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DOI: 10.15290/oes.2024.04.118.07

THE "NEW" HOUSING DEPRIVATION GAP OF EU COUNTRIES[1]

Summary

Purpose – Housing conditions vary widely across the European Union and the inequalities observed are mainly due to the gap between "new" (enlargement after 2004) and "long-standing" member states. The purpose of the study is to examine how the housing deprivation gap evolved between 2010 and 2020. The study also seeks to identify which of new member states are still lagging behind in terms of housing conditions, and which of them have already managed to close the gap.

Research method – The analysis is based on Eurostat data. It was conducted using the TOPSIS method.

Results – Results showed that among new enlargement states, there are countries that have almost completely overcome the housing deprivation gap over the past decade. These include Estonia, Czechia, Slovakia, Slovenia, which can be considered the leading countries in 2020, and to a lesser extent, Poland and Hungary. Nevertheless, the countries with the highest intensity of problems still are almost exclusively those from the 2004 enlargement (Romania, Bulgaria, Lithuania, Latvia). A current housing deprivation gap is therefore occurring within new member states (instead of between new and long-standing members).

Originality/value/implications/recommendations – The study indicates that only a few countries that joined the EU in 2004 or later have managed to catch up with EU countries in terms of housing conditions. This points to the need to consider the cohesion policies implemented in EU and to support individual economies in creating living conditions in Europe.

Keywords: housing deprivation, European Union, housing poverty

JEL classification: R20, J14, I32

[1] Article received on 7.05.2024, accepted on 6.11.2024.

1. Introduction

Monitoring the level of coherence and disparities occurring in the countries of the European Union is extremely important for achieving the goals of the Community, including shaping appropriate living conditions for its residents. One of the areas that is significant from the perspective of the quality of life is the issue of poverty, one dimension of which is the so-called housing poverty, referring to deficiencies in basic housing conditions. Housing deprivation relates to conditions that should be met to live a life of "decent" quality [cf. Navarro, Ayala, 2008, p. 598; Fusco, 2015, p. 137; Guio et al., 2009].

In the scope of housing deprivation in the EU, significant disparities are visible between long-standing EU countries and new enlargement states (since 2004). Research by Norris and Domanski [2009], as well as Norris and Shiels [2007], demonstrated that during the EU extension in 2004, there was a significant disparity in housing conditions between accession countries and the original 15 EU Member States. Further analyses [e.g. Borg, 2014] indicated that post-accession, there was a noticeable improvement in housing conditions among new member states; however, a gap with the original 15 EU remained visible. Subsequent analyses [Matel, 2023] revealed that in the following years, new member states were "catching up" in terms of housing conditions with long-standing countries, especially notable in the case of Estonia and Czechia. Similarly, research by Dewile [2022] on low-income households indicated that between 2005, 2012, and 2017, there was a gradual convergence in the level of housing conditions in EU countries, mainly due to improvements in Eastern European Countries. Nonetheless, as emphasized by L. Ayala et al. [2022], Eastern European households in 2019 were still significantly more housing deprived than the rest of the EU.

As research by Wojewódzka-Wiewiórska and Dudek [2023] for Poland showed, a considerable decrease in housing deprivation was recorded in 2020 compared to 2017–2019, which can be attributed to the influence of the pandemic. As explained by Kocur-Bera [2022], dwellings in the COVID-19 era have become the center of individuals' life activities (work, leisure, commuting). The need to work remotely and the shift of activity to private space could potentially result in increased care for this living space. The question remains whether this applies equally to Western and Eastern European societies. The ongoing research aims to answer the following questions: does a gap in housing deprivation in the EU still exist? Does it still affect the division into "new" and "old" member states? Are new member states equally successful in overcoming housing poverty?

2. Literature review

2.2. The concept of measuring housing deprivation

Taking into account the definitions of housing deprivation [e.g. Navarro, Ayala, 2008, p. 598; Fusco, 2015, p. 137; Guio et al., 2009], it is unclear how to understand which conditions are responsible for basic quality of a dwelling and what conditions should be met to live a life of "decent" quality. As a result, a number of measurement proposals can be found in the literature.

When analysing them, the method proposed by Eurostat should be the starting point, because it seems to be the first attempt to unify the way of measuring housing deprivation. According to Eurostat, housing deprivation refers to people living in a dwelling with a leaking roof, no bath/shower and no indoor toilet, or a dwelling considered too dark. Eurostat discerns also the so-called severe housing deprivation, which is defined as the percentage of the population living in a dwelling which is considered as overcrowded, while also exhibiting at least one of the housing deprivation indicators. Such an approach seems to be rather narrow [compare for example Nolan, Winston, 2011; Palvarini, Pavolini, 2010; Wan, Su, 2016] because of non-disclosure of some amount of information, which may lead to overlooking the diversity of the phenomenon. However, its simplicity makes it more universal.

Apart from the Eurostat approach, in the literature, several concepts for measuring housing deprivation have been proposed. These include research by: Navarro and Ayala [2008]; Palvarini and Pavolini [2010]; Nolan and Winston [2011]; Mandic and Cirman [2012]; Amore [2013]; Filandri and Olagnero [2014]; Fusco [2015]; Wan and Su [2016]; Kozera et al. [2017]; Ulman and Ćwiek [2020]; Wojewódzka-Wiewiórska and Dudek [2023]; Ayala et al. [2022]; Galeota Lanza and De Martino [2022]; Matel [2023]. When comparing them, it can be seen that they mostly base on the same variables [e.g. Navarro, Ayala, 2008; Palvarini, Pavolini, 2010; Nolan, Winston, 2011; Mandic, Cirman, 2012; Filandri, Olagnero, 2014; Fusco, 2015; Kozera et al., 2017; Ulman, Ćwiek, 2020; Wojewódzka-Wiewiórska, Dudek, 2023; Ayala et al., 2022; Matel, 2023]. This is largely due to the reliance on the same data in comparing European countries. The primary sources of information here are the EU-SILC surveys that provide a specific set of information on housing conditions.

Each of the proposals of measuring the phenomenon under study takes into account housing structural problems, such as no bath or shower, no indoor flushing toilet, no hot running water, too dark dwelling, leaky roof, damp walls, rot in window frames or floors [e.g. Navarro, Ayala, 2008; Palvarini, Pavolini, 2010;

Nolan, Winston, 2011; Mandic, Cirman, 2012; Filandri, Olagnero, 2014; Fusco, 2015; Wan, Su, 2016; Kozera et al., 2017; Ulman, Ćwiek, 2020; Wojewódzka-Wiewiórska, Dudek, 2023; Ayala et al., 2022; Galeota et al., 2022; Matel, 2023].

Almost all measurement proposals [except for Nolan, Winston, 2011] include variables related to housing overcrowding. Usually, these are measured in an objective way [such as Eurostat; Filandri, Olagnero, 2014; Fusco, 2015; Wan, Su, 2016], by the ratio of the number of rooms or living space to the number of residents. An approach based on a subjective sense of overcrowding [Mandic, Cirman, 2012] is less popular. There are also proposals of combining those two variables [Ulman, Ćwiek, 2020].

In most of the methodologies [except for Eurostat; Fusco, 2015; Kozera et al., 2017], neighbourhood characteristics are included. They concern pollution, outside noise and crime. Some authors considered the issue of housing cost burden [e.g. Palvarini, Pavolini, 2010; Nolan, Winston, 2011; Ayala et al., 2022]. In addition, Nolan and Winston [2011] as well as Kozera et al. [2017] took into account the ownership of durable goods, like a colour TV or washing machine, which does not seem to be a popular approach to measuring housing deprivation. In addition, Ayala et al. [2022] analysed the availability of a computer and Internet connection, aiming to take into account the capabilities of remote work from a dwelling during the pandemic.

A different approach to analysis can be found in Galeota Lanza and De Martino [2022]. It is based on a relative assessment of various dimensions of deprivation and comparing them between areas of Naples. The result of the study is not the assessment of housing quality but of the relationship of the quality between the studied neighbourhood and the rest of the city.

When analysing the indicators considered, it should be noted that some of them are objective in nature (like the overcrowding rate and housing cost overburden rate). Other ones, however, represent subjective housing quality. As Ulman and Ćwiek [2020] point out, these two groups should be seen as complementary.

2.2. What do we know about housing deprivation across the European Union?

Research on housing deprivation is carried out in various approaches, including national-level analyses [Ulman, Ćwiek, 2020; Navarro, Ayala 2008, Galeota et al., 2022] or identifying the particular situation of social groups [Matel, Marcinkiewicz, 2021; Nolan, Winston 2011; Dewile, 2022]. Common analysis also seems to compare countries among themselves [e.g. Won, Su, 2019; Norris, Winston, 2012; Matel, 2023].

Studies on housing deprivation among the EU Member States [Mandic, Cirman, 2012; Norris, Domanski, 2009; Norris, Shiels, 2007; Borg, 2014; Dewilde, 2022; Matel, 2023; Alaya, 2023] indicated a possible connection between the level of deprivation and the economic development of a country. Norris and Domanski [2009], as well as Norris and Shiels [2007] analysed whether dwelling had at least one room per occupant, an indoor toilet and no reported shortage of space or rot in windows, doors or floors or damp or leaks, whether households had missed a rent or mortgage payment in the last three months, and the affordability of home heating. As a synthetic measure of housing outcomes, they analysed the proportion of households who did not report any of the aforementioned problems. Using data from 2003, they distinguished three categories of 25 EU countries (also those from the enlargement in 2004). EU Member States with the highest percentage of households without any of the distinguished problems were mainly northwestern ones, which joined the EU prior to 2004 (Germany, Denmark, Austria, Sweden, Belgium, the Netherlands, Finland, Ireland and France). The second group (average level of households without housing problems) comprised of both long-standing member states, mainly – except for the UK and Luxembourg – of Southern Europe (i.e. Spain, Greece and Italy) and some of the "new member states" (Czechia, Cyprus, Slovenia and Malta). The third group with the lowest percentage of households without any housing problems covered mainly the new member states (except for Portugal), including Hungary, Slovakia, Poland, Estonia, Latvia, Bulgaria, Romania and Lithuania. It seems that in 2003, there was a division into long-standing and new member states in the European Union in terms of housing deprivation.

Norris and Shiels [2007] compared the EU Member States, using data for 2003 as well, but applying a different methodology. They compared the mean score (ranging from 25 = richest in Europe, to 1= poorest in Europe) referring to: average floor area of dwellings, the proportion of dwellings with running water, a lavatory and a bath or shower, the number of dwellings per 1,000 inhabitants, average number of persons per occupied dwelling and the share of household consumption devoted to housing, water, electricity, gas and other fuels. In such a way, they indicated a good housing condition in most of the long-standing EU Member States, mainly northern ones (except for Italy). Other "long-standing" member states, Czechia and Malta, were the ones with intermediate housing conditions. A poor housing situation was observed in new Central and Eastern European member states and Portugal (as the sole EU-15 country represented in this category). It is noticed that – despite the use of different methodological approaches – the typologies were quite similar.

Next, according to Borg [2014], in 2007, housing deprivation in the EU still tends to be at highest levels in Central and Eastern European countries, particularly in Lithuania, Estonia, Hungary, Latvia and Slovenia. The research by Dewilde [2022] – referred to housing deprivation gap in the EU focusing on low-income households – compared the situation in the years: 2005, 2011 and 2017. The research confirmed that there was a reduction in the housing deprivation gap in the EU, although in Eastern Europe, housing poverty is still significantly higher. The research also pointed to strong declines among "new" member states (less so in Hungary and Slovenia) in housing problems between 2005 and 2017.

Research by Matel [2023] showed how the situation had been changing till 2017. It showed that the housing deprivation gap in 2007–2017 had narrowed considerably between long standing countries and new member states. "Catching up" of other EU countries by new members was particularly observable in Estonia and Czechia, but in 2017, there were still significant differences between EU-15 and the countries from enlargement in 2004.

Next, Alaya [2023] examined housing deprivation in the context of the COVID pandemic in European countries, including variables that were not previously typically seen as symptoms of housing poverty (no computer, no Internet connection). The measure was therefore highly specific. The survey indicated that in 2019 – just before the pandemic – the highest rates of deprivation were observed in Bulgaria, Cyprus, Greece, Spain, Lithuania, Latvia, Malta, Portugal, Romania. It can be noted that these are mostly new member states, but not only them. In turn, this would indicate that in 2019, the housing deprivation gap in Europe evolved, but still exists.

3. Material and method

Basing on available data for the European Union countries, 9 indicators of housing deprivation were used, concerning: structural problems, housing cost overburden, overpopulation, and neighbourhood problems, according to Table 1.

Both subjective (HD_3, HD_6, HD_7, HD_8, HD_9) and objective indicators (HD_1, HD_2, HD_4, HD_5) were used. Both types are a widely accepted approximation of an objective measure of housing characteristics [Mandic, Cirman, 2012]. Data for 2010 and 2020 were used, as more recent data is not available (according to Eurostat).

TABLE 1

Indicators of housing deprivation in three dimensions

Symbol	Indicator description
HD_1	the percentage of households with any of the following problems with a dwelling/accommodation: leaking roof, damp walls/floors/foundation, or rot in window frames or floor
HD_2	the percentage of households without a shower unit or a bathtub in a dwelling for the sole use of the household
HD_3	the percentage of households living a dwelling which is too dark, meaning there is not enough daylight coming through the windows
HD_4	the percentage of the population living in a household where total housing costs (net of housing allowances) represent more than 40% of the total disposable household income (net of housing allowances)
HD_5	the percentage of population living in an overcrowded household (according to EU-SILC panel data methodology described in the literature review section)
HD_6	the percentage of the population who are unable to keep home adequately warm
HD_7	the percentage of total population who face the problem of too much noise in their dwelling from neighbours or from outside (traffic, business, factory, etc.)
HD_8	the percentage of total population who face the problem of pollution, grime or other environmental problems in the local area such as: smoke, dust, unpleasant smells or polluted water
HD_9	the percentage of total population who face the problem of crime, violence or vandalism in the local area

Source: own elaboration.

A synthetic measure of housing deprivation and ranking of countries were designed using a multidimensional comparative analysis – the *Technique for Order Preference by Similarity to Ideal Solution* method, known as the TOPSIS method [Hwang, Yoon, 1981], with a common pattern and anti-pattern of housing deprivation in the EU. The procedure of counting a summary indicator was presented among other in: Roszkowska and Filipowicz-Chomko [2019]; Godlewska and Sidorczuk-Pietraszko [2019], Hwang and Yoon [1981]. A detailed description of the calculation procedure implemented has been introduced in the publication of Roszkowska and Filipowicz-Chomko [2019]. In the presented research, one common pattern (ideal and anti-ideal solution) was used for the entire period

studied (2010 and 2020) [Hellwig, 1968]. For each variable, its maximum and minimum value for the whole period were used. This allowed not only to create a ranking of countries in a particular year, but also to assess progress in overcoming housing deprivation problems in the period considered. Such a modification, according to Godlewska and Sidorczuk-Pietraszko [2019], allows to overcome certain weaknesses of this method in its original shape, namely the fact that it allows for the ranking of objects without taking into account the temporal dimension. The coefficients of variation for all analysed variables exceeded 30%, meaning that they met the requirements of the TOPSIS method [Hellwig et al., 1997, p. 25]. In the TOPSIS method, the use of highly correlated variables is not recommended. In the study, variables whose correlation index did not exceed 0.7 (based on Pearson's linear correlation coefficient) were selected. The highest correlation level was observed for the variables HD2 and HD5 (0.629) and for the variable HD1 and HD3 (0.603). However, they did not exceed the accepted limit of 0.7.

5. Results

The hierarchy of the EU Member States in terms of housing deprivation level was determined basing on an aggregate measure of HD (Table 2). The higher the position, the lower the level of housing deprivation observed in a country.

TABLE 2

Housing deprivation index in 2010 and 2020 in EU-27 countries

Country	2010		2020		Change	
	HD_{2010}	ranking	HD_{2020}	ranking	$HD_{10–20}$	ranking
Belgium	0.223	11	0.193	8	–	3
Bulgaria	0.563	26	0.466	26	↓	–
Czechia	0.204	8	0.121	2	↓	6
Denmark	0.243	14	0.222	15	–	-1
Germany	0.234	12	0.200	10	–	2
Estonia	0.270	16	0.129	3	↓↓	13
Ireland	0.101	2	0.162	5	↑	-3
Greece	0.334	23	0.464	25	↑↑	-2

Country	2010		2020		Change	
	HD_{2010}	ranking	HD_{2020}	ranking	HD_{10-20}	ranking
Spain	0.196	7	0.293	20	↑	-13
France	0.187	6	0.291	19	↑↑	-13
Croatia	0.261	15	0.198	9	↓	6
Italy	0.242	13	0.253	17	–	-4
Cyprus	0.311	22	0.318	22	–	–
Latvia	0.482	25	0.333	23	↓↓	2
Lithuania	0.392	24	0.345	24	–	–
Luxembourg	0.134	4	0.212	12	↑	-8
Hungary	0.304	21	0.212	13	↓	8
Malta	0.302	20	0.299	21	–	-1
Netherlands	0.216	9	0.237	16	–	-7
Austria	0.176	5	0.145	4	–	1
Poland	0.276	17	0.215	14	↓	3
Portugal	0.299	19	0.289	18	–	1
Romania	0.621	27	0.542	27	↓	–
Slovenia	0.286	18	0.187	7	↓	11
Slovakia	0.219	10	0.169	6	–	4
Finland	0.068	1	0.095	1	–	–
Sweden	0.130	3	0.204	11	↑	-8

Source: own elaboration.

Next, based on the HD indicator, the countries were divided into three classes of housing deprivation (low level of HD, average level of HD, high level of HD). Because the study procedure employed a common pattern and anti-pattern for 2010 and 2020, the value of changes of the indicator and affiliation with typological classes within the studied periods were compared (analysed as the progress made by particular countries in combating housing deprivation, or as deterioration). The boundaries between the groups have been established on the basis of the arithmetic

mean and standard deviation of the HD_{2020} and HD_{2010} synthetic measures. It means that the same boundaries for group division in 2010 and 2020 were used, which aims to assess the class mobility of the countries. The groups were as follows:

Low level of HD $\quad HD > \overline{HD}_{10-20} - 0.5\ StDev_{HD(10-20)}$

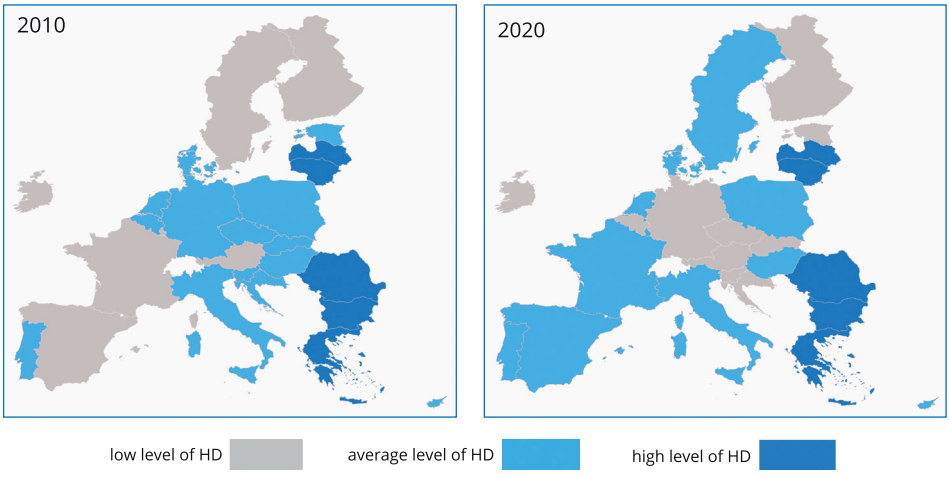
Average level of HD $\quad \overline{HD}_{10-20} - 0.5\ StDev_{HD(10-20)} < HD < \overline{HD}_{10-20} + 0.5\ StDev_{HD(10-20)}$

High level of HD $\quad HD > \overline{HD}_{10-20} + 0.5\ StDev_{HD(10-20),}$

where:
$\overline{HD}_{10-20}$ – the arithmetic mean of HD for EU-27 in 2010 and 2020,
$StDev_{HD(10-20)}$ – standard deviation of HD for EU-27 in 2010 and 2020.

The division of countries into classes is presented in Fig. 1–2.

FIGURE 1–2
Division of EU countries into housing deprivation classes in 2010 and 2020



Source: own elaboration.

The study has shown that among EU countries, there are those that have made significant progress in overcoming housing deprivation over the past decade. Estonia and Latvia are particularly noteworthy. A decrease in housing deprivation was also observed in Lithuania and Poland. Progress was thus evident in all Baltic

countries. A decrease in the intensity of problems was also observed in Bulgaria, Czechia, Croatia, Hungary, Romania, and Slovenia. These are countries from the recent expansions of the European Union (2004 and in the case of Croatia, 2010). At the same time, in some long-standing EU countries, an intensification of housing problems can be observed. This is particularly evident in France and Greece. In the case of France, this is mainly related to the technical condition of housing and environmental pollution issues, while in Greece, it is related to difficulties in bearing housing costs. Other countries where the level of housing deprivation increased during the analyzed period were Ireland, Spain, Luxembourg, and Sweden. It can be observed, therefore, that while the problem of housing deprivation has decreased in new member states over the past decade, it has intensified in some long-standing countries. This has led to significant changes in the ranking of EU countries in terms of housing deprivation.

In 2010, only countries from the EU-15 (Finland, Ireland, Sweden, Luxembourg, Austria, France, and Spain) were classified in the low-deprivation group. Thus, a clear disparity between "new" and "old" member states emerged, referred to as the housing deprivation gap. In 2020, the situation changed. Countries from later enlargements, including Czechia, Estonia, Slovakia, and Slovenia, joined the leaders.

In 2010, besides Greece, the countries with the highest intensity of housing problems in the EU were those from the 2004 enlargement (Romania, Bulgaria, Latvia, Lithuania, Cyprus, Hungary, Malta). In 2020, the situation remained unchanged in this regard, except for Hungary. It can be observed, therefore, that while countries in Central Europe (Czechia, Slovakia, Slovenia, Hungary, Poland), similarly to Estonia, have essentially bridged the gap between "new" and "old" member states in terms of housing poverty over the past decade, the problem persists in the case of countries in Southeastern and Eastern Europe.

Significant disparities in housing conditions are especially noticeable in Romania, Bulgaria, Lithuania, and Latvia. The gap between new and long-standing EU countries thus narrows only for some of them, while the housing deprivation gap takes on a new form.

6. Discussion

Previous studies conducted at the level of the European Union have indicated the existence of a significant gap in housing conditions between new enlargement states and long-standing EU countries. Research by Norris and Domanski [2009]

as well as by Norris and Shiels [2007] pointed to a particularly pronounced intensity of problems in Central and Eastern European countries, including Hungary, Slovakia, Poland, Estonia, Latvia, Bulgaria, Romania, and Lithuania. The existence of a gap in housing conditions was also confirmed in Borg's analysis [2014] conducted for 2007 data. In subsequent periods, gradual reduction of the analyzed gap was observed in the literature, mainly due to the improvement of housing conditions in new member states [Dewilde, 2022], which was also confirmed by Matel's research [2023]. Despite increasing coherence, in 2019, the gap in housing conditions remained present [Alaya, 2023].

The conducted study comparing the years 2010 (a period of strong disparities in housing conditions in the EU) and 2020 indicated a dual nature of the observed changes. Among the new member states, there are those that have bridged the gap with long-standing countries (mainly Czechia, Estonia, Slovenia, Slovakia). As a result, among the countries with the least intensity of problems, there is no longer a distinction between "new" and "old" member states. However, in some of the countries from the 2004 enlargement, there is still a significant distance from the EU-15. These include Lithuania, Latvia, Bulgaria, and Romania. Consequently, among the countries with the highest intensity of deprivation problems in 2020 – besides Greece – there are only new member states.

Changes in the level of housing deprivation may have various reasons. Firstly, different countries have implemented different housing policies. They have also experienced different changes in the labor market and economic development, which also result in changes in housing conditions. Countries that have overcome the gap in housing conditions with the "old" EU Member States (Czechia, Slovakia, Slovenia, Hungary, Poland), have mainly experienced improvements in the area of housing overcrowding (respectively: -7.3%, -10%, -24%, -28.2%, 10.6%). This may be influenced by the growth of the residential construction sector and the increasing importance of mortgages in financing housing purchases, as well as demographic situation. These economies have also experienced improvements in the area of public order and the environment (the percentage of population who face the problem of pollution and crime). This in turn may be a consequence of the EU policies implementation. Countries such as Romania, Bulgaria, Lithuania, and Latvia have generally experienced similar amendments in these areas, but with different starting levels of housing problems, and sometimes with lower dynamics of change, which may indicate that they will need more time for the convergence process. It can also be noted that in countries that have dropped significantly in the ranking, such as France and Spain, change is not related to one specific problem, but to many symptoms of deprivation. DeWilde [2022] indicated that the increase

in deprivation in Western European countries was related to the impact of the Great Financial Crisis. As the Author pointed out, this decline in living standards – although not showing significant dynamics – can be felt as harmful by Western societies due to the long-standing positive trends of change observed in recent decades. The Author also found that higher levels of rental market regulation in EU countries are associated with positive changes in housing deprivation [Dewilde, 2022]. The competitiveness of the ways in which housing needs can be met is also important. An attractive rental sector can compete with homeownership, and an attractive social rental offer can compete with private renting, leading to improved housing conditions [Borg, 2015]. What is more, it should be noted that some of the variables used in the analysis are of subjective nature, rated by respondents. Therefore, they may be influenced by changes in residents' preferences.

7. Conclusions

The gap in housing deprivation between long-standing and new states of the EU, which was pronounced in 2010, has been decreasing over the past decade. This is both due to the improvement of housing conditions in countries from the 2004 enlargement and partially to the stabilization or even worsening of housing conditions in long-standing countries. It can be observed that individual new member states show different dynamics in overcoming the problem of deprivation. While Czechia, Estonia, Slovakia, Slovenia, and (to a lesser extent) Hungary and Poland are doing well in catching up with long-standing countries, Bulgaria, Romania, Lithuania, and Latvia still lag behind and are at the bottom of the ranking.

As a result, the housing deprivation gap in the European Union still exists in 2020, but it takes on a new form. It is no longer a gap between "new" and "old" member states, but rather a gap within the new member states themselves. Some of them have "caught up" with the EU-15, while others remain significantly behind.

This in turn raises questions regarding both the effectiveness of the implemented cohesion policy and the efficiency of its implementation at the national level. This aspect should undoubtedly be taken into account in shaping the European Union's policy.

The conducted study has indicated an interesting dynamic of changes in the phenomenon of housing deprivation. However, it is associated with a certain limitation which concerns the vast majority of studies on housing deprivation. It is worth remembering that they are based on representative surveys conducted on a specific group of households. Therefore, they inherently exclude the analysis of homelessness

(as noted, among others, by Busch-Geertsema et al. [2016, p. 125]). Due to the intensification of migration processes in Europe in recent years, it can be assumed that this issue will become increasingly important in the study of the phenomenon.

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