### Housing Policy: New Field of the Three Seas Initiative Cooperation in Mitigation the Central Europe's Demographic Problems

The deteriorating demographic situation remains one of the key challenges for the countries participating in the Three Seas Initiative (3SI), which are among the fastest aging in the world. Therefore, it is necessary to look for all possible ways to deal with this problem. The condition for the profitability of an efficient infrastructure, the creation of which was the basic premise for establishing 3SI cooperation, is a sufficiently high number of its users. In this context, a promising field of cooperation between the countries participating in the initiative may be stimulating fertility through an appropriately programmed housing policy. This issue seems to be still insufficiently researched in the literature on the subject and not enough addressed in public policies. The aim of the paper is to examine how the regional policy could be also a platform supporting the demographic policy on the regional and EU level. It's an attempt to take a closer look at the relationship between housing policy and fertility and answer the question, if the 3SI as an example regional platform could demonstrate a positive influence on development of housing policy as a tool of mitigating the demographic problem. The article was based on the analysis of the literature on the subject and of statistical data from Eurostat.

K e y w o r d s: Three Seas Initiative, housing policy, fertility rates, population ageing, regional policy.

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# HOUSING POLICY: NEW FIELD OF THE THREE SEAS INITIATIVE COOPERATION IN MITIGATION THE CENTRAL EUROPE'S DEMOGRAPHIC PROBLEMS<sup>1</sup>

### INTRODUCTION

The deteriorating demographic situation remains one of the key challenges for the countries participating in the Three Seas Initiative (3SI), which are among the fastest aging in the world. Therefore, it is necessary to look for all possible ways to deal with this problem. The condition for the profitability of an efficient infrastructure, the creation of which was the basic premise for establishing 3SI cooperation, is a sufficiently high number of its users. In this context, a promising field of cooperation between the countries participating in the initiative may be stimulating fertility through an appropriately programmed housing policy. This issue seems to be still insufficiently researched in the literature on the subject and not enough addressed in public policies.

Throughout the recent years numerous formats were created to try to coin the regional agenda of Central Europe, looking for cooperation

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on common issues. In 1989 the Central European Initiative (CEI) was founded as a very broad format embracing various states of Central Europe and its neighbours, namely Albania, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Czechia, Hungary, Italy, Moldova, Montenegro, North Macedonia, Poland, Romania, Serbia, Slovakia, Slovenia, and Ukraine. Although the CEI has its own secretariat, due to a large number of quite diverse member states and too wide scope of activities, its impact on the region is rather limited, although it was politically quite an active format especially in times of the Balkan wars. However, economic crisis in Italy and its focus on its internal policy weakened its leadership in the initiative bringing it rather to stagnation.<sup>2</sup> Since 1991 the V4 format consisting of Czechia, Hungary, Poland, and Slovakia had been active to facilitate these countries to access the NATO and the EU and then focused on finding the common political agenda to cooperate on regional and EU level.<sup>3</sup> The format was used for example to block changes to the EU migration and asylum policy, though it proved to be a too small group of countries to have a meaningful impact on the EU policy in general as it's far from reaching the blocking minority. It also failed to engage in infrastructural integration of the region although it was originally planned in the initiating the cooperation Visegrad declaration.4

Another format the Three Seas Initiative is a regional political platform initiated by the presidents of Croatia and Poland in 2015 to support building infrastructural connections in Central Europe,<sup>5</sup> especially roads, railway, energy and digital links on the North-South axis to balance the existing links which traditionally were planned between the East and the West.<sup>6</sup> It was designed to strengthen the economic cooperation to unleash the growth potential of the region.<sup>7</sup> Since the establishment in 2015 the 3SI quite strongly took root

Ibid.

<sup>&</sup>lt;sup>2</sup> Agnieszka Orzelska-Stączek, 'Inicjatywa Środkowoeuropejska a Trójmorze – odmienne koncepcje współpracy w Europie Środkowo-Wschodniej', *Studia Polityczne* 46: 1, 2018, pp. 149–169, https://doi.org/10.35757/STP.2018.46.1.07.

<sup>&</sup>lt;sup>3</sup> Tomasz Kubin, 'Grupa Wyszehradzka – perspektywy dalszej współpracy', Atheneum. Polskie Studia Politologiczne 42, 2014, pp. 24–39.

<sup>&</sup>lt;sup>4</sup> Declaration on the Cooperation of Czechoslovak Republic, the Republic of Poland and Republic of Hungary in Striving to the European Integration, https://www.visegradgroup.eu/documents/visegrad-declarations/deklapl (access: 7 July 2024).

<sup>&</sup>lt;sup>5</sup> The term Central Europe is used in the paper to define the countries which joined the EU after 2003, namely Bulgaria, Czechia, Croatia, Estonia, Hungary, Latvia, Lithuania, Poland, Romania, Slovakia, and Slovenia. The 3SI format is wider as it includes also Austria and Greece.

Oubrovnik Statement on the Three Seas Initiative, https://media.voog.com/0000/0046/4166/files/DUBROVNIK\_deklaratsioon\_2016.pdf (access: 20 June 2024).

in the political landscape of Central Europe. Annually organized summits of the presidents of the region, which were accompanied by business summits led to strengthening the relations between political and business elites of the region. The support by the 3SI helped to accelerate and finding financing for important regional, cross-border projects such as construction of the Via Carpatia highway. Building vast infrastructural network on the North-South basis will be costly. According to the analyses of the International Monetary Fund it could reach up to 2030 1.3 trillion dollars. The Spotdata institute comes to similar conclusions assessing costs of such investments needs for up to 1.1 trillion euro.

Although the causes of the decline in fertility are very complex and there is no simple solution to reversing this process, it is worth taking a closer look at the relationship between fertility and housing. Some researchers point out that government actions aimed at stimulating fertility and thus improving the population size and its age structure, should start with a well-thought-out, comprehensive housing policy<sup>10</sup>. The literature on the subject also includes studies indicating the relationship between accessible housing and decisions about marriage and childbearing<sup>11</sup>. It seems that the available research and analyses do not exhaust the topic and do not answer the question of how to mitigate the demographic problems by proper housing policy design.

There are still significant research gaps that need to be addressed, such as the impact of available housing on fertility rates and possible fields of cooperation within mitigation of unfavourable demographic changes by proper housing policy. There is a lack of comparative analyses of the housing situation in all 3SI countries, even though most of these countries face serious challenges both in terms of the quality and availability of housing, as well as demographic trends. Although there are some papers comparing housing challenges in

<sup>&</sup>lt;sup>8</sup> Anil Ari, David Bartolini, Vizhdan Boranova, Gabriel Di Bella, Kamil Dybczak, Keiko Honjo, Raju Huidrom, Andreas Jobst, Nemanja Jovanovic, Ezgi O. Ozturk, Laura Papi, Sergio Sola, Michelle Stone, and Petia Topalova, 'Infrastructure in Central, Eastern, and Southeastern Europe: Benchmarking, Macroeconomic Impact, and Policy Issues', Department Paper IMF 011, 2020, p. 15, https://doi.org/10.5089/9781513550558.087.

<sup>9</sup> Perspectives for Infrastructural Investments in the Three Seas Region, Spotdata analytical unit, 2019, https://spotdata.pl/research/download/74 (access: 1 July 2024).

<sup>&</sup>lt;sup>10</sup> Iwona Sagan, *Mieszkalnictwo jako narzędzie samorządowej polityki lokalnej* (Warsaw: Fundacja Rozwoju Demokracji Lokalnej, Centrum Ekspertyzy Lokalnej, 2021).

<sup>&</sup>lt;sup>11</sup> Clara H. Mulder, *Key Note Presentation. The Relationship between Population and Housing*, Sixty-ninth session of the UNECE Committee on Housing and Land Management, 2008, https://unece.org/fileadmin/DAM/hlm/archive/Key%20note%20population%20 and%20housing.pdf (access: 7 October 2024).

Central and Eastern Europe, or Visegrad group, there are virtually no papers analyzing housing policy in the 3SI region and tools of the regional policy to develop it. Therefore, **the aim of the paper** is to examine how the regional policy could be also a platform supporting the demographic policy on the regional and EU level. It's an attempt to take a closer look at the relationship between housing policy and fertility and answer the question, if the 3SI as an example regional platform could demonstrate a positive influence on development of housing policy as a tool of mitigating the demographic problem.

The article was based on the analysis of the literature on the subject and of statistical data from Eurostat. We start with a review of research on the relationship between demography and housing. Then we present demographic trends in 3SI countries and the current housing situation in 3SI compared to other European countries. Then we present the different tenure status in those countries, being the effect of the directions of the housing policy in the countries. Finally, we look for some solutions and recommendations for housing policy design that could stimulate the fertility rates and therefore help to mitigate the regions demographic problems.

### DEMOGRAPHY AND HOUSING—LITERATURE REVIEW

Despite the seemingly obvious strong relationship between housing and population growth, for a long time scientific studies have not combined these issues and have not analyzed the relationships between them. Analyses regarding housing and demographic changes usually fit into various scientific disciplines, hence these studies were created in parallel but distinct courses.

One of the first works combining the issue of demography and the real estate market was published in 1989. Mankiw and Weil concluded that demographics plays significant role in the changes of real estate prices and housing demand. They found out that a big part of the housing demand is created by those 20–30 years old in the USA, but it reaches its peak point at the age of 40. Although their methodology replicated later on in many other countries brought very diverse results and was therefore heavily criticised, but undoubtedly it

<sup>&</sup>lt;sup>12</sup> Gregory N. Mankiw and David Weil, 'The Baby Boom, The Baby Bust, and The Housing Market', *Regional Science and Urban Economics* 19: 2, 1989, pp. 235–58, https://doi.org/10.1016/0166-0462(89)90005-7.

led to more focus of researchers on the link between demography and housing. In the 1990s, the issue of housing and demography began to be combined on a broader scale, some authors point to a new concept of 'housing demography'.<sup>13</sup>

In the literature on the subject, some attention is paid to the relationship between the size and age structure of the population, including the process of its aging and shrinking, which influence the demand for housing. <sup>14</sup> Many authors notice a clear lifecycle pattern in housing consumption. <sup>15</sup> They focus on housing affordability for various social classes, stressing that immigration additionally deepens housing problems in global cities. <sup>16</sup> Much less attention is paid to how factors shaping housing availability and technical standards may influence the decision to start a family and have children. The most important research in this area are several papers written in the last 20 years. <sup>17</sup> Many of the researchers focused on how the house prices influence fertility, for example such a research was conducted in USA <sup>18</sup> and

<sup>&</sup>lt;sup>13</sup> Patricia Gober, 'Urban Housing Demography', *Progress in Human Geography* 16: 2, 1992, pp. 171–89, https://doi.org/10.1177/030913259201600202.

<sup>&</sup>lt;sup>14</sup> Allen C. Goodman, 'Demographics of Individual Housing Demand', *Regional Science and Urban Economics* 20: 1, 1990, pp. 83–102, https://doi.org/10.1016/0166-0462(90)90026-Y; Thomas Lindh and Bo Malmberg, 'Demography and Housing Demand—what Can We Learn from Residential Construction Data?', *Journal of Population Economics* 21: 3, 2008, pp. 521–39, https://doi.org/10.1007/s00148-006-0064-0; Piet Eichholtz and Thies Lindenthal, 'Demographics, Human Capital, and the Demand for Housing', *Journal of Housing Economics* 26, 2014, pp. 19–32, https://doi.org/10.1016/j.jhe.2014.06.002.

<sup>&</sup>lt;sup>15</sup> John Ermisch, 'The Demand for Housing in Britain and Population Ageing: Microeconometric Evidence', *Economica* 63: 251, 1996, pp. 383–404, https://doi.org/10.2307/2555013; Dowell Myers and SungHo Ryu, 'Aging Baby Boomers and the Generational Housing Bubble Foresight and Mitigation of an Epic Transition', *Journal of the American Planning Association* 74: 1, 2008, pp. 17–33, https://doi.org/10.1080/01944360701802006.

<sup>&</sup>lt;sup>16</sup> Wendell Cox, *Demographia International Housing Affordability* (Orange: Chapman University, 2024).

Clara H. Mulder, 'Population and Housing: A Two-sided Relationship', *Demographic Research*, 15, article 13, 2006, pp. 401–412, https://doi.org/10.4054/DemRes.2006.15.13; eadem, *Key Note Presentation*; Sara Ström, 'Housing and First Births in Sweden, 1972–2005', *Housing Studies* 25: 4, 2010, pp. 509–26, https://doi.org/10.1080/02673031003711519; Cecilia Enström Öst, 'Housing and Children: Simultaneous Decisions?—a Cohort Study of Young Adults' Housing and Family Formation Decision', Journal of Population Economics 25: 1, 2011, pp. 349–66, https://doi.org/10.1007/s00148-010-0345-5; Bo Malmberg, 'Fertility Cycles, Age Structure and Housing Demand', *Scottish Journal of Political Economy* 59: 5, 2012, pp. 467–82, https://doi.org/10.1111/j.1467-9485.2012.00590.x; Lukas Smas, Christian Fredricsson, and Haukur Claessen, *Demographic Changes, Housing Policies and Urban Planning. Examples of Situations and Strategies in Nordic Municipalities* (Stocholm, Nordregio Working Paper 4, 2013).

<sup>&</sup>lt;sup>18</sup> Curtis J. Simon and Robert Tamura, 'Do Higher Rents Discourage Fertility? Evidence from US Cities, 1940–2000', *Regional Science and Urban Economics* 39, 1, 2009, pp. 33–42, https://doi.org/10.1016/j.regsciurbeco.2008.08.002.

Hongkong.<sup>19</sup> Other researchers examined the differences in fertility rates between central districts and suburbs—they found out that the indicator is much higher in the suburbs.<sup>20</sup>

Available analyses not only point to a clear relationship between housing prices and fertility, but also to many ambiguous determinants. Some research has showed that cost of buying a home may be a reason to postpone a decision about bearing children leading to lower fertility.<sup>21</sup> On the other hand, also insufficient housing can be the reason for young people to postpone the decision about setting a family and having children.<sup>22</sup> However, the relationship between housing and fertility is determined not only by economic conditions, but also by cultural ones.<sup>23</sup> Clara Mulder<sup>24</sup> draws attention to the fact that access to one's own apartment influences the decision about forming a family and having children directly and indirectly. Indirect influence results from the fact that in many cultures the decision to marry or cohabitate depends on the moment of becoming independent and leaving the parental home. If people live long with their parents, they postpone the decision about forming the family. This relation depends on cultural norms but generally is visible in all European countries. Late parenthood results in smaller number of kids being born in two ways. First of all, when a women starts childbearing at late age, she has fewer fecund years to have as many children as she desires. Also the risk of fecundity problems grows. Secondly, when the time between generations is longer, fewer generations live at the

<sup>&</sup>lt;sup>19</sup> Junjian Yi and Junsen Zhang, 'The Effect of House Price on Fertility: Evidence from Hong Kong', *Economic Inquiry* 48: 3, 2010, pp. 635–50, https://doi.org/10.1111/j.1465-7295.2009.00213.x.

Hill Kulu, Paul J. Boyle, and Gunar Andersson, 'High Suburban Fertility: Evidence from Four Northern European Countries', *Demographic Research* 21, article 31, 2009, pp. 915–44, https://doi.org/10.4054/DemRes.2009.21.31.

<sup>&</sup>lt;sup>21</sup> Catherine Hakim, *Models of the Family in Modern Societies: Ideals and Realities* (London: Routledge, 2003); M.J., Murphy and O. Sullivan, 'Housing Tenure and Family Formation in Contemporary Britain', *European Sociological Review* 1: 3, 1985, pp. 230–43, https://doi.org/10.1093/oxfordjournals.esr.a036390; Daniel Courgeau and Eva Lelièvre, 'Interrelations between First Home-ownership, Constitution of the Family, and Professional Occupation in France', in James Tussel, Richard Hankinson, and Judith Tilton, eds, *Demographic Applications of Event History Analysis* (Oxford: Clarendon Press, 1992), pp. 120–40, https://doi.org/10.1093/oso/9780198283867.003.0006.

<sup>&</sup>lt;sup>22</sup> Smas, Fredricsson, and Claessen, *Demographic Changes*.

<sup>&</sup>lt;sup>23</sup> Mulder, 'Population and Housing'; eadem, Key Note Presentation; Malmberg, 'Fertility Cycles'; Sagan, Mieszkalnictwo jako narzędzie; Smas, Fredricsson, and Claessen, Demographic Changes.

<sup>&</sup>lt;sup>24</sup> Clara H. Mulder, *Key Note Presentation. The Relationship between Population and Housing, Sixty-ninth session of the UNECE Committee on Housing and Land Management,* 2008, https://unece.org/fileadmin/DAM/hlm/archive/Key%20note%20population%20 and%20housing.pdf (access: 7 October 2024).

same time. This leads to smaller population size, and therefore smaller number of children being born.

The above-mentioned considerations show that from the point of view of fertility support policy, it is crucial to create an offer of accessible apartments for young people housing diversified in quality and price. Housing get inaccessible under conditions of short housing supply, high prices, high level of home-ownership, and high costs and excessive conditions of getting mortgages. Therefore, the best situation would be to grant accessible housing of good quality. Such combination is rather unrealistic, so the second best option is the diversity of housing in terms of quality and prizes. In such situation young families can settle down thanks to access to cheap housing, and later—move to some better quality housing. It is also a good idea to create subsidized renting options, so that ownership wouldn't be the only reasonable solution for young people.<sup>25</sup>

## DEMOGRAPHIC PROBLEMS OF 3SI COMPARED TO OTHER EU COUNTRIES

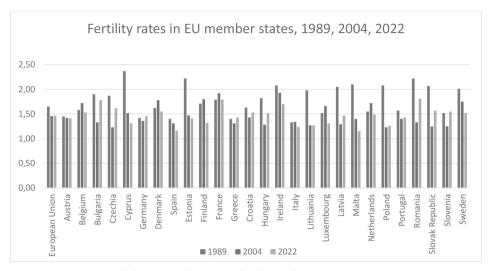
Countries of 3SI region face a serious demographic challenges. In most of 3SI countries there is apparent strong downward tendency of fertility rate. Between 1989 and 2004 this indicator fell down significantly in Bulgaria, Czechia, Estonia, Hungary, Lithuania, Latvia, Poland, Romania, and Slovakia from the sustainable or close to sustainable levels in the 1980s. In many of these countries the fertility rate slightly rebounded in the last years, though it was far from the level of 2.1, which ensures stability of the population number. It was not the only problem. Since the accession to the European Union, when the access to the high-income market in Western Europe was liberalized and as a result the process of massive emigration of working age population from the Central began. Between 2003 and 2022 the population of Central Europe diminished by 6.1%, whereas of Western Europe increased by 3.5%. 26 The worst situation experienced Latvia (decrease of the population by 17.9%), Lithuania (-17.1%), Bulgaria (-16.9%), Romania (-11.7%) and Croatia (-10.4%).<sup>27</sup>

<sup>25</sup> Ibid.

<sup>&</sup>lt;sup>26</sup> Konrad Popławski and Sandra Baniak, A Glass Half Full. Searching For New Sources of Economic Growth in Central Europe (Warsaw: Ośrodek Studiów Wschodnich, 2024), s. 27, https://www.osw.waw.pl/sites/default/files/OSW\_Report-A%20glass-half-full.pdf (access: 7 October 2024).

<sup>&</sup>lt;sup>27</sup> Ibid.



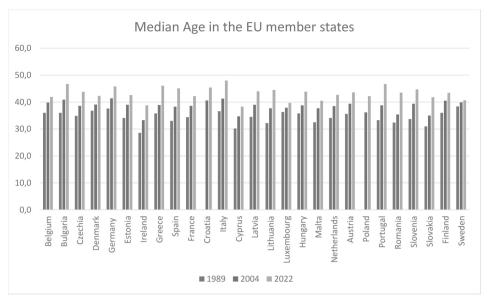


Source: https://data.worldbank.org/indicator/SP.DYN.TFRT.IN?end=2022&name\_desc=false&start=1989 (access: 26 January 2025); 1989 – the first year after the collapse of the USSR; 2004 – enlargement of the EU to include eight 3SI countries; 2022 – latest data.

Moreover, the process of dynamic increasing of the life expectancy together with lower fertility rate and massive emigration have led to accelerated aging of the 3SI countries. In 1989 the average median age of this group of states amounted to 34.2, though it increased in 2004 to 38.4 and in 2022 to 44.1. As a result, some countries of the 3SI belong to the oldest societies in the EU. In 2022 Bulgaria (46.7), Greece (46.1), Croatia (45.4), Slovenia (44.7) and Lithuania (44.5) were the countries, where the indicator exceeded the EU average (44.4). Those negative tendencies, together with increase of the life expectancy of the population, if continued, could have a very negative impact on the stability of social systems in the 3SI countries. According to the European Commission's assessments Poland, Slovakia and Croatia are the fastest aging countries in the EU. In the period between 2013 and 2023 the share of the population aged 65 and over in the population increased the fastest in the aforementioned states. In Poland it rose by 5.5 percentage points (p.p.), in Slovakia by 4.8 p.p. and in Croatia by 4.6 p.p., whereas the average EU growth was 3 p.p.<sup>28</sup>

Population Structure and Ageing, Eurostat, https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Population\_structure\_and\_ageing#The\_share\_of\_elderly\_people\_continues\_to\_increase (access: 7 July 2024).

FIGURE 2



Source: Eurostat (lack of data for 1989 for Poland and Croatia).

# CURRENT HOUSING SITUATION IN 3SI COMPARED TO OTHER EU MEMBER STATES

The housing situation in a given country and the directions of housing policy are closely correlated not only with contemporary legislation, economic situation, and state social policy, but also with historical events. Importantly, housing systems of developed countries have been developed over decades, being formed along with development of the economy and legislation, adapting to existing social needs and disposable resources. An example of such continuous development of housing policy, in a specific direction, in a stable political environment is Austria, with Vienna as an example of a model city for social housing.<sup>29</sup> The situation of Central Europe is a contrast

<sup>&</sup>lt;sup>29</sup> Joanna Giecewicz, *Konserwatywna Awangarda – Wiedeńska Polityka Mieszkaniowa* 1920–2005 (Warsaw: Politechnika Warszawska, 2007).

Vienna's housing policy is cited in literature as a model example, but in the 21st century it faces many challenges also experienced by other European capitals. The waiting time for social flat is getting longer, and a difficult situation of social housing is evidenced by the fact that according to the data indicated by Joanna Giecewicz, in 2005, 75% of the city's inhabitants lived in municipal or city-subsidized apartments, whereas in 2021 it was only 43%. The changes comes from the fact that 15–20 years ago, 2/3 of apartments built in Vienna were social apartments—today, this proportion has been reversed and 2/3 of apartments built are financed with private capital. This happens due

to the situation of Western European countries. The socio-economic transformations that were carried out massively over the course of several years were supposed to be a response to the socio-economic problems that had been accumulating since World War II.

In many 3SI countries, a socialist system came into force after World War II. The productive effort of the state's economy was concentrated on heavy industry and military production. Satisfying the consumption needs of society, including housing, was not a priority area for the then authorities. And although social housing was officially promoted, the government and the economy were unable to respond to the huge demand for housing.<sup>30</sup> Traditions in the field of housing policy directly influence current housing conditions, which in turn shape the standard of living and also decisions concerning marriage and having children.

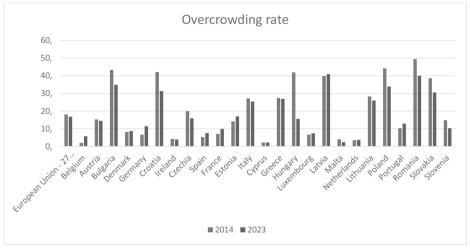
### HOUSING CONDITIONS

Comparison of housing conditions in all the 3SI countries is best made by referring to Eurostat data on the degree of overpopulation, the percentage of the population living in substandard conditions and the share of housing expenditure in the total income of the population. The first indicator measuring the quality of housing in a given country is the overcrowding rate measured as the minimum number of rooms per person. Highest shares of people living in overcrowded households in 2023 among EU countries can be observed in some of 3SI countries: Latvia, Romania, Bulgaria, Poland, and Croatia. In these countries the overcrowding rate is almost twice higher than the average for EU. This indicator has improved significantly since 2014 (especially in Bulgaria, Croatia, Hungary, Poland, Romania, Slovakia) when the households were even more overcrowded. The reverse trend of this indicator can be observed in Latvia and Estonia. At the same time the problem is virtually non-existent in countries of Western Europe.

to the processes taking place on the global financial market, changes in interest rates and the level of inflation. Also, rising prices of plots and building materials pose a challenge to the city authorities in maintaining the current social housing system. Julian Gomez, 'Social Housing in Vienna: Is it as good as it seems?', *Euronews*, 8 March 2024, https://www.euronews.com/2024/03/08/social-housing-in-vienna-is-it-as-good-as-it-seems (access: 7 July 2024).

<sup>&</sup>lt;sup>30</sup> Hanna Augustyniak, Krzysztof Olszewski, and Karin Wagner, 'Housing Policy and Forms of Housing Tenure in Austria and the Unique Social Housing System of Vienna', *Kwartalnik Nauk o Przedsiębiorstwie* 70: 4, 2023, pp. 37–54, https://doi.org/10.33119/KNoP.2023.70.4.3.

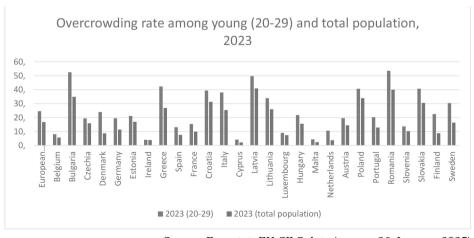
FIGURE 3



Source: Eurostat, EU-SILC data (access: 7 July 2024).

Additionally, overcrowding rates for young people aged 20–29 were examined. This indicator is particularly important in the analysis of the relationship between housing and demographic changes, as the decision to start a family and have children is often related to housing conditions in the period of youth, when the professional position of young people is not established and earnings are not very high. In all countries, 3 SI overcrowding rate among young people (20–29) in 2023 was significantly higher than general indicator for population of all ages. In all 3SI countries this rate has decreased since 2014.

FIGURE 4



Source: Eurostat, EU-SILC data (access: 26 January 2025).

A situation in which households live in overcrowded apartments with technical conditions below minimum standards, which means, for example, lack of bathrooms, toilets, leaking roofs or walls, insufficient access to light, is defined by Eurostat as severe housing deprivation rate. The chart clearly shows that countries facing the problem of overcrowding also face substandard technical conditions. Among the countries with the highest housing deprivation rate are Bulgaria, Greece, Croatia, Latvia, Lithuania, Hungary, and Romania, where the index was the highest in Europe. From outside 3SI group, Italy faced a severe housing deprivation rate. It should be noted that housing conditions in 2020 were much better than in 2014.

Severe housing deprivation rate 25, 20, 15 10. 5 Cyprus **Netherlands** France ithuania. uxembourg Austria enmark Hungary Somania ■ 2014 ■ 2020

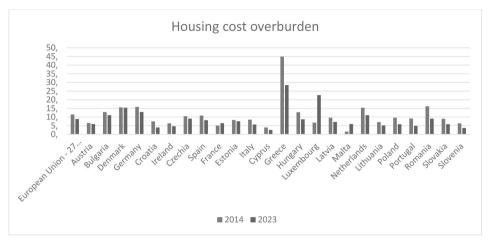
FIGURE 5

Source: Eurostat, EU-SILC data (access: 7 July 2024).

Another important factor influencing the living standard and also decisions about getting married and childbearing is housing availability in terms of housing costs which often makes up the largest component of expenditure for household. Housing cost overburden appears when the total housing costs represent more than 40% of disposable income.<sup>31</sup>

<sup>&</sup>lt;sup>31</sup> Glossary: Housing cost overburden rate—Statistics Explained (europa.eu), https://ec.europa.eu/eurostat/statistics-explained/index.php?title=Glossary:Housing\_cost\_overburden\_rate (access: 7 July 2024).

FIGURE 6



Source: Eurostat, EU-SILC data (access: 7 July 2024).

In 2023, housing costs overburden affected less than 9% of EU residents, which was slightly lower than in 2014. A record high cost overburden rate was recorded in Greece, where the problem affected 28.5% of residents, which was still a significantly better situation than 2014, when this problem affected almost 45% of residents. The next countries with high housing spending are Denmark, Germany, Netherlands, and Luxembourg. 3 SI countries according to these statistics were not overburdened by housing costs which is probably the consequence of living in overcrowded and very often substandard houses.

Unfortunately, it is not to expect that the situation changes in the near future. On the one hand due to the Covid pandemic and full-scale invasion of Ukraine by Russia the EU experience very strong inflation pressure also as a result of the energy resources growth. On the other hand, the European institutions are introducing quite complex climate policy programme, so called Green Deal. One of its goals is 'greening' of building which assumes tackling poverty and worst performing building, renovation of public buildings and decarbonisation of heating and cooling.<sup>32</sup> Especially this last aim could be very sensitive as according to the European Commission's assessments around 9,3% of Europeans are threatened by energy poverty, not being able to keep their home adequately warm

<sup>&</sup>lt;sup>32</sup> Renovation wave, Komisja Europejska, https://energy.ec.europa.eu/topics/energy-efficiency/energy-efficient-buildings/renovation-wave\_en (access: 12 July 2024).

in 2022.<sup>33</sup> According to assessments EU countries will have to spend around annually 149 billion euro (around 1% of GDP) on building renovation investments to meet the EU decarbonization goals.<sup>34</sup> Its financial burdens should be distributed in a socially justified manner not to put the burden on young families further decreasing fertility rate in Central Europe. The European Commission recognized in the last year the demographic challenge. It presented the package of proposals to deal with the issue, so called the demographic toolkit,<sup>35</sup> where it found an affordable housing an important condition for improvement of demographic growth. However, the proposed solutions of this problem are not satisfactory. The European Commission proposed for modernization of energy efficiency of the housing. Although the provisions include some subsidies for the poorest, according to some analyses it generally might lead to increase of costs of housing.<sup>36</sup>

### TRIAD OF HOUSING SPACE SUPPLY

Residents of EU countries can choose from three basic housing forms: owner occupied housing (with mortgage or loan or without), rented housing (private or from professional company—but on market price) and social housing (or with different forms of subsidizing). The form of housing chosen by residents of particular countries depends largely on historical and cultural conditions, but also on the degree of development of rental systems, the amount of rental fees and the stability of such a system. An important determinant of population distribution by tenure status are the directions of housing policy pursued by governments and local governments.

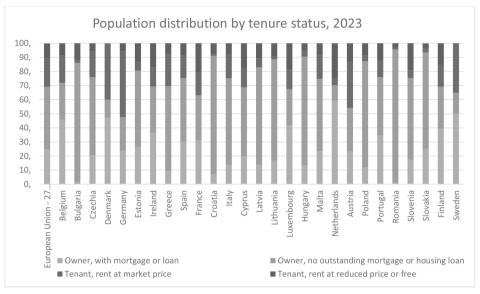
<sup>&</sup>lt;sup>33</sup> Ugnė Keliauskaitė, Ben McWilliams, Giovanni Sgaravatti, and Simone Tagliapietra, 'How to Finance the European Union's Building Decarbonisation Plan', *Bruegel Policy Brief* 12, 2024, https://www.bruegel.org/system/files/2024-07/PB%2012%202024\_0.pdf (access: 12 July 2024); *Commission Recommendation (Eu) 2023/2407 of 20 October 2023 on energy poverty*, 20 October 2023, https://eur-lex.europa.eu/eli/reco/2023/2407/oj (access: 12 July 2024).

<sup>&</sup>lt;sup>34</sup> Renovation Wave, European Commission, https://energy.ec.europa.eu/topics/energy-efficiency/energy-efficient-buildings/renovation-wave\_en (access: 14 July 2024).

<sup>&</sup>lt;sup>35</sup> Communication From the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions. Demographic Change in Europe: A Toolbox for Action, European Commission, European Commission, 11 October 2023, https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52023DC0577 (access: 14 July 2024).

<sup>&</sup>lt;sup>36</sup> Mike Hayes, Will the Green Deal Aggravate the Housing Crisis?, 30 October 2023, https://www.constructionbriefing.com/news/will-the-green-deal-aggravate-the-housing-crisis-/8032579.article (access: 14 July 2024).

FIGURE 7



Source: Eurostat, EU-SILC data (access: 7 July 2024).

While the EU average is 70% in the 'ownership' category, in most 3SI countries, more than 70% of the population lives in their own home. The highest ownership rates are in Romania and Slovakia (95%), Croatia, Hungary, Lithuania (around 90%), Poland, Bulgaria (87%). On the other hand, a much larger part of the inhabitants of the most economically developed countries in Western Europe live in rented apartments (at market or reduced price), e.g. in Germany it is 52% of the inhabitants, in Austria—almost 45% of the inhabitants. In Austria, the social housing system is aimed not only at the poorest, but is also an attractive alternative to house ownership for the middle class.<sup>37</sup> The example of Germany and Austria shows that with a well--structured apartment rental system, residents may prefer renting (even at market price) than ownership.<sup>38</sup> However, it should also be emphasized that the ownership indicator does not take into account the technical standard of the apartment, its size and location. For example, in Poland, many apartments built in accordance with the austerity standards of the socialist times, are very small and often

<sup>&</sup>lt;sup>37</sup> Giecewicz, Konserwatywna Awangarda.

<sup>&</sup>lt;sup>38</sup> Ibid.; Philip Oltermann, 'The Social Housing Secret: How Vienna Became the World's Most Livable City', *The Guardian*, 12 January 2024, https://www.theguardian.com/lifeandstyle/2024/jan/10/the-social-housing-secret-how-vienna-became-the-worlds-most-livable-city (access: 7 July 2024); Gomez, 'Social Housing in Vienna'.

located in small and medium-sized towns that are losing their socio-economic functions and are becoming depopulated, while the inhabitants of these towns are moving to the largest metropolises, where generate demand for apartments.<sup>39</sup>

For comparison, in Poland, 87% of residents live in owner-occupied apartments. Such high ownership rates result from the imperfections of the rental market, which is underdeveloped in Poland, rental prices are subject to the unregulated law of supply and demand, and as a result, they are high (especially in metropolises) and may be subject to frequent increases. This unstable rental system and relatively high prices mean that only people who want to remain mobile or who do not have creditworthiness decide to rent. For many people who have creditworthiness and have decided on the city they would like to live in, it is more financially profitable than renting an apartment on the commercial market to take out a mortgage loan and buy their own apartment.<sup>40</sup>

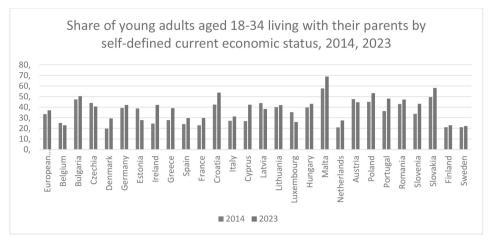
Interesting measure of housing situation in a country is a number of young people (18–34) living in a parental home. It indicates for the authorities drawbacks of the housing policy, especially in the face of the problem of low fertility that the whole Europe is facing. According to Eurostat data, in 2023 in EU 37% of young adults aged 18–35 lived in their parental home, and this indicator has increased since 2014 by 3,6 p.p.<sup>41</sup> However the numbers are highly diversified between different countries of the EU, which can be the result, among others, of economic situation and cultural patterns at the same time.

<sup>&</sup>lt;sup>39</sup> Kamil Nowak, 'Przestrzenne zróżnicowanie sytuacji mieszkaniowej w procesie przemian demograficznych', *Studia Regionalne i Lokalne* 94: 4, 2023, https://doi. org/10.7366/1509499549406; Przemysław Śleszyński, *Delimitacja miast średnich tracących funkcje społeczno-gospodarcze* (Warsaw: Instytut Geografii i Przestrzennego Zagospodarowania PAN, 2016); Augustyniak, Olszewski, and Wagner, 'Housing Policy'.

<sup>&</sup>lt;sup>40</sup> Anna Matel and Krzysztof Olszewski, 'The Model of Tenure Choice in Life Cycle of Poles—Empirical Analysis', *Kwartalnik Nauk o Przedsiębiorstwie* 66: 4, 2022, pp. 51–64, https://doi.org/10.33119/KNoP.2022.66.4.4; eidem, 'The Model of Tenure Choice in Life Cycle of Poles', *Kwartalnik Nauk o Przedsiębiorstwie* 67: 1, 2023, pp. 73–96, https://doi.org/10.33119/KNoP.2023.67.1.5.

<sup>&</sup>lt;sup>41</sup> Share of Young Adults Aged 18–34 Living with Their Parents by Self-defined Current Economic Status, Eurostat, https://ec.europa.eu/eurostat/databrowser/view/ILC\_LVPS09/default/table?lang=en (access: 20 January 2025).

#### FIGURE 8



Source: Eurostat, Share of young adults aged 18-34 living with their parents by self-defined current economic status, https://ec.europa.eu/eurostat/databrowser/view/ILC\_LVPS09/default/table?lang=en, (access: 20 January 2025).

In the vast majority of EU countries, an increase in the percentage of young people living with their parents can be observed and an almost double increase can be observed in Ireland (42.1% in 2023). Moreover, an extremely difficult housing situation for young people prevails in Malta (68.9% in 2023). However, the countries with the highest level of the analyzed indicator in 2023 (apart from Malta) are several 3SI countries: Bulgaria (50.4), Croatia (53.7), Poland (53.2), Romania (47.2), Slovakia (58.1). In the remaining 3SI countries, this indicator fluctuates around 40%, while in other EU countries it is 20–30%.

The 3SI countries are mostly post-socialist countries, in which similar processes occurred in the housing policy in the past, and are currently facing similar challenges in housing policy. The exceptions here are Austria and Greece, whose housing policies were developed in different social, economic and political conditions, and which also joined the EU much earlier than the countries of Central Europe. The first factor that constantly influenced tenure status in all the countries of Central Europe is the process of massive and rapid privatization of municipal housing, which began in these countries in the 1990s.<sup>42</sup> This process had two serious consequences—in

<sup>&</sup>lt;sup>42</sup> József Hegedüs, Martin Lux, Petr Sunega, and Nóra Teller, 'Social Housing in Post-Socialist Countries', in Kathleen Scanlon, Christine Whitehead, and Melissa Fernández Arrigoitia, eds, *Social Housing in Europe* (Wiley Blackwel, 2014), pp. 239–54, https://doi.org/10.1002/9781118412367.ch14; Hana Marie Broulíková and Josef Montag, 'Housing

addition to high ownership rates in Central European countries, it caused a serious polarization of society—former tenants of municipal apartments were divided into those who could afford to buy the apartment with a discount and the poorest, who remained tenants of municipal apartments. It can also be noticed that the resources of municipal apartments usually included the least attractive ones, in the worst technical conditions. The second important factor causing different rates in individual Central European countries was the development of the mortgage market, which took place around the 2000s and enabled the implementation of a housing policy based on the assumption that all aspects of housing sectors (e.g. financial, legal) should be free from the control of the state. The ideal situation would be a housing system where market mechanisms regulate the production, allocation and consumption of housing.

Transition of post-socialist economies assumed introduction of market reforms at the cost of statist measures. In the context of striving to fulfil EU and NATO accession criteria by introducing market economy and regaining the economic competitiveness there was no financial resources or political determination to develop housing policy. It also brought a feeling of social instability and distracted attention from pronatalist policies as for a long time it seemed that the resources of human capital in Central Europe are infinite. Moreover, after decades of implementation of socialistic methods the Central European societies were fed up of economic development planning and thought that market economy measures could solve all the problems.

### TERRITORIAL ASPECTS OF HOUSING POLICY AND ITS DEMOGRAPHIC DIMENSION

Demographic and housing problems are inextricably linked to uneven territorial development.<sup>45</sup> The whole of Europe is facing the problem of depopulation of rural areas, small and medium-sized towns.<sup>46</sup> At the

Privatization in Transition Countries: Institutional Features and Outcomes', *Review of Economic Perspectives* 20: 1, 2020, pp. 51–71, https://doi.org/10.2478/revecp-2020-0003.

<sup>&</sup>lt;sup>43</sup> József Hegedüs, Vera Horváth, and Eszter Somogyi, *Affordable Housing in Central and Eastern Europe: Identifying and Overcoming Constrains in New Member States* (Metropolitan Research Institute, 2017).

<sup>44</sup> Ibid

<sup>&</sup>lt;sup>45</sup> See Nowak, 'Przestrzenne zróżnicowanie sytuacji mieszkaniowej'.

<sup>&</sup>lt;sup>46</sup> Shrinking Cities, The Future of Cities Series, European Commision 2022, JRC Publications Repository, https://publications.jrc.ec.europa.eu/repository/handle/JRC12 6011 (access: 12 July 2024); Annegret Haase, Matthias Bernt, Katrin Großmann, Vlad Mykhnenko, and Dieter Rink, 'Varieties of Shrinkage in European Cities', European Urban and Regional Studies 23: 1, 2013, https://doi.org/10.1177/0969776413481985.

same time, the largest metropolises are growing disproportionately fast, and as their population increases, the demand for apartments increases. According to OECD, next to transport and public service provision, the biggest challenge for the authorities of the largest metropolises is to provide accessible housing.<sup>47</sup> Uneven territorial development—shrinking processes of one areas and dynamic urbanization of the others leads to a situation where many apartments located in shrinking areas remain unused, there is housing oversupply. The aspect of the distribution of apartments escapes basic statistical data, such as quantitative data on the number of apartments in a given country, which is compared to the total number of households or tenure status.

It should also be noted that the specificity of demographic and housing problems in small and medium-sized cities is completely different than in the largest metropolises. Young people leaving their family home for the metropolis are forced to buy or rent an apartment and have no possibility of continuing to live with their parents. On the other hand, people who decide to stay in their hometown can solve the problem of unavailability of apartments by staying in their parents' house for a longer period of time.<sup>48</sup>

The problem of an aging society, falling fertility rate and lack of labor force is often tried to be solved by encouraging migrants to come and work in specific industries (most often: construction, agriculture, domestic services). Migrants usually prefer to settle in the largest metropolises. Migrations, both internal and international, cause increased demand for apartments in the destination city. This demand will vary depending on whether we analyze migration of highly skilled workers, economic temporary migrants or maybe the whole families. What's important, in an era of shrinking cities and demographic problems—accessible housing in a given city, may be one of the reasons to attract migrants to settle down or prevent the inhabitants from moving out. On the other hand, the inaccessible housing will work in the opposite way, making people to leave the city or not to move in.<sup>49</sup>

<sup>&</sup>lt;sup>47</sup> Cities in the World. A New Perspective on Urbanisation, OECD, European Comission, 2020, https://www.oecd.org/en/publications/cities-in-the-world\_d0efcbda-en.html (access: 12 July 2024).

Augustyniak, Olszewski, and Wagner, 'Housing Policy'; Mulder, Key Note Presentation.
 Ibid.; Housing for Migrants and Refugees in the UNECE Region Challenges and Practices,
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### CONCLUSIONS

The 3SI will reach 10 years of functioning in 2025 and through this time the infrastructural, energy and business ties has been strengthened between the participating states. However, there is a need to deepen the economic dimension of the cooperation, which was also an original goal of the initiative. It's important to develop infrastructure to improve the intra-regional connectivity, though this goal should not be understood in a very narrow sense. Focusing just on development of the infrastructure was one of the mistakes realized during the reunification of West and East Germany. The infrastructure of East Germany has been modernized, but it did not stop massive process of emigration as people saw leaving in West Germany as much more attractive. One of the ideas to deepen the 3SI might be to focus on mitigation of the demographic decline by cooperation on development of various policies and instruments.

There is a consensus among the researchers that the Central Europe belongs to the fastest aging regions in the world. This is a significant threat for the development and stability of the pension system. The problem is quite complex and concerns multi-level governance. Therefore, there seems to be a need not only use the resources of individual national or local governments, but also to use international forums to work on proposals of stimulating fertility measures. The first step in this direction might be focus on regional policy tools. Taking into account that the modern states are embedded in various institutional networks and international agreements there is a value-added in looking for ways of increasing their leverage through international cooperation to have an influence on such a decision-making. Taking into account the very different experiences of individual countries participating in the format, both the summits of the Three Seas Initiative and the annual forums of 3SI regions may become an important place for discussion and searching for solutions to demographic problems, and ultimately also for specific projects to support fertility at the EU forum. Working out the demographic problem on the forum of the 3SI could lead to set a common agenda and build coalitions of interest. Thus, 3SI could be a platform to support a demographic policy. As it was indicated before for instance some aspects of the climate policy could affect housing and are often decided not on the national, but the EU level.

An effective tool to mitigate the demographic challenge could be a housing policy as the scientific literature delivers arguments for the causal relationship between insufficient offer of affordable and fulfilling basic standards housing and lower fertility rates. Our analysis shows that the housing and demographic situation of the 3SI countries is clearly worse than in most other EU countries. Especially post-socialistic states of this format like Poland focused in the recent three decade on economic transition, which assumed often very rapid and harsh liberal reforms and cutting social benefits. Therefore, although the housing was pretty underdeveloped in the last three decades and the state was rather getting rid of its reservoir of social apartments, which could be allocated to young families.<sup>50</sup> High ownership rates in most 3SI countries are the result of the situation that renting apartments on the private market is unprofitable due to the instability of the rental system and prices or unattainable in the case of social housing due to the limited stock of social housing. High ownership rates on the one hand prove that citizens take their fate in own hands. On the other hand, it indicates limited interest of governments and local governments in developing housing policy, especially those focused on affordable housing for rent for people with limited income.<sup>51</sup> There is a reversed situation in Austria, which is also a participating state in the 3SI. In the scientific literature especially the example of Vienna is given as a perfect example of initiated already in 1920 and consequently developed housing policy, which facilitated building-up an offer of affordable apartments resources for renting.<sup>52</sup> This example shows quite clearly that the 3SI could be a platform for debating this housing policy and exchanging experiences. Similar experiences of a centrally planned economy, similar demographic problems and a similar housing situation justify close cooperation in this area by the 3SI countries.

To obtain better effects of the housing policy, it should be differentiated territorially. The situation in the largest metropolises is significantly different from the situation of small and medium-sized cities and rural areas. The differences stem from the availability of housing (price and physical), migration movements of the population (both internal and international migrations), the possibility of

<sup>52</sup> Giecewicz, Konserwatywna Awangarda.

 $<sup>^{50}</sup>$  Augustyniak, Olszewski, and Wagner, 'Housing Policy'; Broulíková and Montag, 'Housing Privatization in Transition Countries'.

<sup>&</sup>lt;sup>51</sup> Hegedüs, Lux, Sunega, and Teller, 'Social Housing in Post-Socialist Countries'.

young people living with their parents, as well as the availability of infrastructure. social and technical, overall quality of life. It should be assumed that this pattern will be similar in all 3 SI countries, but the topic requires further, in-depth research.

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