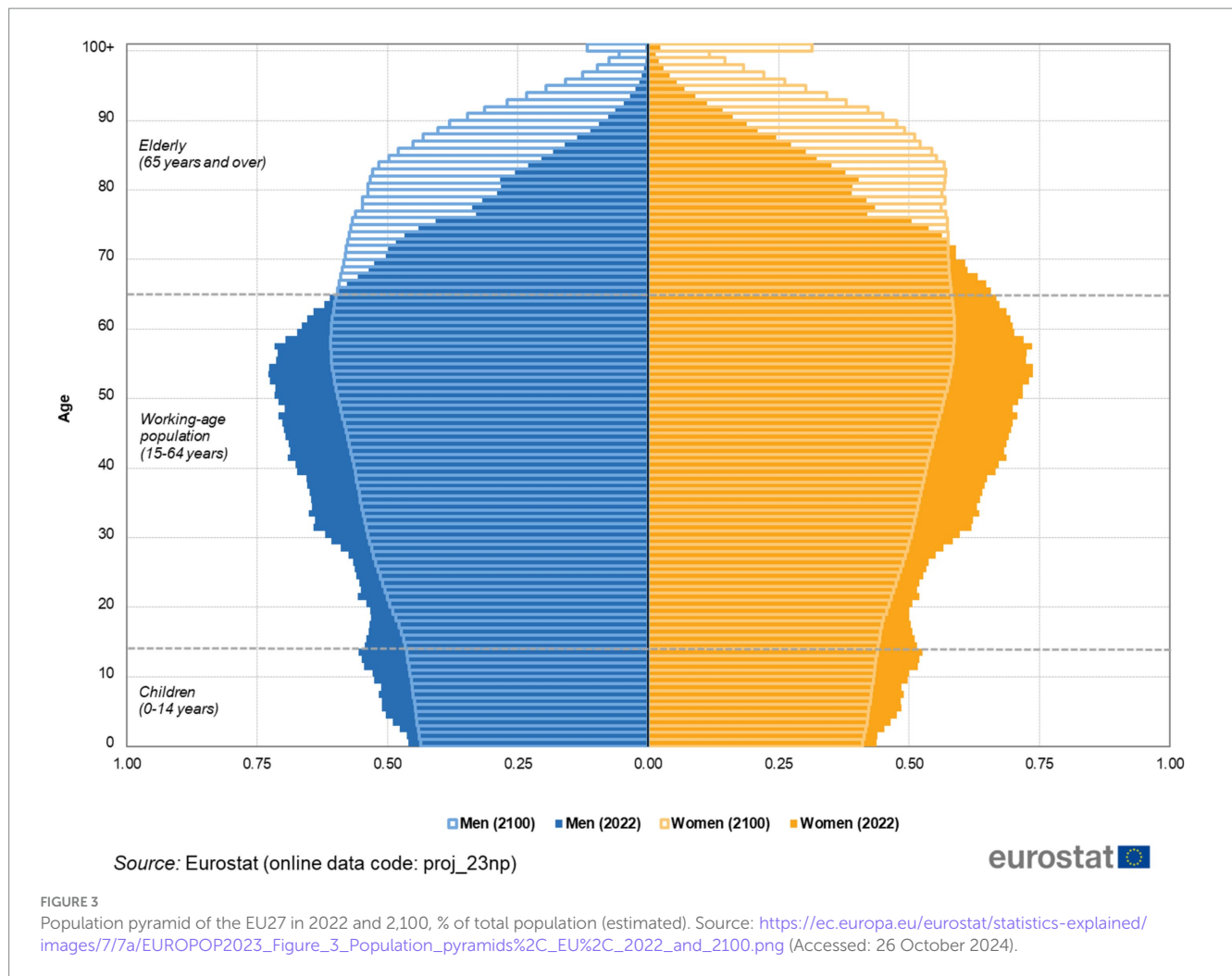
The motivations for migration are multifaceted. Economic factors remain a primary driver, as individuals seek better job prospects and living conditions. Research highlights that migrants often choose

destinations based on perceived accessibility and historical ties, with many opting for countries where they have established networks or prior connections (Christensen et al., 2016). This is particularly evident in the case of Central and Eastern European migrants who have increasingly moved to Western European nations, contributing to the labor market and addressing skill shortages (Strockmeijer et al., 2019). The emergence of new migration routes and destinations reflects changing global dynamics, as individuals explore opportunities beyond traditional migration corridors (Chatzipanagiotidou, 2018).

Migration also influences the dynamics of population change, emerging as a primary factor, particularly in the context of stabilizing fertility and mortality rates. Europe's population is shrinking, in consequence the labor age population is also decreasing. One of the primary ways migration contributes to sustainable population growth is through its compensatory effect on fertility rates in low-fertility areas. For instance, in European countries such as Sweden and Luxembourg, net migration has been shown to sustain long-term population growth even when fertility rates drop to very low levels (Parr, 2023).

Due to the impact of the pandemic, immigration to Europe could not offset the natural population decline during 2020 and 2021 on EU average. In the individual Member States, however, we get a very different picture<sup>8</sup>. In the majority of countries (Belgium, Czech Republic, Denmark, Germany, Estonia, Spain, Latvia, Lithuania, Netherlands, Austria, Portugal, Romania, Slovenia and Finland) the growing population can be attributed to migration, so

<sup>8</sup> Eurostat (2023) Key figures on the EU in the world—2023 edition, Publications Office of the European Commission.



that in the meantime a natural population decrease experienced in 2022. In six countries (Ireland, France, Cyprus, Luxembourg, Malta and Sweden) both natural reproduction and positive net migration contribute to population growth. Among seven EU member states that reported a population decline in 2022, only Greece registered a population decline due to negative natural change and negative net migration. In the other six countries (Bulgaria, Croatia, Italy, Hungary, Poland and Slovakia), the positive net migration was not sufficient to compensate for the negative natural population dynamics. Albeit the Visegrád countries (Poland, Czech Republic, Slovakia, and Hungary) play a crucial role in Ukrainian migration, Lipták and Kincses (2023) for thematic and scope-related reasons, this segment will not be addressed in the current discussion.

### 3.4 Labor market and employment policies in light of crisis

During the first two quarters of 2020, European economies experienced their most severe economic downturn since World War II, with recessions that were both sharper and deeper than those triggered by the global financial crisis and the European sovereign debt crisis of 2007–2009 (International Monetary Fund, 2022). Since

2020, the European Commission has coordinated a unified response to the COVID-19 pandemic, including measures to mitigate its socio-economic effects. The SURE instrument provided financial loans to support Member States' public spending on job retention schemes, self-employment subsidies, and wage support (Hoffman et al., 2024). These measures varied significantly across Europe in terms of sectoral and demographic coverage, as well as their duration (European Commission Directorate General for Employment, Social Affairs and Inclusion, Icon Institute, 2020). Eurofound's COVID-19 EU PolicyWatch database registered over 1,300 measures (Eurofound and European Commission Joint Research Centre, 2021). The swift and large-scale policy responses implemented by EU and national authorities effectively mitigated labor market damage and supported a rapid economic recovery in 2021. Job retention schemes alone preserved around 4 million jobs, contributing to record-low unemployment rates and high labor force participation in several Member States by the end of 2021 (International Monetary Fund, 2022, p. 8–9). The labor market was affected by COVID-19 restrictions in 2020, showing a 1 percentage point decrease in the employment rate compared with 2019 (72.7% in the latter year), but then recovered in 2021 with a 0.4 pp. increase compared with 2019. The share of employed people in the EU was 73.1% (2021), which included 189.7 million people.

A qualitative comparative analysis on 2017 and 2018 data on 17 European countries found that institutional factors, such as immigration policies, welfare state configurations, and employment regulations, were significant on influencing the labor market outcomes for migrants, often relegating them to low-wage and precarious employment conditions (King, 2022). This analysis yielded two distinct combinations of institutional factors that have been identified as contributing to the high level of marginalization experienced by migrants. The first combination consists of restrictive immigration policy and a prominent low-skill sector, in conjunction with robust employment protection legislation. The second combination involves restrictive immigration policy and a prominent low-skill sector, along with the presence of a well-developed welfare state.

In their study, Kanas and Fenger investigate the role of non-cognitive skills in the exacerbation of labor market inequalities between immigrants and native workers in Europe. The non-cognitive skills to which they refer include such factors as interpersonal abilities, emotional intelligence and resilience. These skills are becoming important in the modern labor market, particularly in technological advancements which are reshaping both job requirements and workplace formations (Kanas and Fenger, 2023). The study underscores that immigrants frequently encounter obstacles in acquiring these competencies, which can result in disparate labor market outcomes compared to their native counterparts.

However, while native workers (the EU Member States' own nationals) experienced relatively stable employment, unemployment, and activity rates during the economic contraction, EU-born workers (workers born in other EU Member States) faced greater fluctuations, with even more pronounced impacts observed among non-EU-born workers. In 2020 the change was visible: "between the last quarter of 2019 and the first quarter of 2021, the employment rate of migrant workers born outside the European Union dropped by almost 6%, while for EU migrant workers, the loss of employment was closer to that experienced by natives, at approximately 3.1%." (Fasani and Mazza, 2023) Compared to the last pre-pandemic quarter (2019q4), in the first quarter of 2021 employment rates fell by about 2 percentage points (p.p.) for natives, 2.5 p.p. for EU-born and almost 4.5 p.p. for non-EU-born (Mazza et al., 2022, p. 7). Some of the non-native workers returned home because of job losses in Western Europe, for example, the number of members of Hungarian households working abroad decreased by 39,000 in 2020 (Gellérné Lukács, 2021, p. 106). Specifically focusing on the Visegrád countries (Czechia, Hungary, Poland, and Slovakia), Zieliński (2022) used Eurostat data to examine the impact of the COVID pandemic on the labor markets of these countries. Based on analysis of Eurostat database 2018–2021, Zieliński claims that the rate of layoffs was lower during the pandemic, presumably because employers were concerned about the difficulty of finding new workers and did not reduce employment. In the V4 countries the flexible forms of employment worked as a business cycle buffer, created a decline in temporary employment, part-time jobs and an increase in self-employment. Molnár et al. (2024) examine the trends in the Czech and Hungarian labor markets from a regional perspective, especially in light of the two recent crises and confirm that between the two crises analyzed—the 2008 financial and economic crisis and the COVID-19 pandemic—the former had a more significant impact in both of the countries (Molnár et al., 2024, 580). No mass return migration from Western EU Member States back to the CEE countries was detected (Zaiceva and Zimmermann,

2013, p. 4). A study examining the CEE region as a whole argues that returnees are less likely to actively participate in the labor market, they rather choose self-employment (Martin and Radu, 2012).

While the pandemic has not worsened the labor market situation of women (compared to other EU countries, see Mazza et al., 2022), it has worsened the situation of young people, those aged 55–64, and people with lower education levels. Also, significant outward migration to the EU-15, alongside the associated debates on posted workers and social dumping, as well as the events since 2008 financial crisis, have adversely influenced industrial relations and workers' labor rights in the EU (Czorzasty, 2024, p. 18).

In the short term, immediately after the economic shock of the 2008 crisis and the COVID pandemic, government intervention helped to reduce the rise in unemployment. Taking into account the effects of the intervention in terms of limiting labor market imbalances, similar measures are recommended in case of another shock. As state intervention implies an increase in public debt, its size should be adapted to the depth of the shock (Zieliński, 2022).

## 4 Discussion

### 4.1 Demographic transition

Coleman discusses the emergence of a "third demographic transition" in Europe, characterized by low fertility rates and high levels of immigration, which has significantly altered the demographic landscape of many European countries (Coleman, 2006). This perspective is essential for understanding the contemporary challenges faced by European societies, particularly in terms of integration and social cohesion. Reher's examination of the economic and social implications of the demographic transition provides insights into how demographic changes have been intertwined with economic development and social modernization in Europe (Reher, 2011). This analysis underscores the importance of considering economic factors alongside demographic trends to fully grasp their impact on society. The work of Billari highlights the shifts in fertility patterns across Europe, noting the decline in birth rates and the implications for future population structures (Billari, 2005). This decline is a critical aspect of the demographic changes observed over the century, as it directly affects population aging and the sustainability of labor markets and social welfare systems.

Europe's demographic situation in the recent years has been described as a "demographic winter" (Dumont et al., 1986, p. 21) and "wrinkled Europe" (Dumont and Verluise, 2014) which refers to a worldwide decline in birth rates. Today, no European country meets the ratio of around 2.1 live births per woman, which would be necessary for sustainable population in a country, not considering migration. In 2023, 3.66 million babies were born in the EU (in 2022 still 3.88 million babies), the number of children born in the EU has been continuously declining since 2016, when 4.38 million children were born.<sup>9</sup> In the last 7 years, the rate of decline in the number of

<sup>9</sup> EUROSTAT, Fertility statistics, 24 February 2024, [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Fertility\\_statistics](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Fertility_statistics) and <https://www.statista.com/statistics/253401/number-of-live-births-in-the-eu/>.

births has been slightly more than the same rate as the population of Luxembourg. If the current rate of decrease in births continues, the EU27 will be missing a population equivalent to that of Estonia in the first half of the 2030s, within the next 7–8 years.

The number of elderly people in the EU—namely those over 80—is expected to increase by 57.1% between 2010 and 2030,<sup>10</sup> which has significant consequences for the labor market and social security systems. Between 1998 and 2018, the population in some EU regions decreased by 15% due to rapid depopulation and population aging. Such a rapid demographic change generated disproportionately high adaptation costs, primarily for the social security system, but indirectly for the economy and other areas as well.

Demographic indicators, including the age composition of the population, have a major impact on the economy, working capacity, and, ultimately, competitiveness of a country, region, or continent. In turn, aging has repercussions on the economy, the labor market, the sustainability of pension systems, and the increasing burden on health and social care systems. At this point, in the long term, fertility decisions have an invaluable role in terms of population development.

## 4.2 The effect of crisis on fertility indicators and governmental measures

The number of children born in Europe and the total fertility rate (TFR) has been influenced by various demographic, economic, and social factors over the years. Crisis plays a significant role: the EU's total fertility rate, after rising from 1.43 in 2001–2002 to a peak of 1.57 in 2008–2010, declined slightly, fluctuated until 2017, and then resumed its downward trend. During the COVID-19 pandemic, the rate dropped to 1.51 in 2020, briefly rose to 1.53 in 2021, and fell again in 2022 and reached a low of 1.46 live births per woman.<sup>11</sup>

The impact of the COVID-19 pandemic on mobility, health care and social welfare systems was considerable (Gyenyey, 2021), and on birth rates it has been particularly notable. A study analyzing live birth data from 24 European countries found a significant decline in birth rates during the pandemic, with a reported decrease of 14.1% in January 2021 compared to previous years (Pomar et al., 2022, p. 2923). This decline happened 9–10 months following the peak of the epidemic and the lockdowns associated with the first wave of COVID-19 in Europe. It was more pronounced in southern European countries, where economic uncertainty and health concerns may have led to a reduction in family planning and childbearing decisions (Aassve et al., 2021). The pandemic's effects on birth rates have been compounded by existing trends of declining fertility, particularly in regions with historically low birth rates, such as Southern and Eastern Europe (van and Rózańska-Putek, 2016). In Southern Europe, lower levels of cash transfers and family allowances have been linked to higher poverty risks for families with children, which may deter couples from having more children (Barbieri and Bozzon, 2016). The

relationship between economic stability and fertility is complex, as economic uncertainty can lead to delayed childbearing and lower overall birth rates (van and Rózańska-Putek, 2016).

It is clear from the fertility data that, despite the large-scale immigration wave of recent years, the desire to have children has decreased in Europe, and fewer and fewer children are born, more and more of them come from parents with an immigrant background. In 2013, one in eight children, and in 2021 one in six, was born to a mother of foreign nationality in the European Union. Two-thirds of the births in Luxembourg can be linked to mothers of foreign origin, while in Belgium, Germany, Austria, Sweden, Cyprus and Malta every third, in France, Spain, Ireland every fourth, and in Italy, Denmark, Greece, the Netherlands and Portugal every fifth newborn were born to immigrants. In Hungary, the same rate was much lower, only 4% (Pári et al., 2024).

After 2010, Hungary stood up for family values and the decisive community-shaping power of the family (Fűrész and Molnár, 2021). The Hungarian family policy in the last 14 years is already showing itself in serious results. Hungary has achieved the greatest growth in Europe in terms of having children and the stability of relationships: the fertility rate indicating the desire to have children increased by 27%, the number of marriages doubled, and the number of divorces and abortions decreased by 40% in more than a decade (Fűrész and Molnár, 2021). It can be said that the opportunities for families have significantly improved in Hungary over the past more than one decade, due to the fact that family life, especially large families, is a prominent aspect of the country's operation, and Hungary has managed to break with the "habituation" that those who have more children, will spend the life in poverty (Novák and Fűrész, 2021, p. 240–245).

During the COVID-19 pandemic, in Hungary, supporting families and children remained an overarching principle, the coronavirus caused no break in this either. Despite the social and economic difficulties caused by the virus, there has been no cutting or termination of benefits, quite on the contrary, the continuity and even the reinforcement of family policy measures was observed (Gellérné Lukács, 2021, p. 109). Perhaps the greatest demographic merit of Hungarian family policy is that over the past 15 years it has drawn a stable population onto the Hungarian age structure, as Figure 4 illustrates.

In recent years, the annual number of childbirths in Hungary has been between 85 and 93 thousand, which represents a low but stable number. The large cohort of children born in the Ratkó era<sup>12</sup> and their children (Ratkó grandchildren) were outstanding, however, regrettably, a third outgrowth on the Hungarian population pyramid is missing (the Ratkó great-grandchildren) (Figure 5).

10 Eurostat (2024) Mortality and life expectancy statistics, March 2024, [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Mortality\\_and\\_life\\_expectancy\\_statistics](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Mortality_and_life_expectancy_statistics).

11 Eurostat (2024) Fertility statistics, February 2024, [https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Fertility\\_statistics](https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Fertility_statistics).

12 The Ratkó era—named after Anna Ratkó, the Cabinet Minister of Health from 1950 to 1953—is the name given to the population policy between 1952 and 1956, during which the natural reproduction rate increased significantly due to the abortion ban and the child tax. In 5 years, more than 1 million children were born in the country (Ratkó children). The highest number of live births during this period was in 1954, when 223,347 children were born and the total fertility rate (TFR) was 2.97. The so-called Ratkó grandchildren (born between 1974 and 1979) also had many children. This was the last in Hungary's demographic history when the fertility rate was above the replacement level.

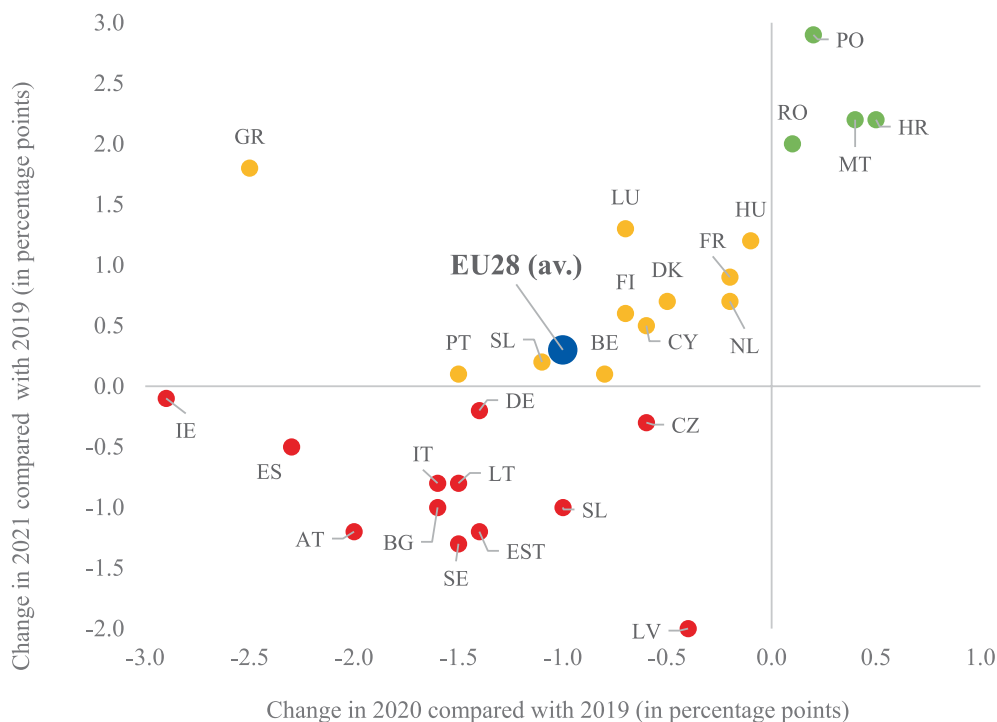


FIGURE 4

Annual change in employment rate, compared 2021/2019 with 2020/2019 [in percentage points (pp.)]. Source: Eurostat Tabel code: lfsi\_emp\_a (Accessed: 15/01/20251).

The situation is very similar in every CEE state including the challenges and the introduction of a series of family friendly measures (Gellérné Lukács and Mészáros, 2024). It is very important to establish a family-oriented value system at the social level and to support family-friendly workplaces. It can also be concluded that young adults are committed to the family (Michalski, 2024, p. 207). Therefore, the promotion of childbearing, or at least keeping it at the same level, must raise policy questions in EU decision-making that cannot be avoided from a demographic point of view.

“It seems that exploring the topic of parenthood and its different dimensions—including the relationship between having children and being active on labor market—combined with dissemination of good quality knowledge should be seen as an urgent and necessary task to be done in order to create the best possible climate, regulations and solutions which would foster win-win synergy between parenthood and professional activity. Labor market is important, but it has no future without the fundamental work and effort that parents perform every day within their families.” (Michalski, 2024, p. 209).

### 4.3 Demography as a new explicit driver for competitiveness

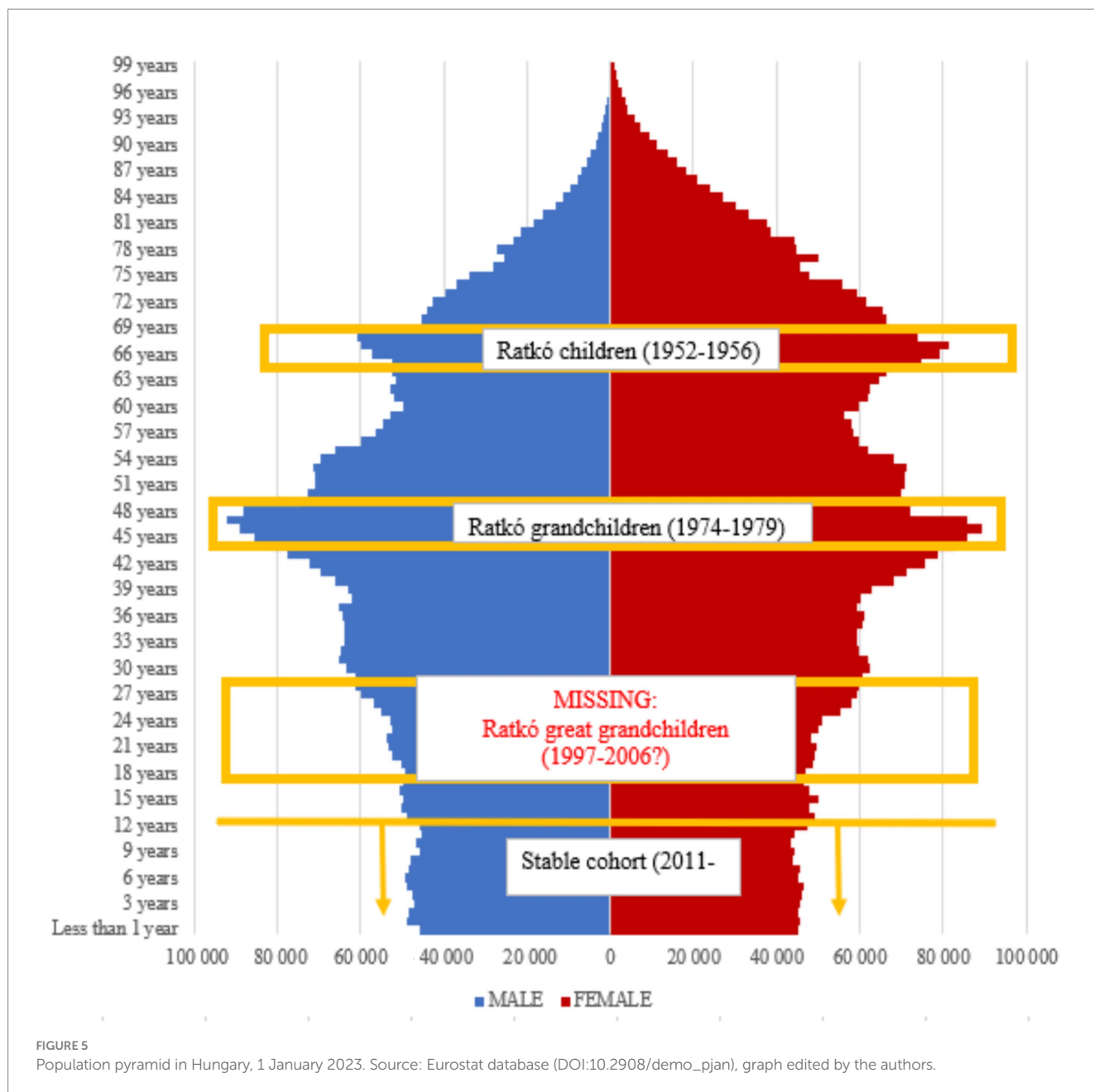
Huguenot-Noël and Corti analyzed the role of EU employment policies in promoting social citizenship by evaluating the evolution and distribution of individual entitlements over time and argue that the EU has broadened its influence on individual social rights in

recent years (Huguenot-Noël and Corti, 2023, p. 190). The authors observe that this turn was endorsed by the aftermath of the 2008 crisis. It is evident that employment has always been a cardinal element of competitiveness, and both the provisions of the TFEU (Articles on the Internal Market and on social policy)<sup>13</sup> and several regulations and directives have been built upon the idea of decent work (Gyulavári, 2022). However, against the background of the financial and economic crisis in 2008, followed by Brexit and the subsequent adoption of the European Pillar of Social Rights (EPSR), EU policies established inclusive growth as a priority area and focus more on social rights. Directive 2019/1158 on work-life balance is a recent example of mandatory legislation which has twofold target objective. It does not only have a strong economic focus (widening the circle of employees), but it is also supporting social citizenship by establishing individual's rights as protected parents or carers. A research focusing on migrants' knowledge about their social rights—in Denmark, the Netherlands, and Germany—is positively correlated with their subjective well-being (Seibel, 2023). This research emphasizes that policy makers should take into account how they communicate policy regulations to migrant populations, because it has an effect on their subjective well-being as well.

Since January 2023, a refined European approach tailored also to addressing demographic challenges has gained prominence. First, the

<sup>13</sup> Article 3 of the Treaty on European Union (TEU), and Articles 9, 10, 19, 45–48, and 145–161 of the Treaty on the Functioning of the European Union (TFEU).





European Commission published its report *The impact of demographic change—in a changing environment*.<sup>14</sup> In June 2023 it was discussed by the European Council which in its June conclusions invited the Commission to “present a toolbox for addressing the impact of demographic challenges on Europe’s competitive edge.”<sup>15</sup> It has been made clear by the European Council that demography is an important

element of competitiveness. The subsequent Granada Declaration of 6 October 2023 highlights that addressing the demographic challenge is part of efforts to build a stronger, more dynamic, more competitive and more cohesive Europe in a changing world.<sup>16</sup> The Declaration recognized the outstanding impact of the demographic challenge on the future of the European Union.

At the 9th Cohesion Forum held on 11–12 April 2024, Commission President Ursula von der Leyen and Cohesion Commissioner Elisa Ferreira highlighted the concept of a “triple

14 The impact of demographic change in a changing environment, [https://commission.europa.eu/system/files/2023-01/Demography\\_report\\_2022\\_0.pdf](https://commission.europa.eu/system/files/2023-01/Demography_report_2022_0.pdf) (Accessed: 10.07.2024).

15 European Council meeting (29 and 30 June 2023) – Conclusions, Point 18 g, <https://data.consilium.europa.eu/doc/document/ST-7-2023-INIT/en/pdf> (Accessed: 10.07.2024).

16 Council of the EU (2023a). The Granada declaration of 6 October 2023, <https://www.consilium.europa.eu/en/press/press-releases/2023/10/06/granada-declaration/pdf/> (Accessed: 10.07.2024).

transition.” Alongside the green and digital transitions, which have largely dominated public discourse thus far, they emphasized the importance of demographics.<sup>17</sup> “Of crucial importance in this respect is the combined effect of the green and digital transitions on destroying and creating jobs, on the quality potential of new jobs and on wage levels,” and significant fiscal challenges loom on the horizon, as demands for social spending are increasingly competing with the need for public funds to address the impacts of climate change and environmental degradation (Petmesidou and Guillén, 2022, p. 321). Demographic challenge as a third overarching issue requires a shift in approach for Europe to address competitiveness effectively.

The Draghi Report in September 2024 was straightforward regarding Europe’s productivity challenge: “Europe needs faster productivity growth to maintain sustainable growth rates in the face of adverse demographics. After the second world war, the EU experienced strong catch-up growth driven by both rising productivity and a growing population. However, both drivers of growth are now slowing.” (Draghi Report, 2024, p. 26) The Draghi report highlights a critical shift in demographic trends and labor force dynamics. Historically, steady growth in the working-age population has been a key driver of GDP in major economies. However, since the 1990s, this growth has slowed and entered a consistent decline over the last decade, largely due to falling fertility rates across EU Member States and Europe as a whole. Positive net migration, even in inclusive Western nations, has not sufficiently offset this decline. Moreover, long-term projections indicate further population shrinkage, exacerbated by significant aging trends.

The Draghi report further emphasizes that Europe is suffering from skills gaps across the economy, reinforced by a declining labor force... “Demographic headwinds imply a shrinking labor force in Europe, while the US population is projected to expand in the coming decades. In this setting, a European strategy to address skills gaps—focused on all stages of education—is essential. Many of the skills gaps can be traced back to the underuse of existing talent, as witnessed by deep gender gaps in some occupations.” (Draghi Report, 2024, p. 36) From this perspective it is very important that almost parallel with the Demography Report, on 17 January 2023, the European Commission presented its communication *Harnessing talent in Europe’s region*, as the first key initiative of the European Year of Skills.<sup>18</sup> The key message of the communication is that as the EU population is aging and the available workforce is shrinking, many regions in the EU are facing a massive brain drain of young and skilled workers. This threatens the economic dynamism of the regions concerned, curbs innovation and, thus, has a negative impact on the competitiveness and cohesion of the EU as a whole. The communication identifies 46 regions in the talent development trap

(with 16% of the total EU population) and a further 36 regions at serious risk of falling into the talent development trap (with almost a third of the total population).

An analysis of the Central Eastern European countries as early as 2015 emphasized that “Decisive measures are needed in order to raise the competitiveness levels in these countries and, as a result, support higher levels of productivity, employment and prosperity, today and in the future.” (Myszkowska, 2015, p. 18) It is essential taking into consideration the fact that although, while CEE shows promise in sustainability, there is still a significant gap with advanced economies, highlighting the need for more robust environmental policies on the one hand, and the rigid labor markets in CEE hinder employment growth, necessitating reforms to enhance flexibility and adaptability in the workforce on the other hand. Many CEE nations face declining birth rates and high levels of emigration, particularly among younger generations: “The region can draw on a well-educated workforce, although the high levels of emigration observed recently suggests that the available workforce will continue to shrink in the future—which is especially true of the younger demographic.” (Myszkowska, 2015, p. 12) This might lead to an even more rapidly shrinking workforce, which can hamper economic growth, reduce productivity. Population aging exacerbates the negative effects of these challenges by leading to higher dependency ratios and increasing the burden on social services.

Related to available gainful and decent work, Enrico Letta, former Prime Minister of Italy, highlighted a paradigm shift in his recent report on the Internal Market (Letta, 2024). He acknowledges that free movement is not universally accessible, with barriers such as age, lack of skills, intergenerational obligations, home ownership, emotional ties, and the impact of “brain drain” disproportionately affecting residents in less developed regions. Letta emphasizes that mobility entails significant costs and calls for targeted support for all citizens, regardless of location and advocates for “freedom to stay” (Letta, 2024, p. 93–94).

## 5 Conclusion

Demographic issues in Europe, particularly concerning mortality, births, family policy, and migration, are complex and interrelated phenomena that reflect broader socio-economic and political dynamics. The interplay between inward migration, return migration, and demographic changes significantly influences and already influenced the demographic landscape of the European countries. Europe has been experiencing declining birth rates and increasing mortality rates, leading to an aging population. This demographic shift poses challenges for social welfare systems and labor markets.

In the article, we first reviewed key legal and policy intersections linking demography and employment, addressing major European trends, CEE specifics, and incorporating our own data sets. The analysis highlights that the longstanding downward trajectory of European demographic trends persists, exacerbated in CEE countries by their role as sending regions within the EU’s internal mobility framework. Observing the experiences of the 2008 financial crisis and the 2019 COVID-19 crisis, it is evident that while EU labor markets demonstrated resilience, with quicker recovery post-COVID, mobile workers from CEE regions faced greater challenges. These included higher rates of job loss or transitions to less productive roles compared

17 Speech by Commissioner Elisa Ferreira at the opening ceremony of the 9th Cohesion Forum. [https://ec.europa.eu/commission/presscorner/detail/en/speech\\_24\\_1978](https://ec.europa.eu/commission/presscorner/detail/en/speech_24_1978).

18 Harnessing talent in Europe’s regions—Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions on the European Care Strategy, COM(2023) 32 final. Harnessing Talent Platform: [https://ec.europa.eu/regional\\_policy/whats-new/newsroom/23-11-2023-10-eu-regions-will-receive-technical-assistance-under-pillar-1-of-the-talent-booster-mechanism\\_en](https://ec.europa.eu/regional_policy/whats-new/newsroom/23-11-2023-10-eu-regions-will-receive-technical-assistance-under-pillar-1-of-the-talent-booster-mechanism_en) (Acc).

to native workers, statistically leading to induced return migration, albeit not sustained as old patterns resumed post-crisis.

The article further notes a significant shift in European policy focus in recent years, where demography has emerged as a distinct policy issue rather than merely a labor market resource channel. This evolution is underscored by its inclusion as an independent element of the “triple transition” and a cornerstone of competitiveness. The importance of this development is amplified by two major 2024 reports by Letta and Draghi, advocating for the “freedom to stay,” the enhancement of local opportunities for EU citizens, and the regional retention and harnessing of talent.

The demographic situation has shown limited, if any, improvement in recent decades, emphasizing the necessity for sustained efforts not only by EU Member States but also at the European level. Addressing demographic challenges through policies aimed at promoting higher birth rates, resilient labor markets and retaining talent is crucial for strengthening the EU’s and the CEE region’s competitiveness.

## Data availability statement

The original contributions presented in the study are included in the article/supplementary material, further inquiries can be directed to the corresponding author.

## Author contributions

ÉL: Conceptualization, Project administration, Writing – original draft. ÁM: Investigation, Writing – original draft. AP: Conceptualization, Data curation, Writing – original draft.

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