

DATA & TRENDS

Educational disparities in place of residence. The urban-rural divide in six European countries from a social stratification perspective

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ABSTRACT In recent years, many European countries have experienced growing disparities between urban and rural areas. These disparities are associated not only with differences in infrastructure, public goods and cultural provision, but also with heterogeneous demographic developments. In this paper, we intersect the perspectives of spatial demography, urban geography and social stratification by examining whether spatial inequalities between educational groups have increased in six European countries since the turn of the millennium. Analytically, we focus on (a) the educational composition of metropolitan and rural populations and (b) the residential patterns of educational groups. The empirical analyses using European Social Survey (ESS) data suggest that while there are no systematic changes over the two-decade study period, patterns of residential disparities differ considerably across the analysed countries. In particular, France and Sweden emerge as countries with significant differences in residential location between educational groups. At the same time, there is no evidence that the educational gradient of place of residence is stronger among the younger than the older age groups.

KEYWORDS Socio-spatial disparities • Settlement types • Polarisation • European Social Survey

Introduction

In recent decades, declining fertility rates, rising life expectancy and net immigration have reshaped the populations of European countries. These demographic developments are closely linked to both socio-economic and spatial processes. On the one hand, the profound changes in educational and occupational structures in post-industrial societies mean that younger birth cohorts are more likely to have completed tertiary education than previous cohorts (Eurostat, 2023a). On the other hand, these demographic and socio-economic changes have exacerbated urban-rural disparities. In particular, economic pathways have diverged between post-industrial metropolises and peripheral regions (Moretti, 2012). Rural communities and small towns have experienced population decline and ageing, whereas urban areas have grown significantly (Eurostat, 2023b). Economically strong regions are experiencing especially large population gains (Iammarino et al., 2019). In eastern Europe, population growth has often been confined to capital cities (Turgel and Ulyanova, 2023),

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while in France (Institut national de la statistique et des études économiques, 2019), Germany (Statistisches Bundesamt, 2024) and the United Kingdom (Office for National Statistics, 2021), population growth has occurred in the majority of large cities, albeit to varying degrees.

Rising spatial disparities are reflected not only in differences in population dynamics, but also in the changing socio-demographic composition of urban and rural populations (Eurostat, 2023b). In particular, the younger and more educated groups are seen as the drivers of urbanisation processes (Kashnitsky et al., 2020).

Another line of argument refers to increasing class differences in residential patterns. According to authors such as Florida (2004) and Reckwitz (2021), the representatives of the post-industrial economy, i.e. the “creative class” or the “new” middle class, are essentially urban classes who are attracted by vibrant and diverse metropolises. Moreover, the changing social composition of large cities is supposed to reinforce urban-rural disparities in population structures. Rising spatial inequalities are, in turn, expected to fuel social, cultural and political conflicts in many Western countries between metropolitan based cosmopolitans and provincially anchored communarians (Zürn and de Wilde, 2016) – or between “Somewheres” and “Anywheres” (Goodhart, 2017).

Taken together, the literature suggests that in recent decades, “large-scale” socio-spatial disparities have been increasing. These processes not only fuel unequal regional development and urban-rural divides, but are also assumed to provide a structural basis for social and political polarisation and right-wing populism.

Following on from these observations, our study aims to investigate in more detail differences in place of residence between sub-populations defined by educational level in selected European countries. While the existing body of research has mostly analysed disparities between regions or districts – for example, regional differences in economic performance, infrastructure or population structures – our study applies a different analytical approach by examining how *population groups are distributed over settlement types*.¹ By addressing spatial disparities between educational groups, our study intersects the perspectives of spatial demography, urban geography and social stratification.

Within this frame, we specifically ask whether socio-spatial inequalities have increased since the turn of the millennium. To answer our questions, we use data for six European countries from the European Social Survey (ESS) for the period 2002 to 2022. In the following, we first review studies that have dealt with issues of spatial disparities, and then derive our research hypotheses based on this review. After describing our database, we report the results. Finally, we discuss the relevance and implications of our findings.

Prior research

Much of existing research on regional and urban–rural inequalities focuses on disparities between spatial entities (mostly regions, districts) and relies on indicators such as economic structure and performance, labour market features or demographic characteristics

1 Another line of research that is rooted in urban geography and sociology deals with small-scale spatial disparities within cities (cf. van Ham et al., 2021).

(e.g. Sabater et al., 2017; Gutiérrez Posada et al., 2018; Le Bras and Warnant, 2021; Brixey et al., 2022). Cross-national studies at the regional level have confirmed that disparate developments have occurred between capital regions and the rest of the country, which are reflected in employment and population structures as well as in economic performance (Eurofound and European Commission Joint Research Centre, 2019, p. 7). A large body of urban research has also dealt with socio-spatial inequalities at the level of cities. For instance, Musterd et al. (2017) analysed segregation patterns in 12 European capitals (Amsterdam, Athens, Budapest, London, Madrid, Oslo, Prague, Riga, Stockholm, Tallinn, Vienna and Vilnius), and concluded that socio-economic inequality has increased in European metropolises (see also van Ham et al., 2021 for a global perspective). Similar patterns of rising residential segregation have been observed in other European cities, including Brussels (Costa and de Valk, 2021), Berlin (Blokland and Vief, 2021) and Paris (McAvay and Verdugo, 2021).

Furthermore, demographic studies have shown that many European metropolitan regions have been experiencing population growth in the new millennium (Salvati et al., 2019, p. 22). Research on Germany (Sander, 2014), France (Labosse and Thouilleux, 2021), the UK (Thomas et al., 2015) and Spain (Lopez-Gay, 2014) shows that migration gains in large cities are driven by a continuous influx of young adults seeking education or work. These groups are mainly attracted to city centres, leading to talk of a “youthification” (Moos, 2015) of core cities (Siedentop et al., 2017). In contrast, families with children tend to move to the outskirts of major cities (Sander, 2014; Eder et al., 2018; Booi et al., 2020; Andersen et al., 2022).

While regional, urban and demographic studies have provided in-depth assessments of spatial disparities within and between cities and regions, researchers have paid much less attention to the issue of spatial disparities from a social stratification perspective. By this we mean *population-wide* studies that look at how socio-demographic groups are distributed across different *settlement types* – as opposed to research that focuses on spatial patterns on a sub-national and often local level, such as the studies described above. Recent studies on spatial disparities between social strata or classes include Konietzka and Martynovych (2022, 2023) for Germany and Vigna (2023) for France. While the latter found that average subjective social status is higher in large cities than in other settlement types (Vigna, 2023, p. 710), the former examined how socio-economic classes differ by place of residence. The results indicate that the higher classes are more likely to live in the metropolises, and that there was little change in this pattern over a two-decade period (1996–2018) (Konietzka and Martynovych, 2022, p. 194, 2023, p. 13).

Hypotheses

When analysing the relationship between spatial and socio-economic characteristics, it is appropriate to distinguish between an aggregate and an individual-level perspective. Cities and regions may differ in their socio-demographic composition (social structures), and socio-demographic groups may be distributed differently across settlement types. These two phenomena are related, but represent separate analytical aspects of socio-spatial disparities.

In the context of our research question, it is important to note that changes in the demographic composition of settlement types are not necessarily accompanied by corresponding

changes in the behaviour of individuals and groups. In other words, rising proportions of higher educated strata in large cities do not necessarily indicate that the higher educated have become more likely to live in large cities. The proportion of people with higher education may well have increased because the more recent birth cohorts are, on average, higher educated. At the same time, while it is plausible to assume that, at the individual level, the higher educated have a disproportionate preference for living in the metropolises, this does not necessarily mean that they are a numerically dominant population group in the metropolises.

Such considerations highlight the need to distinguish between phenomena that characterise settlement types or aggregate units (e.g. regions), and to address questions such as that of how cities differ in terms of their population structures on the one hand, and individual-level questions such as that of where different types of people live on the other. Against this background, our paper investigates in more detail how educational status and settlement type are related. We begin by examining changes in the population structure of different settlement types (metropolises, large cities, small towns and rural areas) across European countries (aggregate-level perspective). On this basis, we will look at how the residential behaviour of educational groups has changed in the new millennium (individual-level perspective).

In our analysis, we consider educational attainment as a proxy for resource endowment and social status in a more general sense, given that educational resources not only influence demographic behaviour (Mikolai et al., 2018; Zimmermann and Konietzka, 2018), but also have a fundamental impact on individual life chances (Baeriswyl et al., 2024).

Given the rising urban-rural disparities in European countries, the first thing we would expect to see is a growing divergence in the educational composition of the population in metropolises and small towns, and in urban and rural areas, over the last two decades. An extreme manifestation of this process would be *polarisation* between urban and settlement types, defined as a pattern in which the metropolises are increasingly dominated by higher educated groups, while small towns and rural communities are increasingly dominated by lower educated groups (hypothesis 1). Against this background, the question of to what extent individual-level dynamics have contributed to the increase in urban-rural disparities also arises. We thus examine whether the more privileged higher educated population groups are becoming more likely to reside in metropolises and large cities, while the less educated population groups are becoming more likely to live in potentially disadvantaged small towns and peripheral locations (hypothesis 2).

Data and methods

For our analysis, we use data from rounds 1 to 10 of the European Social Survey (ESS). The ESS is a representative scientific survey that has been conducted in European countries every two years since 2002. We include six countries (Belgium, France, Germany, Spain, Sweden and the United Kingdom) that have participated in all rounds since 2002, and for which consistent regional information is available over the observation period. The countries cover different geographical regions (northern, western, central and southern Europe) and socio-political regimes (universalist, liberal, continental and Mediterranean). In order to obtain robust case numbers for our analyses, we aggregate the survey years into three

groups: 2002/07 (rounds 1 to 3), 2008/15 (rounds 4 to 7) and 2016/22 (rounds 8 to 10).² We select respondents between the ages of 25 and 74, excluding younger age groups who are often still in education and whose residence may be temporary and determined by regional educational opportunities. We also exclude respondents with missing data, which gives us about 99,000 valid cases (for the analytical sample, see Table S.1, Supplementary material, available online at <https://doi.org/10.1553/p-9g9e-pf8p>).

Our dependent variable is the respondent's place of residence. The dataset provides information on the self-reported place of residence, distinguishing between a farm or home in the countryside, a country village, town or small city, the suburbs or outskirts of a big city and a big city. On this basis we distinguish between rural communities (rural villages and farms or individual houses in the countryside), small cities (medium-sized and small cities) and large cities (big cities and the suburbs or outskirts of a big city). Furthermore, making use of the NUTS classification, we add the nations' capitals as a separate category.³ The data allow us to identify both Berlin and London within their administrative boundaries, while the Belgian capital of Brussels, the French capital of Paris, the Spanish capital of Madrid and the Swedish capital of Stockholm are merged with their surrounding areas.⁴

Our core independent variable is the individual's educational level. Based on the International Standard Classification of Education (ISCED), we distinguish between up to the lower secondary level (ISCED 0–2, “lower education”), the upper secondary or post-secondary non-tertiary level (ISCED 3–4, “medium education”) and the tertiary level of education (ISCED 5–8, “higher education”).

Gender (male, female), age group (25 to 34, 35 to 44, 45 to 54, 55 to 64, 65 to 74) and migration background are taken into account as control variables. Migrants are defined as respondents who were not born in the country of the survey (for descriptive statistics, see Table S.2, Supplementary material).

Results

Changes in the educational structures of settlement types

First, we examine whether the social structures of rural communities and small towns are becoming dominated by the lower educated, while the opposite trend applies to the population structures of large cities and capitals (hypothesis 1).

2 Since the surveys were conducted at varying times in the countries under consideration, we attribute the analysis to the year in which the survey was actually conducted, rather than to the official year of the ESS round. Specifically, the survey for France was conducted in 2003/07 (as opposed to 2002/07) and 2016/21 (as opposed to 2016/22), while the survey for Spain was conducted in 2017/22 (as opposed to 2016/22).

3 The ESS provides no consistent information regarding the NUTS level across the countries under consideration. The levels of regional information we draw on are at NUTS 1 (rounds 1 to 4) and NUTS 2 (rounds 5 to 10) for Belgium, at NUTS 1 (rounds 1 to 4) and NUTS 2 (rounds 5 to 10) for France, at NUTS 1 (rounds 1 to 10) for Germany, at NUTS 2 (rounds 1 to 10) for Spain, at NUTS 2 (rounds 1 to 4, 9 to 10) and NUTS 3 (rounds 5 to 8) for Sweden and at NUTS 1 (rounds 1 to 10) for the United Kingdom.

4 Brussels-Capital Region (Belgium), Île-de-France (France), Comunidad de Madrid (Spain), Stockholms län (Sweden). The inclusion of the areas surrounding the capital cities may mitigate the observed polarisation trends.

Table 1 shows that in 2002/07, between 27% (Spain) and 44% (United Kingdom) of the population in the capital cities were in the higher education group. These proportions have increased substantially over time in all countries. In 2016/22, 46% of capital city residents in Spain and 62% of capital city residents in the United Kingdom were highly educated. Conversely, the proportion of the population with lower levels of education has fallen in each country, with Spain (from 51% to 32%) and Sweden (from 13% to 9%) representing the extreme cases. But how has the composition of rural communities and small towns changed over time? As the table shows, the dynamics in rural communities and small towns are quite similar to those in capital cities: the share of the higher educated group has increased, while the share of the lower educated group has decreased. With the exception of Spain, the proportions of the lower educated group in rural municipalities are less than a quarter, which means that these are not disadvantaged regions in terms of educational structures.

The profound changes in educational structures reflect the massive expansion of higher education that has affected younger cohorts in European countries (see Table S.2, Supplementary material). However, as our data show, this shift has not been confined to urban areas. Instead, the social composition of all settlement types has changed considerably in a relatively short period of time. This in turn means that there is little empirical evidence of a polarisation of population structures in terms of education between rural communities or small towns on the one hand and large cities or capital cities on the other (see hypothesis 1).

Changes in place of residence by educational group

We now move away from assessing educational structures in different types of settlement to look at to what extent individual-level changes in where people live have occurred. Do the more privileged population groups increasingly prefer to live in large cities and metropolises? And, are the lower educated groups more likely to live in small towns and peripheral locations (hypothesis 2)?

As Table 2 shows, the spatial distribution of educational groups varies considerably between countries. If we focus on the contrast between rural communities and capitals, we can distinguish two groups of countries. In France, Spain and Sweden, there are clear differences in residential locations between educational groups. In all three countries, comparatively high proportions of the lower educated live in rural communities (between 35% (France) and 50% (Spain) in the latest period), while only 17% (Sweden) to 30% (Spain) of the higher educated live in rural communities. At the same time, 19% (Spain) to 31% (Sweden) of the higher educated, but only 10% (Spain) to 15% (Sweden) of the lower educated, live in the capital cities.

The second group includes Belgium, Germany and the United Kingdom, all of which show rather low levels of spatial disparities in place of residence between the higher and lower educated. However, it is the changes in these disparities over time that are particularly relevant to our research question.

The results show that in most countries, there has been little change over the observation period. In Spain (15% to 19%), Sweden (29% to 31%) and the United Kingdom (15% to 17%),

Table 1 Changes in the educational structures of settlement types in 2002/07 and 2016/22, age groups 25–74 (row percentages)

	Lower education			Medium education			Higher education		
	2002/ 07	2016/ 22	Change	2002/ 07	2016/ 22	Change	2002/ 07	2016/ 22	Change
Belgium									
Capital	36	26	–10	27	25	–2	37	50	+13
Large cities	43	27	–16	29	31	+2	28	42	+14
Small towns	42	25	–17	32	34	+2	26	41	+15
Rural communities	41	24	–17	33	39	+6	26	37	+11
France*									
Capital	34	20	–14	30	28	–2	36	52	+16
Large cities	38	21	–17	36	37	+1	26	43	+17
Small towns	41	27	–14	42	45	+3	17	28	+11
Rural communities	44	22	–22	40	50	+10	16	28	+12
Germany									
Capital	15	12	–3	48	43	–5	37	46	+9
Large cities	17	15	–2	56	48	–8	27	37	+10
Small towns	18	14	–4	61	58	–3	21	27	+6
Rural communities	19	16	–3	62	64	+2	19	24	+5
Spain**									
Capital	51	32	–19	22	22	+0	27	46	+19
Large cities	49	40	–9	19	20	+1	32	41	+9
Small towns	51	41	–10	19	20	+1	30	39	+9
Rural communities	68	55	–13	14	20	+6	17	25	+8
Sweden									
Capital	13	9	–4	49	37	–12	38	55	+17
Large cities	17	12	–5	50	39	–11	33	49	+16
Small towns	22	15	–7	52	48	–4	26	38	+12
Rural communities	28	18	–10	52	53	+1	20	29	+9
United Kingdom									
Capital	41	20	–21	16	19	3	44	62	+18
Large cities	54	23	–31	12	28	16	34	49	+15
Small towns	53	24	–29	12	29	17	35	47	+12
Rural communities	50	21	–29	12	28	16	37	52	+15

Note: * 2003/06 and 2016/21, ** 2017/22.

Source: ESS rounds 1–10, own calculations (weighted).

Table 2 Changes in place of residence by educational level in 2002/07 and 2016/22, age groups 25–74 (column percentages)

	Lower education			Medium education			Higher education		
	2002/ 07	2016/ 22	Change	2002/ 07	2016/ 22	Change	2002/ 07	2016/ 22	Change
Belgium									
Capital	8	10	+2	8	7	−1	13	13	+0
Large cities	18	16	−2	8	14	+6	17	16	−1
Small towns	22	23	+1	22	22	+0	21	23	+2
Rural communities	52	50	−2	54	57	+3	49	48	−1
France*									
Capital	15	16	+1	14	12	−2	30	28	−2
Large cities	20	15	−5	21	15	−6	26	20	−6
Small towns	29	33	+4	31	30	−1	21	23	+2
Rural communities	35	35	+0	34	43	+9	23	29	+6
Germany									
Capital	4	4	+0	4	3	−1	7	7	+0
Large cities	27	29	+2	27	22	−5	33	33	+0
Small towns	40	36	−4	41	35	−6	37	32	−5
Rural communities	29	31	+2	29	40	+11	23	29	6
Spain**									
Capital	12	10	−2	17	15	−2	15	19	+4
Large cities	16	15	−1	21	17	−4	24	20	−4
Small towns	23	25	+2	28	27	−1	31	31	+0
Rural communities	49	50	+1	34	41	+7	29	30	+1
Sweden									
Capital	13	15	+2	20	20	+0	29	31	+2
Large cities	15	18	+3	18	17	−1	22	23	+1
Small towns	33	34	+1	32	34	+2	29	28	−1
Rural communities	39	33	−6	30	29	−1	20	17	−3
United Kingdom									
Capital	10	12	+2	15	9	−6	15	17	+2
Large cities	25	22	−3	22	22	+0	21	21	+0
Small towns	42	42	+0	39	43	+4	39	37	−2
Rural communities	24	23	−1	24	26	+2	25	26	+1

Note: * 2003/06 and 2016/21, ** 2017/22.

Source: ESS rounds 1–10, own calculations (weighted).

the proportion of the higher educated living in the capital cities has increased, in line with our expectations (hypothesis 2). However, in contrast to our expectations, we do not observe a parallel exodus of this group from rural communities. Furthermore, we find no evidence that the lower educated have become more concentrated in rural municipalities.

In the next step, we use a multinomial logistic regression model to more precisely assess whether educational disparities in place of residence have increased over time. The dependent variable is again settlement type. The independent variables are educational level and survey period. In addition, migration background, gender and age group are included as control variables. In order to capture education-specific changes in residential location, we calculate interactions between educational level and survey period for each country. The results are presented as average marginal effects (AME), with the higher educated as the reference category. The coefficients thus show the differences between the low (medium) educated and higher educated groups for each observation period.

Figure 1 essentially corroborates the previous descriptive findings. Most importantly, it confirms that in France, Spain and Sweden in particular, there is a clear divergence between educational groups in terms of where they live. In France and Spain, the lower educated are much less likely to live in the capital cities and large cities, and are much more likely to live in rural areas. In Spain, these differences are less pronounced for the first three settlement types, but the lower educated are particularly likely to live in rural municipalities. In Germany, the disparities tend to follow a similar pattern, but the results are hardly statistically significant. Finally, in Belgium and the United Kingdom, there is little evidence of spatial disparities between the higher and lower educational groups.

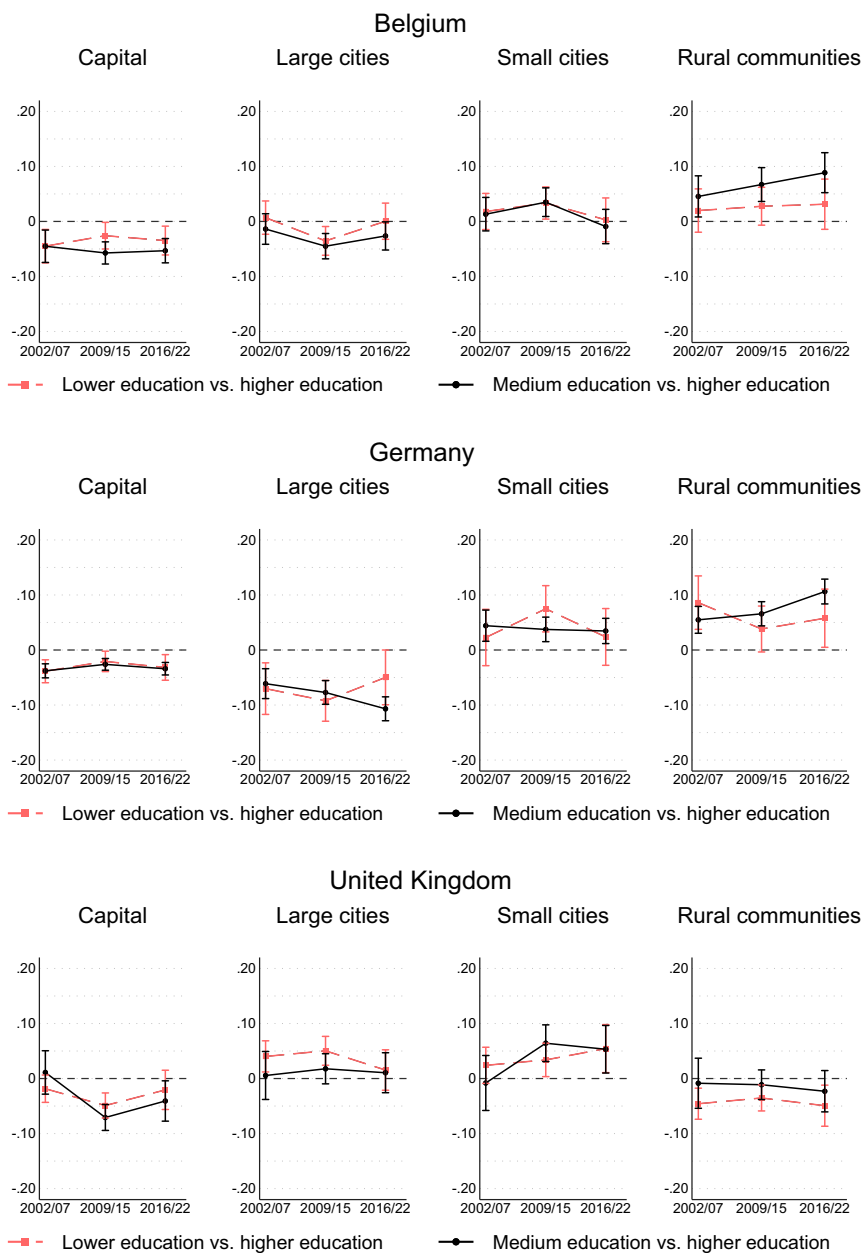
In our model, the inclusion of all three time periods does not add substantial insights. Although some non-linear changes are observed between the periods, we find hardly any relevant shifts over time. In particular, it seems worth noting that in none of the six countries is there a statistically significant increase in AME between the higher and lower educated, either for the probability of living in the capital or for the probability of living in a rural area.

Robustness checks

Given that we do not find substantial group-specific changes over time, it is possible that our analytical strategy masks age group-specific differences. In particular, it could be argued that spatial polarisation specifically applies to the younger age groups who are the beneficiaries of educational expansion, and are especially prone to preferring urban lifestyles. For additional analyses, due to restrictions in case numbers, the age groups are aggregated into two broad categories: 25–49 and 50–74. As the age-specific results show, there is no evidence in any of the countries that educational disparities in place of residence are greater among the younger than the older age group (see Figure S.1 and S.2, Supplementary material).

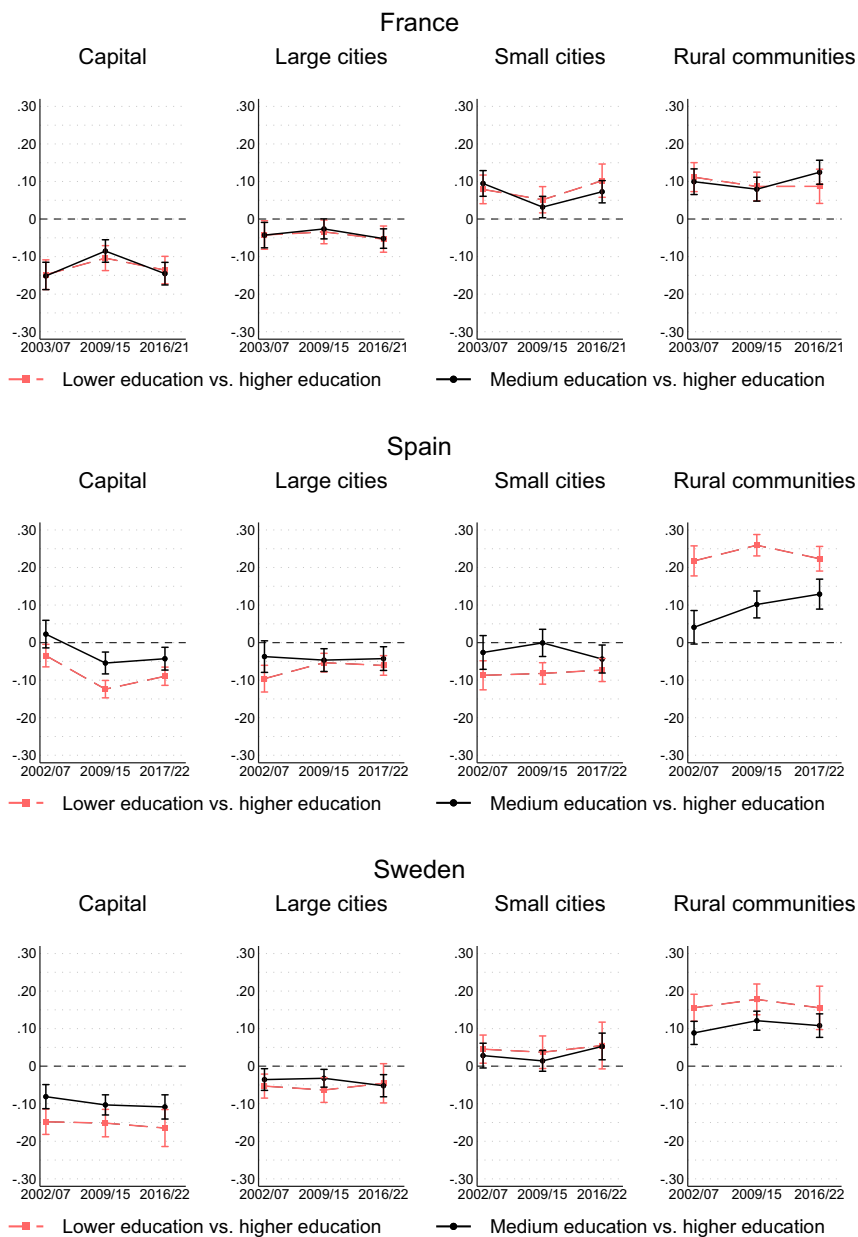
We may also speculate about the impact of the Covid-19 pandemic on socio-spatial inequalities. Recent research has shown that the rate of population growth in European cities slowed between 2019 and 2020, mainly due to an increase in out-migration (cf. Wolff and Mykhnenko, 2023) and lower inflows of young adults (cf. Stawarz et al., 2022). In order to

Figure 1 Differences in place of residence between educational groups aged 25–74 (2002/07, 2009/15, 2016/22) - multinomial logistic regression (average marginal effects, 95% CI)



(continued)

Figure 1 (continued)



Note: Controls for gender, age group and migration background. Source: ESS rounds 1–10, own calculations (weighted).

exclude potential effects of the pandemic, we limit the third observation period to the years 2016 to 2019. As shown in Figure S.3 (in the Supplementary material), the results do not substantially differ from the previous findings (cf. Figure 1). While this suggests that our analyses for the period 2016 to 2022 are not confounded by Covid-19 effects, it does not rule out the possibility that the pandemic altered residential choices and the corresponding differences between educational groups in the medium term.

Discussion

The article started from the idea that growing social inequalities in Western countries have also left their mark at the spatial level, not only in terms of residential segregation within cities, but also in terms of large-scale patterns of spatial disparities between urban and rural areas. As has been argued by social and political theorists (Florida, 2004; Moretti, 2012; Zürn and de Wilde, 2016; Goodhart, 2017; Reckwitz, 2021), the better-off are increasingly moving to the prosperous metropolitan areas, while the lower social classes are being pushed into rural or remote areas.

By looking at spatial disparities from a social stratification perspective, we have sought to add a population-based, individual-level analytical perspective to this discussion, which is often dominated by stylised juxtapositions of traditional and less educated rural population strata versus culturally diverse and higher educated urban population strata.

Using data from the European Social Surveys from 2002 to 2022, we examined the extent to which educational groups in six selected countries differ in their residential locations, and whether spatial disparities between these groups have increased in the new millennium. We used educational attainment as a proxy for socio-economic status and place of residence as an indicator of spatial disparities. Specifically, we tested hypotheses looking at (1) whether the composition of the population by education has diverged in large cities and rural areas, and (2) to what extent this divergence is due to differences in behavioural patterns between educational groups.

Regarding the differences in educational structures between large cities and rural communities/small towns, our analyses showed that, contrary to expectations, the social composition of both capitals/large cities and small towns/rural communities has developed in the same direction. We found that in all countries and settlement types, the proportion of higher educated groups has increased, while the proportion of lower educated groups has decreased. Although the dynamics of structural change vary from country to country, the overall picture is that the gap between settlement types did not widen over the period under consideration.

With regard to the second question on differences in residential location between educational groups, the data showed little change in residential disparities over time. Additional analyses that separated the younger and the older age groups did not substantially change the overall picture. Thus, our conclusion is that there have been no significant changes in the “large-scale” spatial concentration of educational status groups in the six countries since the turn of the millennium. At the same time, we found substantial country differences in the degree of spatial disparities. While a clear relationship between educational status

and place of residence emerged in France and Sweden, the association was weak in Belgium and the United Kingdom, and was moderately strong in Germany and Spain. The reasons for these differences between countries are not obvious, as they do not follow regional or welfare state differences. Nevertheless, our analyses suggest that the socio-spatial sorting of population groups has not increased in any of the six countries. In sum, the findings run counter to the widely held belief that regional and urban-rural disparities have been steadily increasing in Western societies (Florida, 2004; Goodhart, 2017; Reckwitz, 2021).

However, even though the empirical evidence presented in this paper indicate that the discourse on spatial polarisation is exaggerating or generalising phenomena that may in fact be much more restricted in scope, we have to remain cautious about our conclusions. First, our analyses were limited to a time frame of just over 20 years, which may be too narrow to capture longer-term socio-spatial changes in the countries under consideration. It would be desirable to retrieve datasets that go back to the 1990s and 1980s. Moreover, it too early to tell if the Covid-19 pandemic has altered the attractiveness of large cities and reversed established migration patterns. Recent studies are reluctant to assess the medium- or long-term consequences of the pandemic for migration processes in European cities (cf. Rink et al., 2022; Stawarz et al., 2022; Wolff and Mykhnenko, 2023). Second, due to insufficient case numbers at the country level, we could only roughly classify cohorts or age groups. In particular, it would be desirable to investigate in more detail the residential choices of the younger highly educated strata. Third, we faced analytical limitations in terms of our classification of place of residence. Developing and applying more fine-grained and comparable classifications of city types (cf. Florida's creative cities concept) are tasks for future research. Fourth, the ESS data imposed restrictions in terms of the spatial delineation of the capital cities and surrounding areas, which differed between countries. In a similar vein, our data did not allow us to map suburbanisation processes in large cities and metropolises. Finally, given that the educational structures in the countries under consideration differ considerably, using alternative socio-economic classifications may provide additional insights into the relationship between social stratification and place of residence.

Despite these restrictions, our analyses presented empirical evidence indicating that social-spatial disparities exist beyond the widely documented segregation patterns within cities and their surrounding areas, and, at the same time, that the degree of spatial disparities between population groups varies considerably at the national level across European countries.

Data availability statement

The analyses are based on the European Social Survey, round 1–10 (European Social Survey European Research Infrastructure, 2002, 2004, 2006, 2008, 2010, 2012, 2014, 2016, 2018, 2020). The data are openly available at <https://www.europeansocialsurvey.org/data-portal>.

Supplementary material

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Supplementary file 1. Tables S.1-S.2, Figures S.1-S.3



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